APPENDIX E

Traffic Report

Griffith Park Outdoor Performing Arts Center
Traffic Circulation and Parking Study

December 13, 2013

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Executive Summary

The following summarizes the traffic study results, conclusions and recommendations:

PROPOSED PROJECT

- The proposed project would include the construction of a permanent open air outdoor stage at the existing Old Zoo picnic area. Ancillary improvement would include a resurfaced parking lot, improvements to existing restrooms, path lighting, resurfaced walkways, a new path and bridge meeting ADA requirements, and undergrounding of an existing overhead power line.

- Striping for between 20 and 22 standard parking stalls and up to six ADA stalls would be provided.

STUDY AREA AND EXISTING CONDITIONS

- Six study intersections were examined for traffic operations during events at the project site, which occur now. The project would be improving access and facilities at the site, also allowing for potential future events.

- Five of the six study intersections are unsignalized, and include locations where access to the site is provided and where access is provided to freeway ramps and park entrances/exits. The five unsignalized intersections are located within the limits of Griffith Park.

- During the existing conditions period, five of the six study intersections are currently operating at LOS C or better during the analyzed weekday and weekend evening peak hours. The Western Heritage Way/Zoo Drive intersection is operating at LOS D in the weekday evening peak hour, but operates at LOS A during the weekend evening peak hour.

CONSTRUCTION TRAFFIC CONDITIONS

- Project construction would include minimal grading, alteration of the existing landscape, or disturbance. Therefore, truck trips required for large-scale grading and dirt hauling would not be generated during the construction period.

- A total of 130 to 150 truck trips would take place over the course of construction, based on estimates provided by RAP. Employee vehicle commute trips to and from the work site would be negligible in terms of potential impacts on the surrounding roadway network, due to the low-intensity nature of the construction work.

- Construction truck trips would be routed directly to freeway routes from park roadways, whenever feasible. Due to the characteristics of the anticipated truck and employee vehicle trips generated during the construction period, impacts of those trips are anticipated to be less than significant.

POST-PROJECT TRAFFIC CONDITIONS

- The proposed project is projected to generate approximately 1,100 trips during each event, including 550 net new trips during the evening peak hour. This is based on the highest current

active event attendance of 2,500 persons for Shakespeare in the Park, and an assumed number of passengers per vehicle at 2.5.

- During the existing with-project scenario, five of the six study intersections are projected to operate at LOS C or better during the weekday and weekend peak hours. The Western Heritage Way/Zoo Drive intersection is projected to operate at LOS E in the weekday peak hour and LOS B in the weekend peak hour, when an event is occurring.

- During the future without-project scenario, five of the six study intersections are projected to operate at LOS C or better during the weekday and weekend peak hours. The Western Heritage Way/Zoo Drive intersection is projected to operate at LOS D in the weekday peak hour and LOS B in the weekend peak hour.

- During the future with-project scenario, five of the six study intersections are projected to operate at LOS C or better during the weekday and weekend peak hours. The Western Heritage Way/Zoo Drive intersection is projected to operate at LOS E during the weekday evening peak hour and LOS B during the weekend evening peak hour, when an event is occurring.

- Based on the review of traffic operations and consideration of the City of Los Angeles Department of Transportation's traffic guidelines, the project would not create any significant impacts to the six study intersections during the weekday and weekend evening peak hour.

- The proposed project is not anticipated to cause a significant traffic impact on any CMP arterial monitoring intersections and mainline freeway-monitoring locations, and is not anticipated to result in a significant transit impacts.

POST-PROJECT PARKING CONDITIONS

- Overflow parking demand conditions are estimated to occur by the 6:00 p.m. hour for both weekday and weekend evening events. The overflow amount peaks at the 7:00 p.m. on weekday evenings at 433 vehicles, and peaks at the 6:00 p.m. hour on weekend evenings at 411 vehicles.

- This overflow demand would be accommodated in other Park parking areas, as it is under current conditions. In these instances, vehicles are directed to park in other nearby parking lot areas such as the Crystal Springs Picnic area and walk to the event site.

1. Introduction

The proposed project involves construction of an Outdoor Performing Arts Center within Griffith Park at a location where existing regularly scheduled events are held. The facility is owned and operated by the City of Los Angeles Department of Recreation and Parks (RAP). KOA Corporation was retained by ESA to analyze the potential circulation and parking impacts associated with the proposed project.

KOA coordinated with the City of Los Angeles Department of Transportation (LADOT) before any of the traffic impact and parking analysis tasks were initiated. Review for the project is under the jurisdiction of LADOT's Metro Development Review. Per discussions with LADOT, it was determined that due to the lack of new trips generated by the project, a Memorandum of Understanding (MOU) and traffic study would not be necessary for this project. However, circulation and parking demand associated with the project was conducted as a review of special event operations in the existing and future timeframes was completed, to provide input to the California Environmental Quality Act (CEQA) analysis being undertaken by the RAP.

1.1 Project Description

The proposed project would include the construction of a permanent open air outdoor stage at the existing Old Zoo picnic area. The site currently hosts several regular annual events which include Shakespeare in the Park, the LA Haunted Hayride, and Symphony in the Glen. In addition to development of the outdoor stage area, the proposed project would incorporate other ancillary improvements such a new switchboard, resurfaced parking lot, improvements to existing restrooms, path lighting, resurfaced walkways, a new path and bridge meeting Americans with Disability Act (ADA) requirements, and undergrounding of an existing overhead power line.

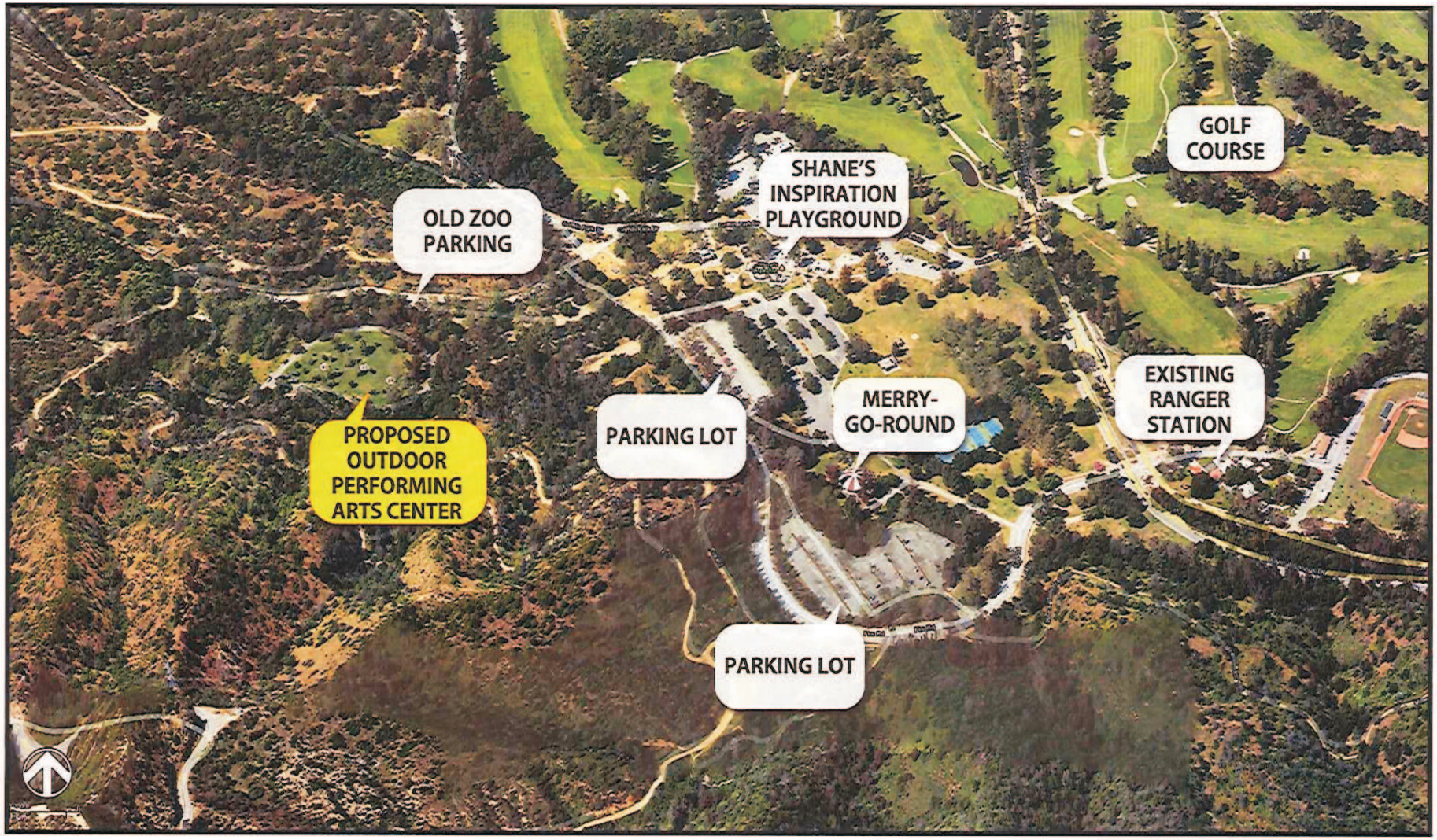
Existing parking is provided in a paved but worn access road north of the site. There is currently capacity for an estimated 22 parking spaces provided, including one faded ADA stall. The parking area would be resurfaced with asphalt and striped up to an existing turn-around area and gate. Striping for between 20 and 22 standard parking stalls and up to six ADA stalls would be provided.

Construction of the proposed project would occur in two phases. Phase 1 would be completed by June 2014 and includes development of the stage, undergrounding of existing utility lines, renovation of existing restrooms, installation of lighting, and ADA picnic and viewing areas. Phase 2 would be completed by June 2015 and includes an ADA pedestrian bridge, improved ADA paths, path lighting, refurbishment of existing stairs, and ADA parking improvements.

The proposed project site is illustrated in Figure 1.

1.2 Project Study Area

The project site is located within the Old Zoo picnic area at 4730 Crystal Springs Drive, and is entirely within the Griffith Park limits. Griffith Park is approximately 15 miles northwest of downtown Los Angeles, and lies just west of the Interstate 5 (I-5) Golden State Freeway, roughly between Los Feliz Boulevard on the south and the State Route 134 (SR-134) Ventura Freeway on the north. Freeway access ramps that provide access to and from Griffith Park on the I-5 are at Los Feliz Boulevard, Griffith Park, and Zoo Drive.



Source: ESA, 2013.

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Griffith Park Outdoor Performing Arts Center EIR

Figure 1
Proposed Project Site

The project study area included the following six study intersections:

1. Zoo Drive & I-5 NB off-ramp/SR-134 EB on-ramp (unsignalized)
2. Western Heritage Way & Zoo Drive (unsignalized)
3. Crystal Springs Drive & Griffith Park Drive (unsignalized)
4. Crystal Springs Drive & Fire Road (unsignalized)
5. Crystal Springs Drive/Griffith Park Drive & I-5 NB off-ramps/SB on-ramps (unsignalized)
6. Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard (signalized)

All of the study intersections are all-way stop-controlled, except for the intersection of Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard. That intersection is controlled by a traffic signal. Five of the six intersections, which are unsignalized, are located within the extents of Griffith Park. Intersections #1, #2, and #5, however, are freeway ramp intersections.

Figure 2 illustrates the locations of the study intersections.

In addition to analyzing traffic conditions, estimated Griffith Park parking area utilization by the project was evaluated. Figure 3 illustrates the locations of the three parking lots closest to the project site that were included in this study.

1.3 Study Scenarios

Traffic impacts associated with the proposed project were analyzed at the study intersections for the weekday and Saturday evening peak period from 5:00 p.m. to 7:00 p.m. The analysis period was chosen for the inbound trips generated by the project that would occur during weekday evening commute times and on Saturday evenings when park users are departing the park at the end of the day.

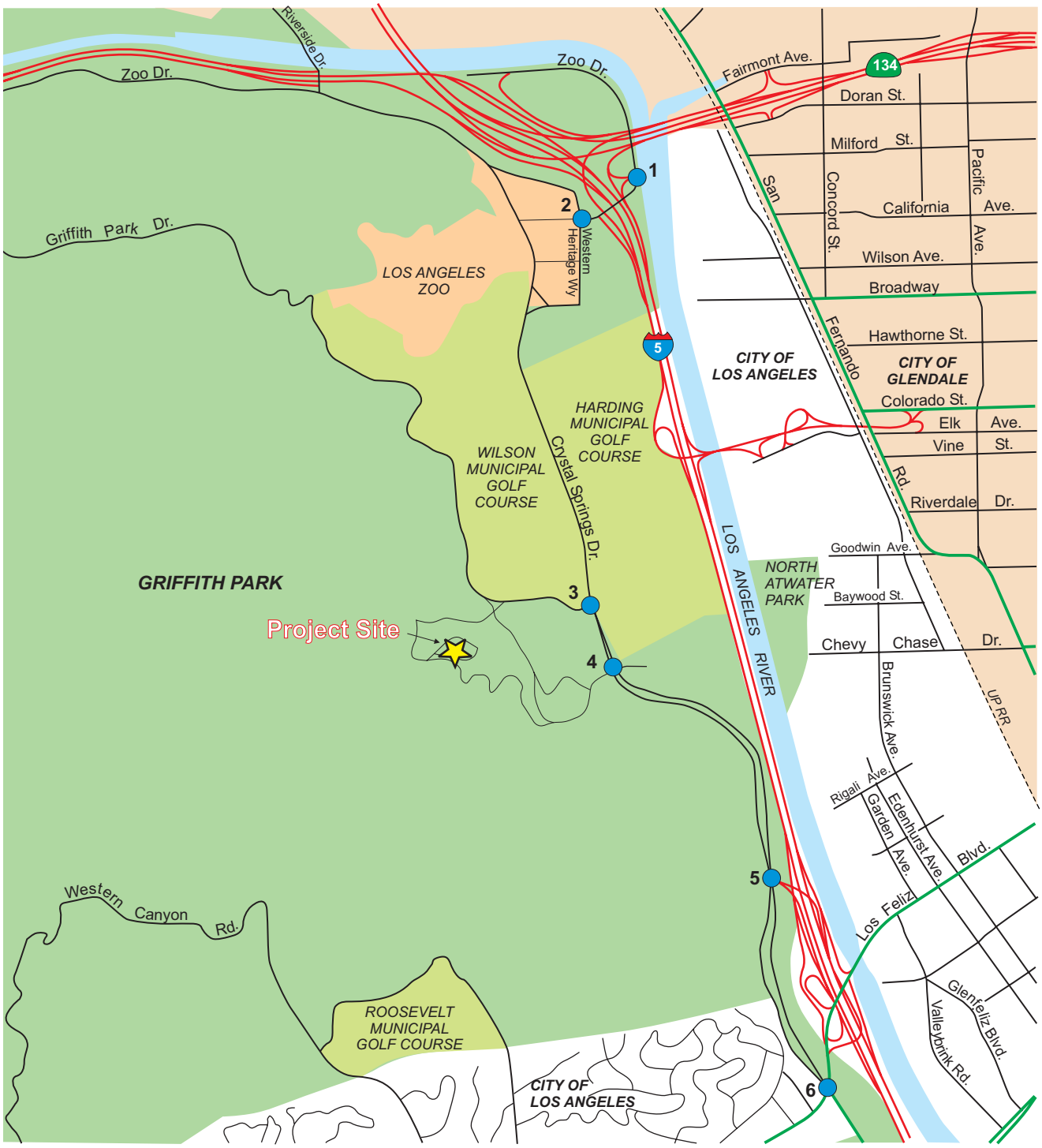
The study included the analysis of the following traffic scenarios:

- Existing Year 2013
- Existing with-Project
- Future (2015) without-Project
- Future (2015) with-Project

1.4 Analysis Methodology

The general methodology and assumptions contained in this report are based on the *LADOT Traffic Study Policies and Procedures (June 2013*) document. As noted earlier, a formal traffic study was not warranted, based on consultation with LADOT. This traffic and parking study was completed, however, as part of a project operations review of traffic and parking conditions, to be incorporated into the environmental document.

The following text describes the study methodology contained in this report.



LEGEND

- Project Location
- Study Intersection

N

Not to Scale

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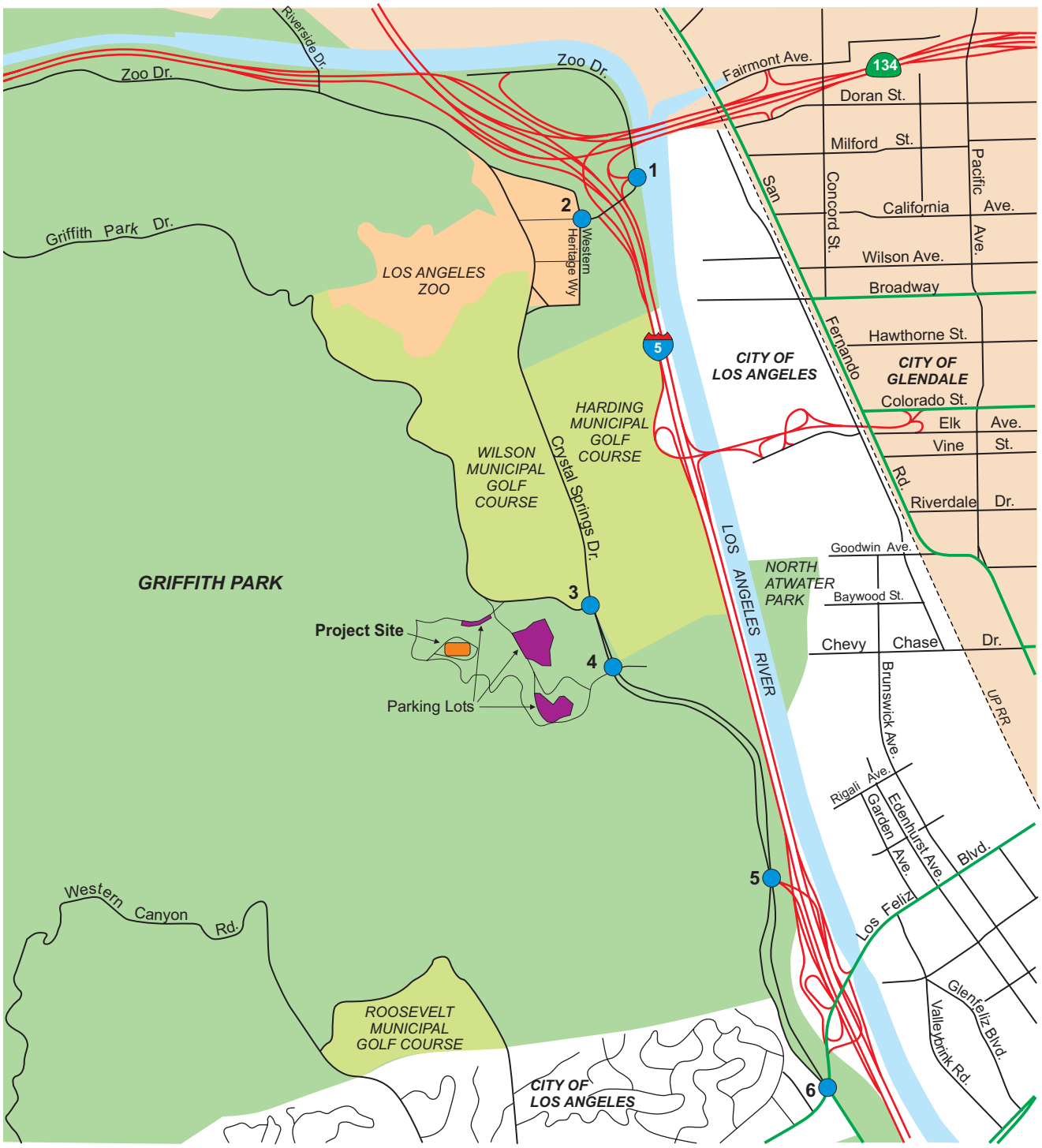
Griffith Park Outdoor Performance Center — Figure 2

Study Intersection Locations



LEGEND

- Project Location
- Study Intersection
- Parking Lots

N

Not to Scale

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Griffith Park Outdoor Performance Center

Figure 3

Parking Study Area

Existing Conditions

New traffic counts were collected during the weekday and weekend at the six study intersections on Saturday, November 16, 2013 and Thursday, November 21, 2013. The traffic counts were taken during the evening hours of 5:00 p.m. to 7:00 p.m. as the time period coincides with likely inbound traffic flows for evening events, as well as evening weekday commute times and departure times for daily park users.

Hourly parking occupancy counts were collected on Thursday, November 21, 2013 and Saturday, November 23, 2013. The parking counts were taken at three existing surface lots that serve the project site and surrounding park uses between 4:00 p.m. to 9:00 p.m., as these are the hours that project trips would begin entering the Park for events, and when peak parking demand would occur after the start of 7:00 p.m. events.

KOA conducted fieldwork within the project study area to identify the condition of key study area roadways including traffic control and approach lane configuration at each study intersection, and also to quantify the parking supply near the project site.

The existing study area traffic level of service (LOS) and the project parking supply is discussed within Section 2 of this report.

Project Trip Generation and Distribution

Consideration for the proposed project trip generation was based on capacity seating for existing special event peak attendance. Based on the understanding of the existing events, Shakespeare in the Park exhibits the highest attendance at 2,500 persons per evening event that enter and leave at roughly the same time (the Haunted Hayride event, also an event within the Park but not confined to a single site, can bring 4,700 visitors each evening; however they come and go throughout the evening with no set attendance peak).

For the purpose of this study, trips generated for these current events as well as potential future new events were evaluated for an understanding of area roadway circulation during the overlap of peak traffic and inbound event vehicle trips. Future events at the project site are expected to remain at the same or similar intensity, however.

The analysis of project trip generation and distribution is discussed within Section 3 of this report.

Project Parking Demand

Project parking demand was, as it was for trip generation calculations, also based on capacity seating for existing special events at the project site. The analysis of project parking demand is discussed within Section 3 of this report.

Seasonal Baseline Data

This study was initiated in fall of 2013, and survey data was collected during the month of November, before the Thanksgiving holiday week. The data does not account for summer-season park use. The analysis of baseline data is therefore qualified in the existing and with-project scenarios.

Existing with-Project Conditions

Based on the proposed project trip generation and the traffic count totals, an existing with-project conditions scenario was analyzed per the *Sunnyvale* CEQA court case decision, which stated that impacts should be analyzed against existing conditions in addition to any future conditions scenario.

The levels of service for existing with-project conditions at the study intersections are discussed in Section 4 of this report.

Future without-Project Conditions

In order to account for traffic growth in the study area, an ambient/background traffic growth rate was applied to the existing traffic counts. In addition, traffic from cumulative/area projects (approved and pending developments) was also added to the study area.

The levels of service at the study intersections for future without-Project conditions are discussed in Section 5 of this report.

Future with-Project Conditions

Based on the future without-Project volumes plus traffic from the proposed project, the future with-Project traffic conditions were determined and analyzed.

The levels of service for this scenario are discussed in Section 6 of this report.

Level of Service Methodology

The City of Los Angeles utilizes the Critical Movement Analysis (CMA) methodology as their established traffic operating analysis methodology. The CMA methodology also determines the V/C and level of service values based on the summation of critical volume of vehicles passing through the intersection divided by the intersection capacity. The capacity is dependent on the number of signal phases (i.e. 1,500 vehicles per hour (vph) for two phases, 1,425 vph for three phases, and 1,375 vph for four phases).

For the stop-controlled study intersections, LOS values were calculated using the unsignalized intersection analysis methodology defined by the *Highway Capacity Manual* (HCM). For this methodology, conditions are based upon intersection delay, defined as the worst-case approach delay experienced by users of the intersection who must stop or yield to free-flow through traffic. This method uses a "gap acceptance" technique to predict driver delay. This methodology is applicable to unsignalized and partially-controlled intersections on major streets where there is potential for crossing difficulty from the minor approaches due to heavy traffic volumes on the major approaches.

Level of service values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating "capacity" of a roadway. Table 1 defines the level of service criteria.

Table 1- Level of Service Definitions

Level of Service	Flow Conditions	Volume to Capacity Ratio *(ICU)*	Average Stop Delay/Vehicle (sec/veh) - Unsignalized *(HCM)*
A	LOS A describes primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.	0.00-0.600	≤10
B	LOS B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.	0.601-0.700	>10 - 15
C	LOS C represents stable operations; however, ability to maneuver and change lanes in mid-block locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average speeds of about 50 percent of the average free-flow speed for the arterial classification. Motorists will experience appreciable tension while driving.	0.701-0.800	>15 - 25
D	LOS D borders on a range in which small increases in flow may cause a substantial increase in delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40 percent of free-flow speed.	0.801-0.900	>25 - 35
E	LOS E is characterized by significant delays and average travel speeds of one-third the free-flow speed of less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.	0.901-1.00	>35 - 50
F	LOS F characterizes arterial flow at extremely low speeds below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays and extensive queuing. Adverse progression is frequently a contributor to this condition.	Over 1.00	>50

Significant Traffic Impacts

As defined by the LADOT document *Traffic Study Policies and Procedures*, significant impacts of a proposed project at an intersection must be mitigated to a level of insignificance, where feasible. Special events at the project site occur now under the existing condition. The project would provide a permanent stage to allow for improved access and viewing of existing and future events, and would also improve access to the site and ancillary facilities. Significant traffic impacts were determined for information purposes only, as the proposed project would not increase trips to and from the project site.

The relevance and application of local agency significant traffic impact standards on project event conditions is discussed in Section 7 of this report.

2. Existing Conditions

This section describes the existing conditions within the study area in terms of roadway facilities, transit service, and traffic operating conditions.

2.1 Existing Roadway System

Interstate 5 (I-5) is a north-south freeway that traverses the western United States. It lies directly east of the study area providing four to five mainline lanes in each direction. Freeway ramps are located via Zoo Drive, Crystal Springs Drive, and Los Feliz Boulevard.

In addition to I-5, State Route 134 (SR-134) is a regional east-west freeway providing access between Toluca Lake and Pasadena. It provides four to five mainline lanes along with high occupancy vehicle (HOV) lanes for the majority of its length. Freeway ramps are located at Zoo Drive and Forest Lawn Drive.

The characteristics of the local study area roadways are summarized below.

Zoo Drive is generally a two-lane local roadway that transitions into Crystal Springs Drive to the south of the Los Angeles Zoo. The posted speed limit is 25 mph and parking is prohibited on both sides of the roadway, except for segments north of the Zoo.

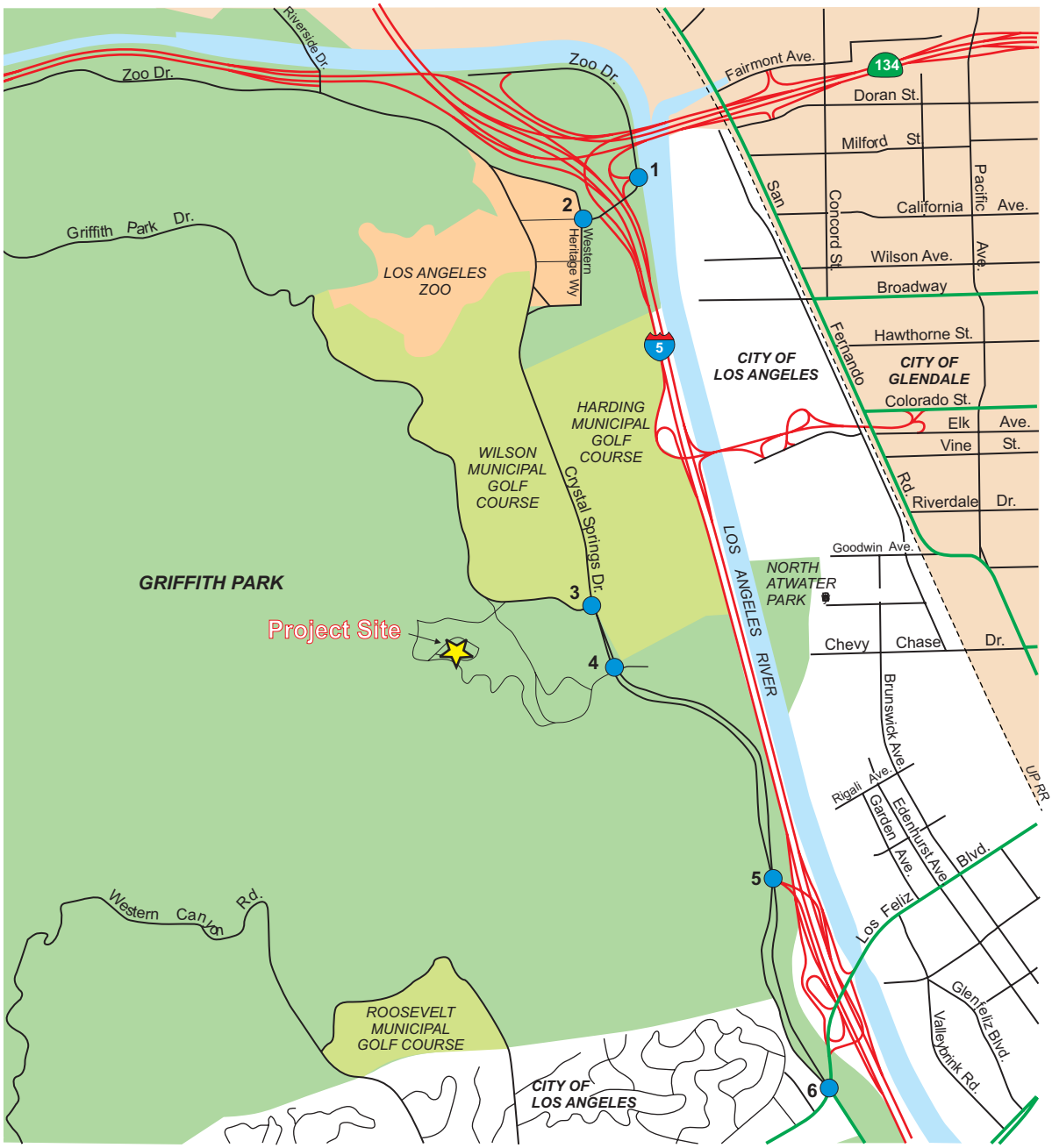
Crystal Springs Drive is a two to four-lane local roadway within Griffith Park. This roadway provides access along the eastern portion of the Park, and operates as northbound-only access as part of a one-way couplet with Griffith Park Drive, within the south area of the Park. The posted speed limit is 25 mph and parking is prohibited on both sides of the roadway.

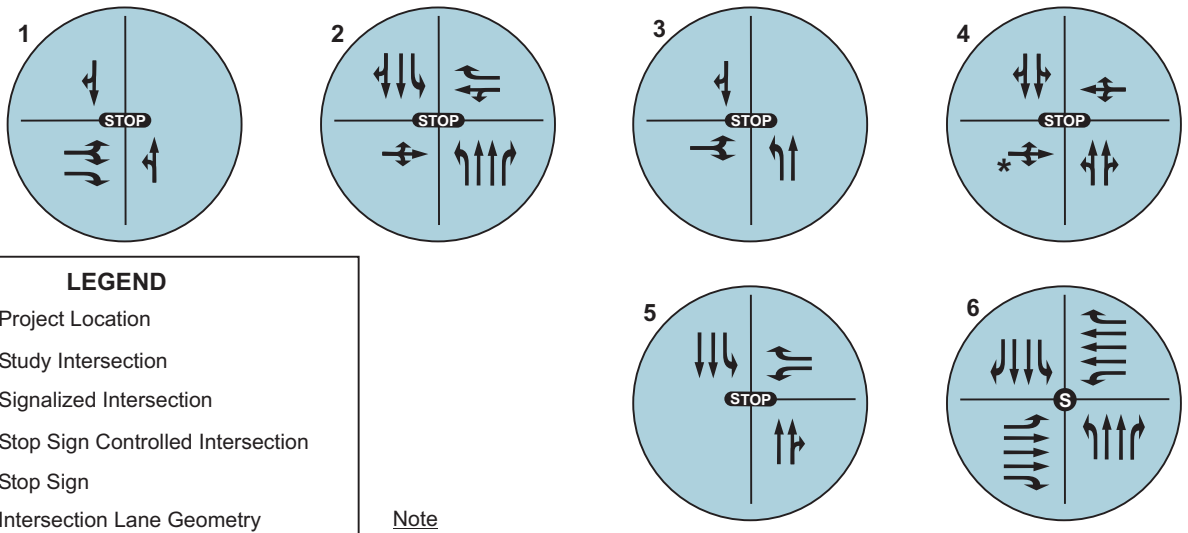
Griffith Park Drive is a local roadway within Griffith Park. A portion of the roadway provides southbound-only access as part of the one-way couplet with Crystal Springs Drive within the southern area of the Park. The northern segment of the roadway provides access between Crystal Springs Drive, access roadways to the parking areas at the north side of the project site, and the north side of the Park.

Fire Road is a two-lane unnamed roadway within Griffith Park that provides access to the south side of parking lots near the project site. It has an intersection with Crystal Springs Drive on the east and public access is prohibited on the west, beyond the parking lot access points.

Los Feliz Boulevard is a four to six-lane Major Class II Highway that provides access between Glendale on the east and Hollywood on the west. The posted speed limit is 35 mph and parking is prohibited on both sides of the roadway near the park entrance.

Figure 4 depicts the existing lane configurations and traffic controls at the study intersections.





LEGEND

- Project Location
- Study Intersection
- Signalized Intersection
- Stop Sign Controlled Intersection
- Stop Sign
- Intersection Lane Geometry

Note

* De facto right turn lane assumed due to wide curb lane

N

Not to Scale

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Griffith Park Outdoor Performance Center — Figure 4

Existing Study Intersection Approach Lanes/Control

2.2 Existing Transit Service

The project study area is served by one bus transit line operated by Metro. Metro Local 96 provides service between downtown Los Angeles to Burbank via Griffith Park Drive/Crystal Springs Drive, at a service frequency of 30 minutes. In the evening, at approximately 6:30 p.m. for northbound service and at 7:00 p.m. for southbound service, service terminates in Griffith Park. For weekend service, Local 96 operates approximately every 50 minutes, and service terminates within Griffith Park after 6:00 p.m.

2.3 Existing Bicycle Facilities

Both Class II (striped bicycle lanes) and Class III (signed routes in shared travel lanes) bicycle facilities are provided within Griffith Park along Crystal Springs Drive/Zoo Drive.

A bicycle lane, which is a dedicated striped lane, is provided from the northern entrance of the Park on Forest Lawn Drive to Griffith Park Drive. South of Griffith Park Drive, the bike lane is replaced by a bike route designated by signs for use by both bicyclists and motor vehicles.

2.4 Existing Traffic Volumes

New traffic counts were collected during the weekday and weekend at six study intersections on Saturday, November 16, 2013 and Thursday, November 21, 2013. The traffic counts were taken during the evening hours of 5:00 p.m. to 7:00 p.m. as this period coincides with the overlap of inbound traffic flow for evening events and the peak of either weekday commute traffic or the evening departure of park users on weekends.

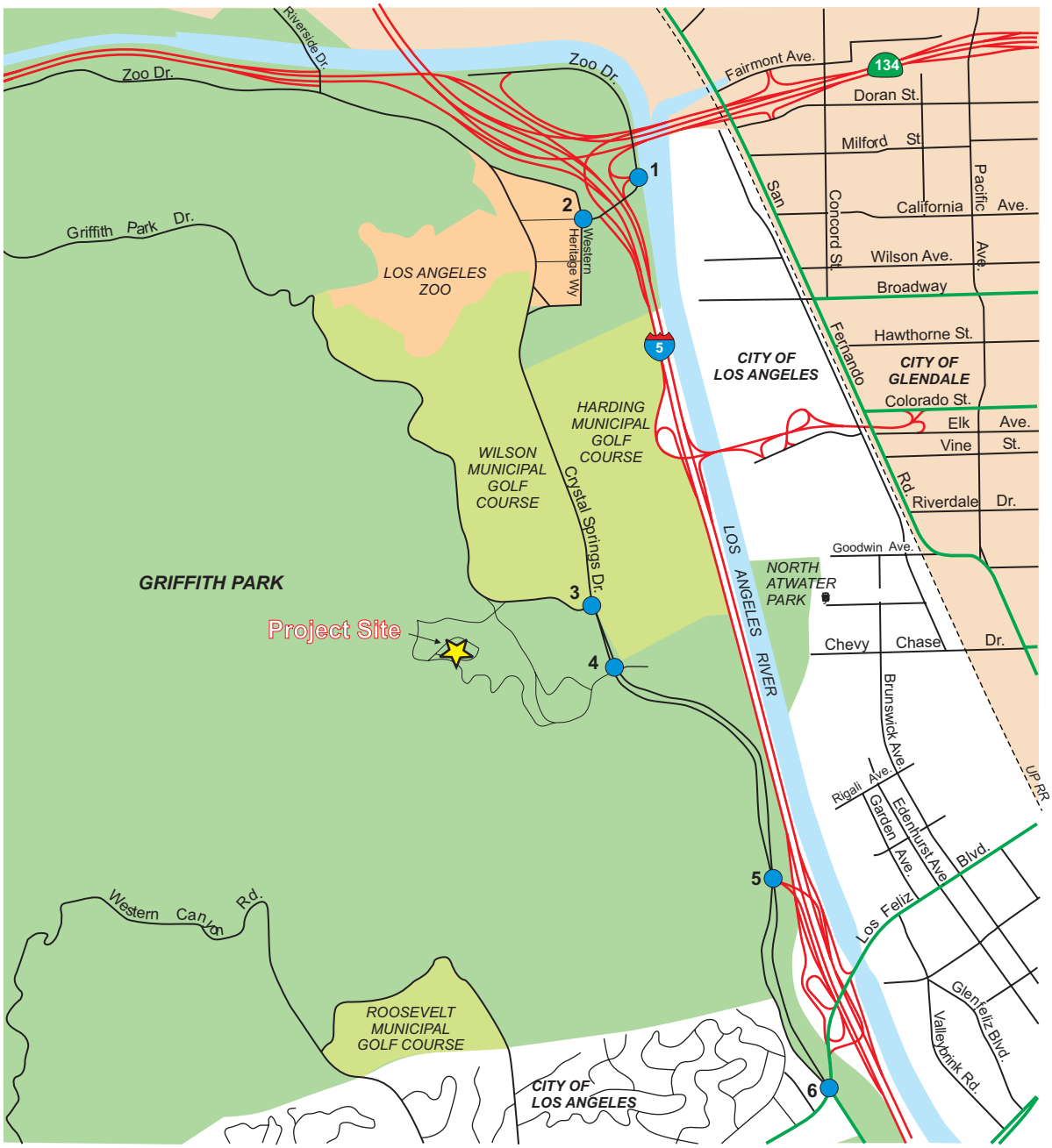
The analyzed existing peak-hour traffic turn movement volumes are illustrated on Figure 5 (weekday) and Figure 6 (weekend). The traffic count data is provided in Appendix A of this report.

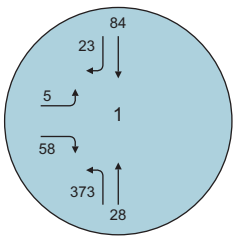
2.5 Existing Traffic Signal System

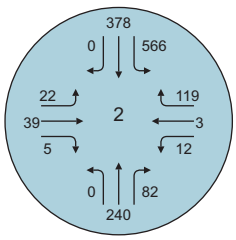
For signalized intersections, LADOT utilizes both the Automated Traffic Surveillance and Control (ATSAC) and Adaptive Traffic Control System (ATCS) to enhance traffic signal operations. ATSAC is a computer-based traffic signal control system whereby engineers monitor traffic conditions and system performance, selects appropriate signal timing (control) strategies, and performs equipment diagnostics and alert functions. ATCS is a later enhancement to ATSAC, which provides fully traffic adaptive signal control based on real-time traffic conditions. The ATCS automatically adjusts traffic signal timing in response to current traffic demands by allowing ATCS to simultaneously control all three critical components of traffic signal timing (cycle length, phase split, and offset).

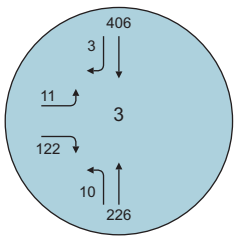
For capacity analysis, LADOT guidelines suggest a 0.07 reduction in volume-to-capacity ratio with the implementation of ATSAC and a 0.03 reduction with the implementation of ATCS, for an overall volume-to-capacity reduction of 0.10. This reduction represents LADOT-estimated benefits in flow and capacity increase by operation of this program.

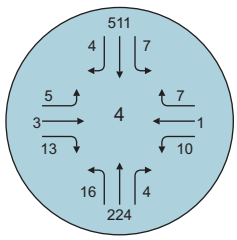
According to LADOT staff, the signalized study intersection is currently equipped with ATSAC but not ATCS, and is therefore subject to an overall volume-to-capacity reduction of 0.07 for both existing and future conditions to reflect ATSAC enhancements. These adjustments have been incorporated.

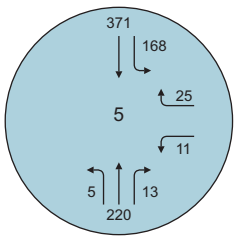


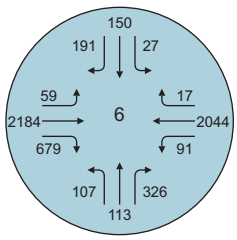












LEGEND

- Project Location
- Study Intersection
- XX Intersection Turn Volume

N

Not to Scale

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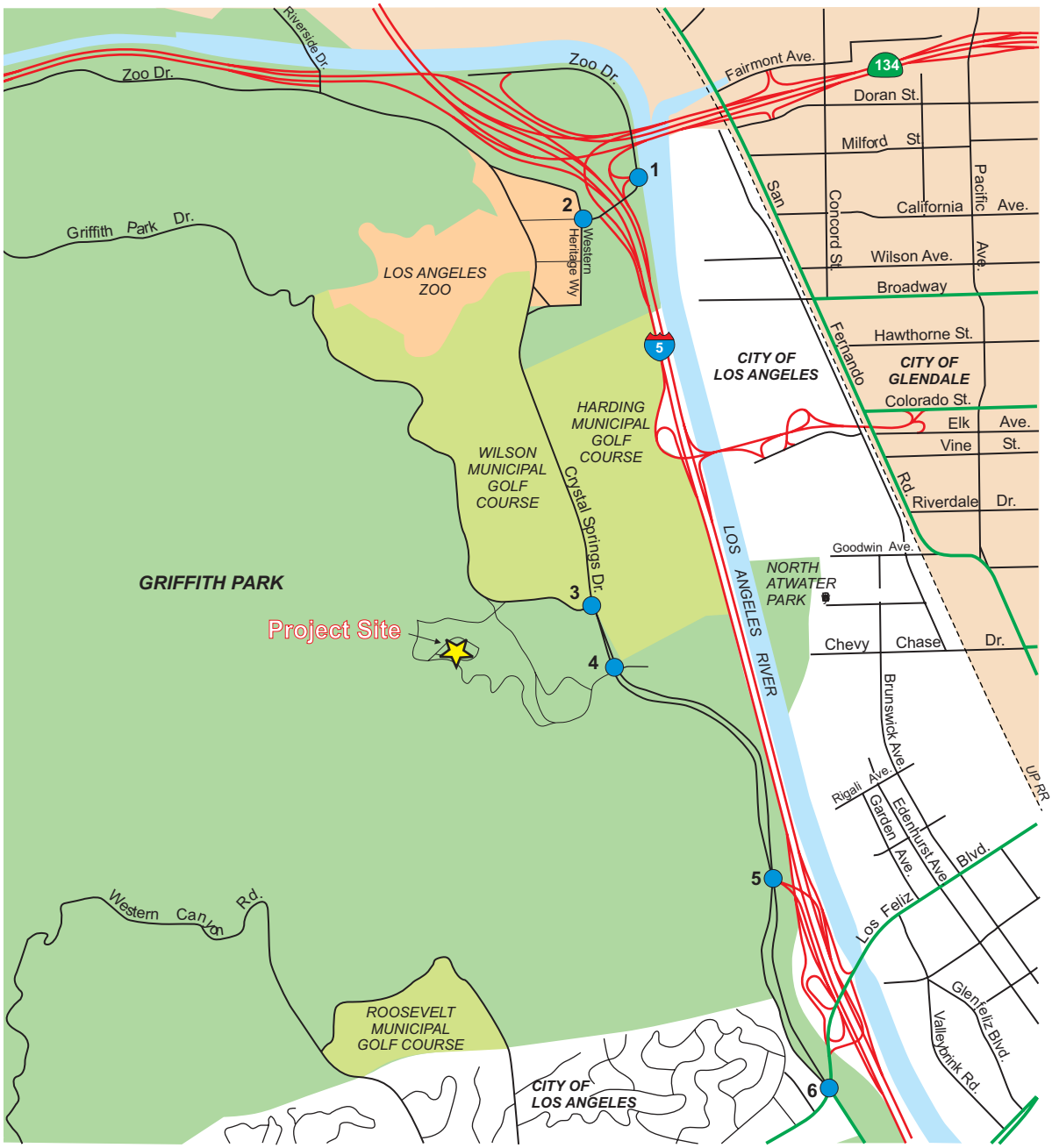
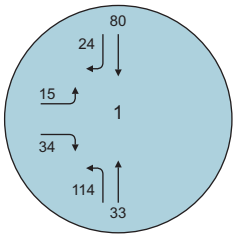
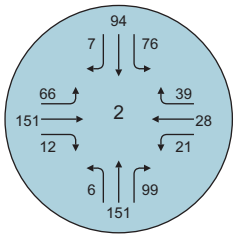
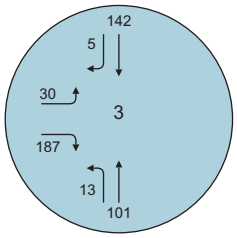
Griffith Park Outdoor Performance Center — Figure 5

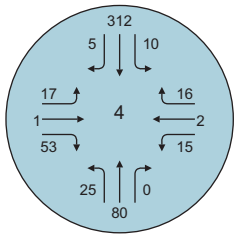
Existing Weekday Evening Peak-Hour Turn Volumes

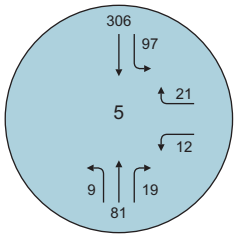


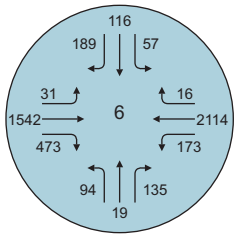












LEGEND

- Project Location
- Study Intersection
- XX Intersection Turn Volume

N

Not to Scale

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Griffith Park Outdoor Performance Center — Figure 6

Existing Weekend Evening Peak-Hour Turn Volumes

2.6 Existing Intersection Levels of Service

Based on the intersection lane geometries and the existing traffic volumes, the volume-to-capacity (V/C) ratios and corresponding levels of service (LOS) were determined for the six study intersections for the weekday and weekend evening period.

The data in Table 2 indicates that five of the six study intersections are currently operating at LOS C or better during the analyzed weekday and weekend evening peak hours. The unsignalized and internal Park intersection of Western Heritage Way/Zoo Drive is currently operating at LOS D in the weekday evening peak hour, but is operating at LOS A during the weekend evening peak hour.

Table 2 - Intersection Operations – Existing Conditions

Study Intersections		Weekday		Weekend	
		Evening Peak			
		V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
1	Zoo Drive & I-5 NB off-ramp/SR-134 EB on-ramp *	9.8	A	9.5	A
2	Western Heritage Way & Zoo Drive *	26.2	D	10.0	A
3	Crystal Springs Drive & Griffith Park Drive *	11.2	B	8.5	A
4	Crystal Springs Drive & Fire Road *	9.6	A	8.7	A
5	Crystal Springs Drive/Griffith Park Drive & I-5 NB off-ramps/SB on-ramps *	9.5	A	8.6	A
6	Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard	0.716	C	0.648	B

** - unsignalized intersection*

The traffic analysis worksheets for this scenario are provided in Appendix B of this report.

2.7 Existing Parking Supply Utilization

Hourly parking demand field surveys were collected on Thursday, November 21, 2013 and Saturday, November 23, 2013. The parking surveys were conducted between 4:00 p.m. to 9:00 p.m., as these are the hours that project trips would begin entering the Park for project events, and when peak parking demand would occur after the start of 7:00 p.m. events.

Table 3 summarizes the existing parking lot utilization, for the areas included in the parking lot demand survey. The highest weekday demand was 35 vehicles or 6.3% occupancy at 7:00 p.m., and the highest weekend demand was 121 vehicles or 21.9% occupancy at 4:00 p.m. Weekday demand is low for the entire surveyed period, and weekend demand drops significantly at 6:00 p.m.

Table 3 – Existing Parking Lot Utilization

TIME	Lot 1 South of Carousel		Lot 2 North of Carousel			Lot 3 North of/Adjacent to Project Site			TOTAL All Three Lots	
	Spaces	Occupancy	Regular	Handicap	Occupancy	Regular	Handicap	Occupancy	Spaces	Occupancy
Supply	225	-	292	13	-	21	1	-	552	-
Demand and Occupancy - Thursday, 11/21/13										
4:00 PM	20	8.9%	6	0	2.1%	7	0	33.3%	33	6.0%
5:00 PM	8	3.6%	8	0	2.7%	4	0	19.0%	20	3.6%
6:00 PM	8	3.6%	5	0	1.7%	1	0	4.8%	14	2.5%
7:00 PM	5	2.2%	30	0	10.3%	0	0	0.0%	35	6.3%
8:00 PM	3	1.3%	30	0	10.3%	0	0	0.0%	33	6.0%
9:00 PM	3	1.3%	9	0	3.1%	0	0	0.0%	12	2.2%
Demand and Occupancy - Saturday, 11/23/13										
4:00 PM	75	33.3%	35	0	12.0%	11	0	52.4%	121	21.9%
5:00 PM	37	16.4%	27	0	9.2%	6	0	28.6%	70	12.7%
6:00 PM	7	3.1%	6	0	2.1%	0	0	0.0%	13	2.4%
7:00 PM	2	0.9%	2	0	0.7%	0	0	0.0%	4	0.7%
8:00 PM	0	0.0%	2	0	0.7%	0	0	0.0%	2	0.4%
9:00 PM	1	0.4%	5	0	1.7%	0	0	0.0%	6	1.1%

3. Project Trip Generation and Parking Demand

This section defines the estimated traffic that is generated by existing special events at the project site, in terms of trip generation, trip distribution and trip assignment. It also discusses the estimated parking demand for those events. All of the calculations are based on typical maximum event size of 2,500 persons, for existing events at the project site facilities. This event intensity was defined by RAP, based on the intensity of ongoing special events. While the actual number of events could increase from the three known events, each individual event is not anticipated to draw more than 2,500 visitors entering and leaving for a single event, based on the project site capacity.

3.1 Project Trip Generation

Established trip generation rate sources such as *Trip Generation, 9th Edition* (published by the Institute of Transportation Engineers or ITE) do not have local sources for trip generation rates, and rates for theaters are based on a very low number of surveys. The daily and peak hour trip generation totals for the proposed project were calculated using the following assumptions:

- Typical capacity crowd of 2,500 persons
- Average number of persons per vehicle of 2.5
- Overlap of peak analyzed hour assumed to be 50 percent
- Outbound trips for drop-off trips were assumed to be 10 percent of the total trips

The number of persons attending a typical event at the facility was defined by information provided by RAP. The associated project trip generation estimates are summarized in Table 4. Project events were calculated to generate approximately 1,100 daily trips, including 550 trips during the evening peak hour. A majority were assumed to be inbound trips, taking place before the start of evening events. For events that might take place on weekdays, the same trip generation estimates were assumed for the analysis.

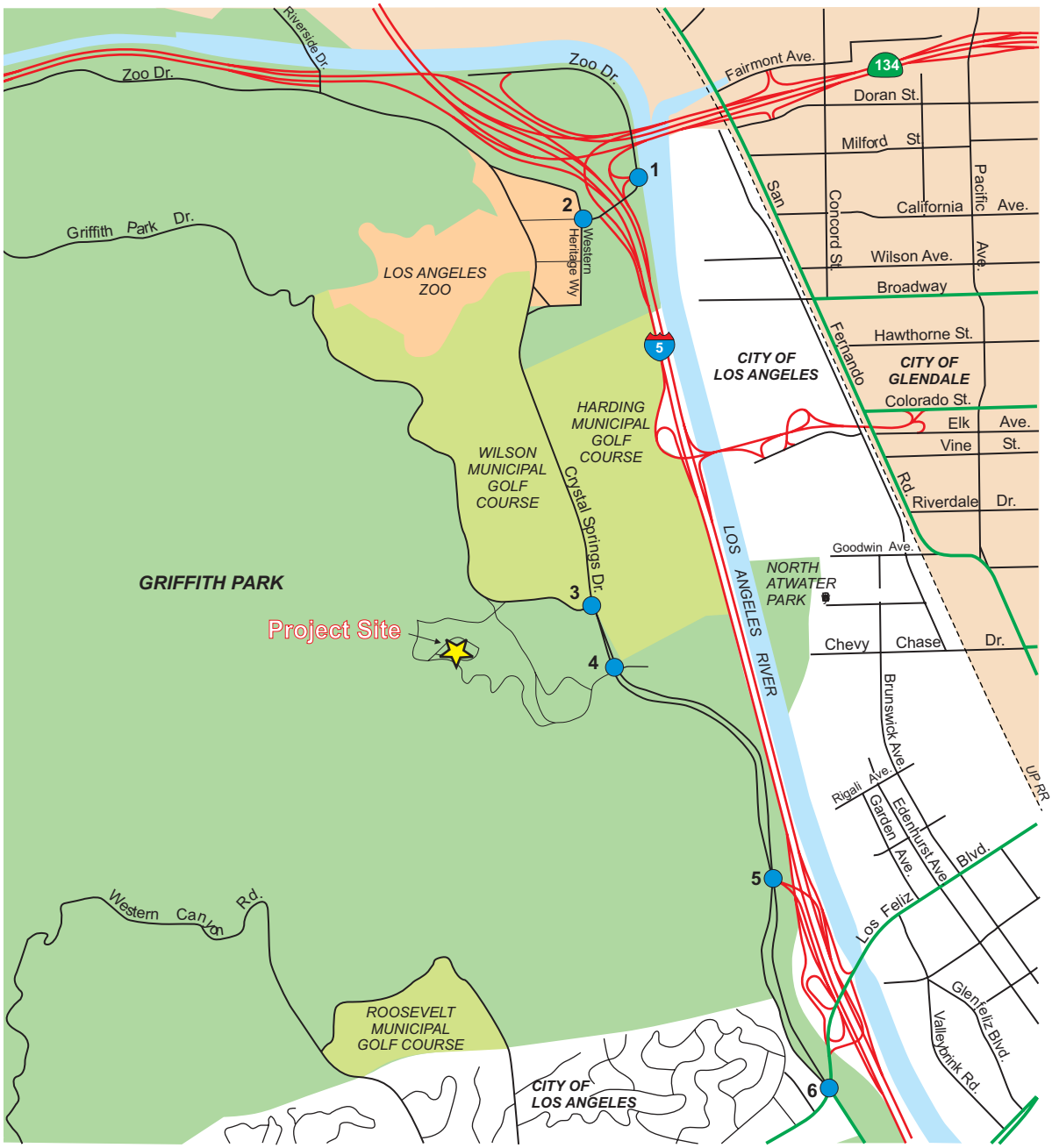
Table 4 – Project Trip Generation

Intensity	Unit	Daily Total	Peak Hour		
			Total	In	Out
2500	Attendees	1,100	550	500	50

3.2 Trip Distribution and Assignment

Trip distribution is the process of assigning the directions from which traffic will access a project site. Trip distribution is dependent upon the land use characteristics of the project, the local roadway network, and the general locations of other land uses to which project trips would originate or terminate. A trip distribution pattern was developed specifically for this project.

Based on the trip generation and distribution assumptions described above, project traffic was assigned to the roadway system. Figure 7 illustrates the project trip assignment to the study intersections for the analyzed peak hours.



LEGEND

- Project Location
- Study Intersection
- XX Intersection Turn Volume

N

Not to Scale

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Griffith Park Outdoor Performance Center

Figure 7

Project Trip Assignment

3.3 Project Parking Demand

The peak parking demand for the proposed project was calculated using some of the assumptions from the trip generation analysis, summarized earlier within this report section.

- Typical capacity crowd of 2,500 persons
- Average number of persons per vehicle of 2.5

The parking demand for the project would be 1,000 vehicles. Including a five percent reduction for pick-up/drop-off (vehicles not parking) trips, the total parking demand would be 950 vehicles. It was assumed, using the same methodology applied to the traffic analysis, that half of the inbound vehicles would arrive earlier than one hour before the event start and that half would arrive within one hour of the event start.

4. Existing with-Project Conditions

This section documents existing traffic conditions at the study intersections with the addition of project-generated traffic. Traffic volumes for these conditions were derived by adding project (active event) trips to the existing traffic volumes.

Table 5 summarizes the resulting V/C and LOS values at the study intersections for the existing and existing with-Project scenarios. The existing scenario excludes traffic generated by project events.

Table 5 – Intersection Operations – Existing with-Project

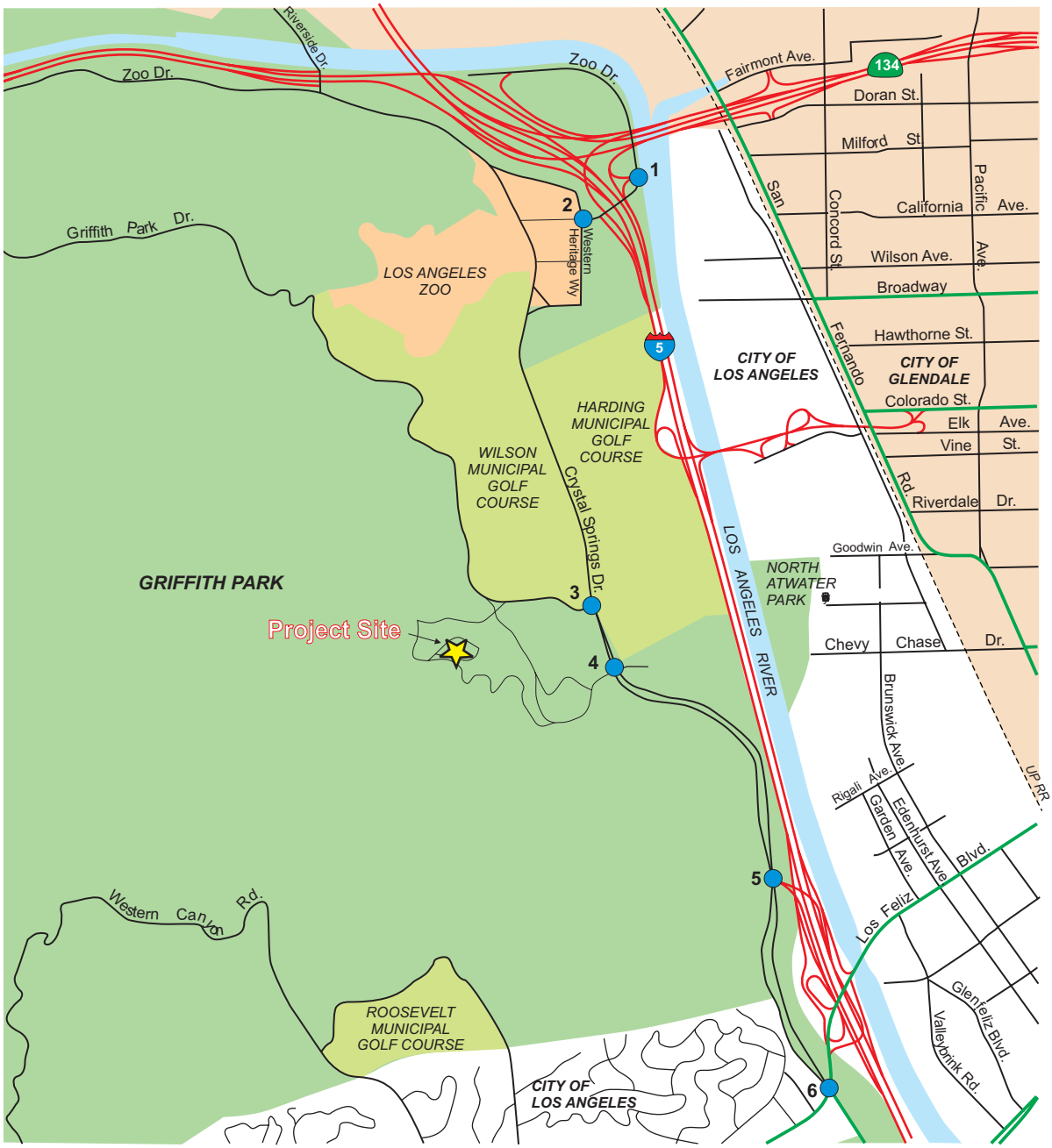
Study Intersections		Evening Peak Hour	Existing (2013) Conditions		Existing (2013) + Project	
			V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
1	Zoo Drive & I-5 NB off-ramp/SR-134 EB on-ramp *	Weekday	9.8	A	10.9	B
		Weekend	9.5	A	10.5	B
2	Western Heritage Way & Zoo Drive *	Weekday	26.2	D	39.4	E
		Weekend	10.0	A	11.7	B
3	Crystal Springs Drive & Griffith Park Drive *	Weekday	11.2	B	19.7	C
		Weekend	8.5	A	10.6	B
4	Crystal Springs Drive & Fire Road *	Weekday	9.6	A	12.4	B
		Weekend	8.7	A	11.0	B
5	Crystal Springs Drive/Griffith Park Drive & I-5 NB off-ramps/SB on-ramps *	Weekday	9.5	A	11.3	B
		Weekend	8.6	A	9.9	A
6	Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard	Weekday	0.716	C	0.720	C
		Weekend	0.648	B	0.650	B

** - Unsignalized intersection*

Five of the six study intersections are estimated to operate at LOS C or better during the weekday and weekend peak hours under the existing with-project (with existing events) scenario. The Western Heritage Way/Zoo Drive intersection, internal to the Park, is estimated to operate at LOS E in the weekday peak hour and LOS B in the weekend peak hour during an event.

The existing with-project traffic volumes are illustrated on Figure 8 (weekday peak hour) and Figure 9 (weekend peak hour). The traffic analysis worksheets for this scenario are provided in Appendix C of this report.

The relevance and application of local agency significant traffic impact standards on project event conditions is discussed in Section 7 of this report.



LEGEND

- Project Location
- Study Intersection
- XX Intersection Turn Volume

N

Not to Scale

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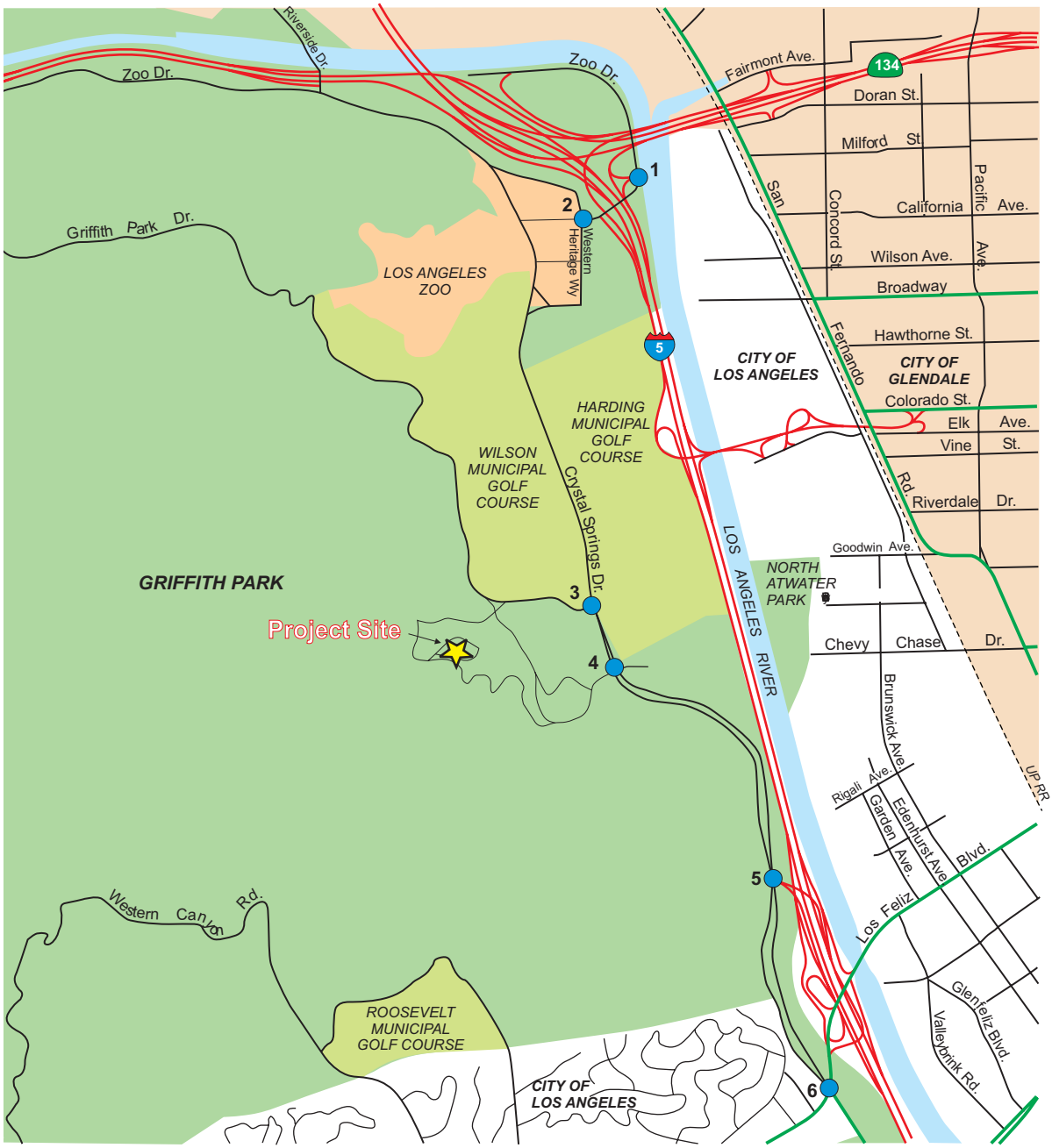
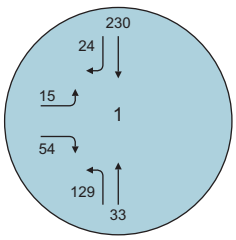
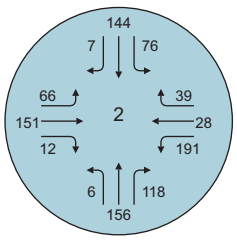
PLANNING & ENGINEERING

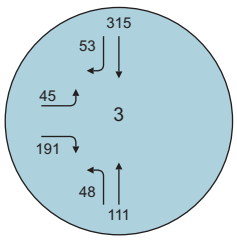
Griffith Park Outdoor Performance Center — Figure 8

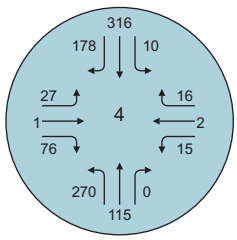
Existing With-Project Weekday Evening Peak-Hour Turn Volumes

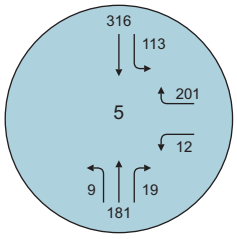


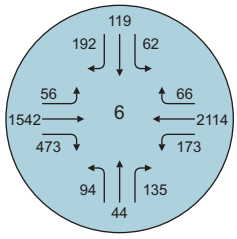












LEGEND

- Project Location
- Study Intersection
- XX Intersection Turn Volume

N

Not to Scale

KOA CORPORATION
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Griffith Park Outdoor Performance Center — Figure 9

Existing With-Project Weekend Evening Peak-Hour Turn Volumes

5. Future without-Project Conditions

This section provides an analysis of future traffic conditions in the study area with other future area projects and ambient growth added but without project traffic. The year 2015 was selected for analysis of future conditions, as Phase 2 of the project would be completed.

5.1 Ambient Growth

In order to acknowledge regional population and employment growth outside of the study area, an ambient/background traffic growth rate was applied to the existing traffic counts. An annual growth rate of two percent per year was used to partially increase volumes to year-2015 base traffic volume conditions.

5.2 Area Projects

In addition to the application of the ambient traffic growth rate, traffic from other area projects (approved and pending developments) was also included as part of the year 2015 analysis. Ten area projects were identified for inclusion in the traffic impact analysis. Area project traffic was distributed to the surrounding street system in the study area for the weekday and weekend evening peak hours.

Appendix D provides the list of identified cumulative/area projects in the cities of Glendale and Los Angeles and provides the trip generation of each based on information provided from each city's development list, or calculation of trips based on intensity and rates defined by ITE *Trip Generation (9th edition)*.

5.3 Future without-Project Intersection Levels of Service

The future without-project operations are summarized in Table 6.

Table 6 – Intersection Operations – Future without-Project

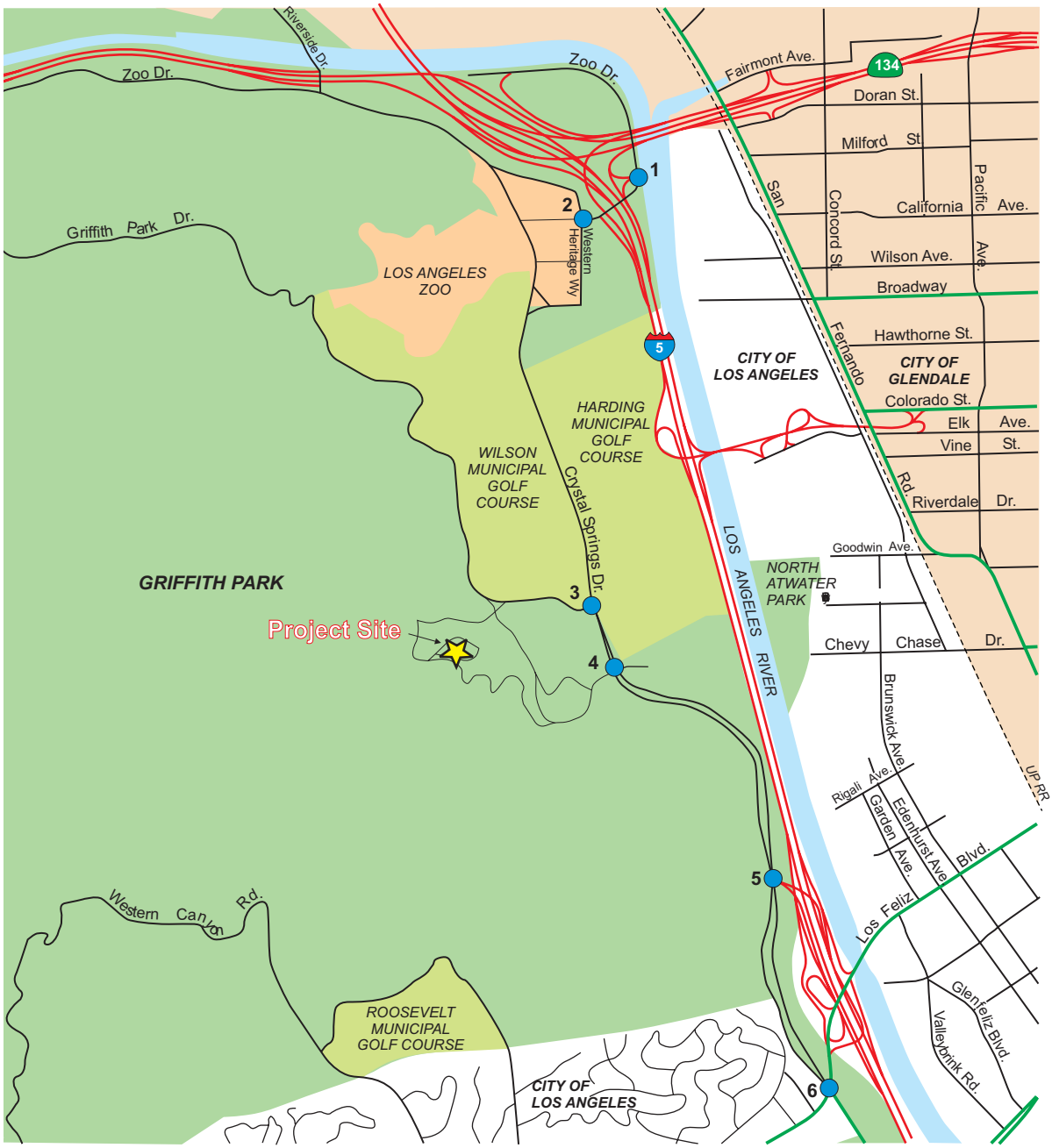
Study Intersections		Evening Peak Hour	Existing (2013) Conditions		Future (2015) Without-Project	
			V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
1	Zoo Drive & I-5 NB off-ramp/SR-134 EB on-ramp *	Weekday	9.8	A	10.0	A
		Weekend	9.5	A	9.7	A
2	Western Heritage Way & Zoo Drive *	Weekday	26.2	D	31.6	D
		Weekend	10.0	A	10.3	B
3	Crystal Springs Drive & Griffith Park Drive *	Weekday	11.2	B	11.9	B
		Weekend	8.5	A	8.6	A
4	Crystal Springs Drive & Fire Road *	Weekday	9.6	A	10.0	A
		Weekend	8.7	A	8.9	A
5	Crystal Springs Drive/Griffith Park Drive & I-5 NB off-ramps/SB on-ramps *	Weekday	9.5	A	9.7	A
		Weekend	8.6	A	8.7	A
6	Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard	Weekday	0.716	C	0.756	C
		Weekend	0.648	B	0.684	B

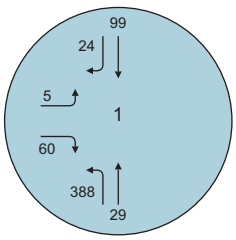
** - Unsignalized intersection*

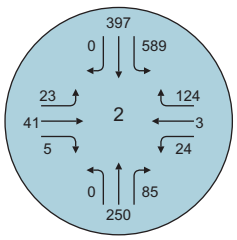
Five of the six study intersections are projected to operate at LOS C or better during the weekday and weekend peak hours under the future without-project scenario. The Western Heritage Way/Zoo Drive intersection is projected to operate at LOS D in the weekday peak hour and LOS B in the weekend peak hour.

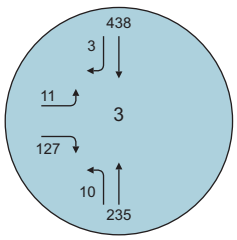
Baseline data applied to the analysis is from November counts. Conditions could be worse during the summer season due to Park activity, but background traffic and freeway-related traffic could be lower. The capacity of the analyzed locations is not expected to be exceeded during the summer months, under normal Park operating conditions.

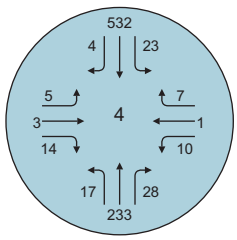
The peak-hour volumes for this analysis scenario are illustrated in Figure 10 (weekday peak hour) and Figure 11 (weekend peak hour). The traffic analysis worksheets are provided in Appendix E of this report.

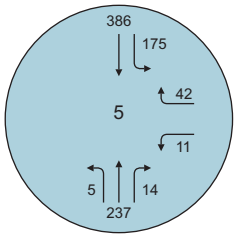


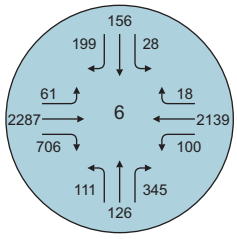












LEGEND

- Project Location
- Study Intersection
- XX Intersection Turn Volume

N

Not to Scale

KOA CORPORATION
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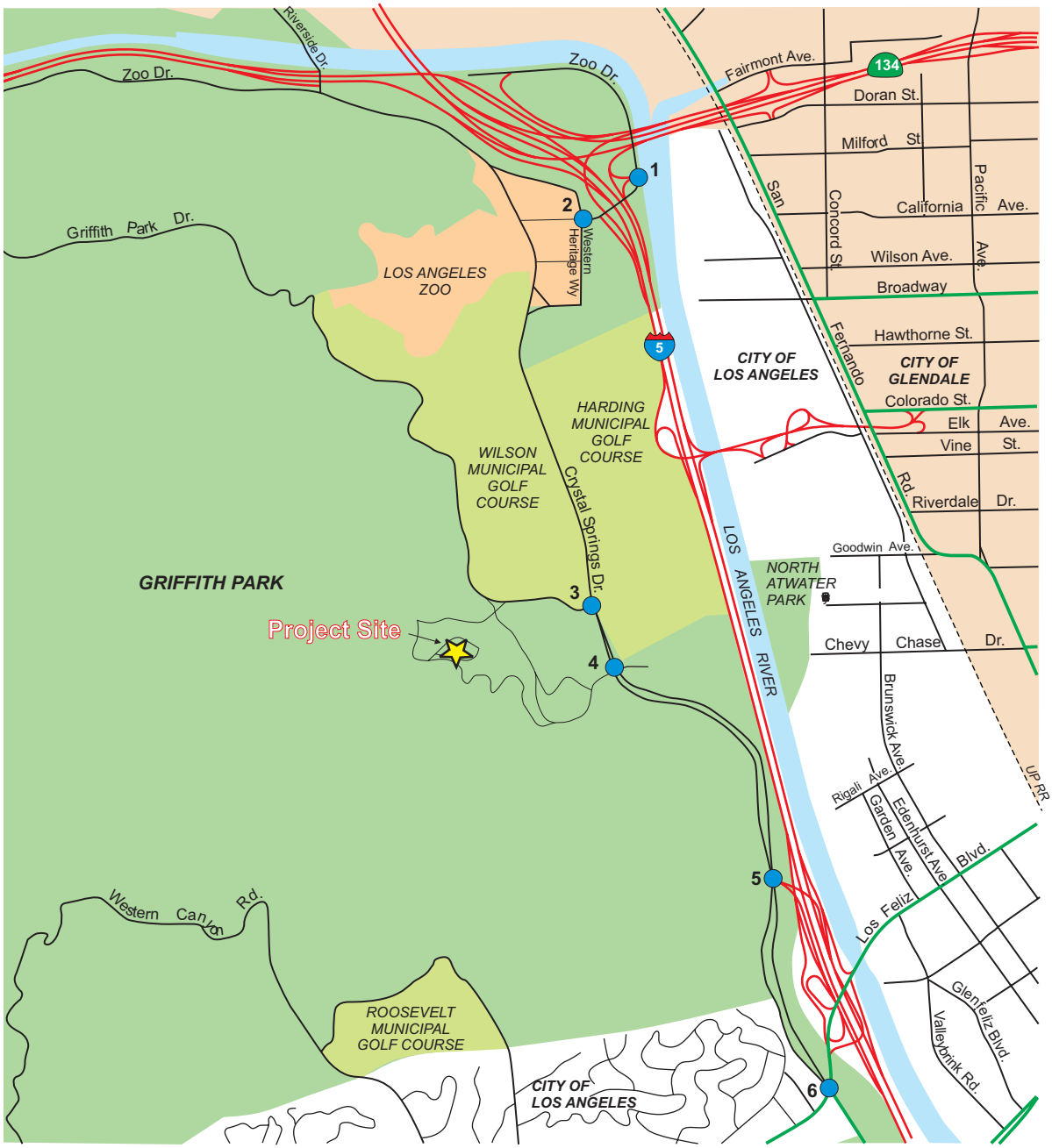
Griffith Park Outdoor Performance Center — Figure 10

Future Without-Project Weekday Evening Peak-Hour Turn Volumes



LEGEND

- Project Location
- Study Intersection
- XX Intersection Turn Volume

N

Not to Scale

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Griffith Park Outdoor Performance Center — Figure 11

Future Without-Project Weekend Evening Peak-Hour Turn Volumes

6. Future with-Project Conditions

This section documents future traffic conditions at the study intersections with the addition of project-generated traffic (with active events). Traffic volumes for these conditions were derived by adding project trips to the future without-Project scenario volumes.

Table 7 summarizes the resulting V/C and LOS values at the study intersections for the future with-Project analysis scenario.

Table 7 – Intersection Operations – Future with-Project

Study Intersections		PM Peak Hour	Future (2015) Without-Project		Future (2015) With-Project	
			V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
1	Zoo Drive & I-5 NB off-ramp/SR-134 EB on-ramp *	Weekday	10.0	A	11.2	B
		Weekend	9.7	A	10.7	B
2	Western Heritage Way & Zoo Drive *	Weekday	31.6	D	47.2	E
		Weekend	10.3	B	12.1	B
3	Crystal Springs Drive & Griffith Park Drive *	Weekday	11.9	B	23.1	C
		Weekend	8.6	A	11.1	B
4	Crystal Springs Drive & Fire Road *	Weekday	10.0	A	13.1	B
		Weekend	8.9	A	11.3	B
5	Crystal Springs Drive/Griffith Park Drive & I-5 NB off-ramps/SB on-ramps *	Weekday	9.7	A	11.7	B
		Weekend	8.7	A	10.2	B
6	Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard	Weekday	0.756	C	0.760	C
		Weekend	0.684	B	0.686	B

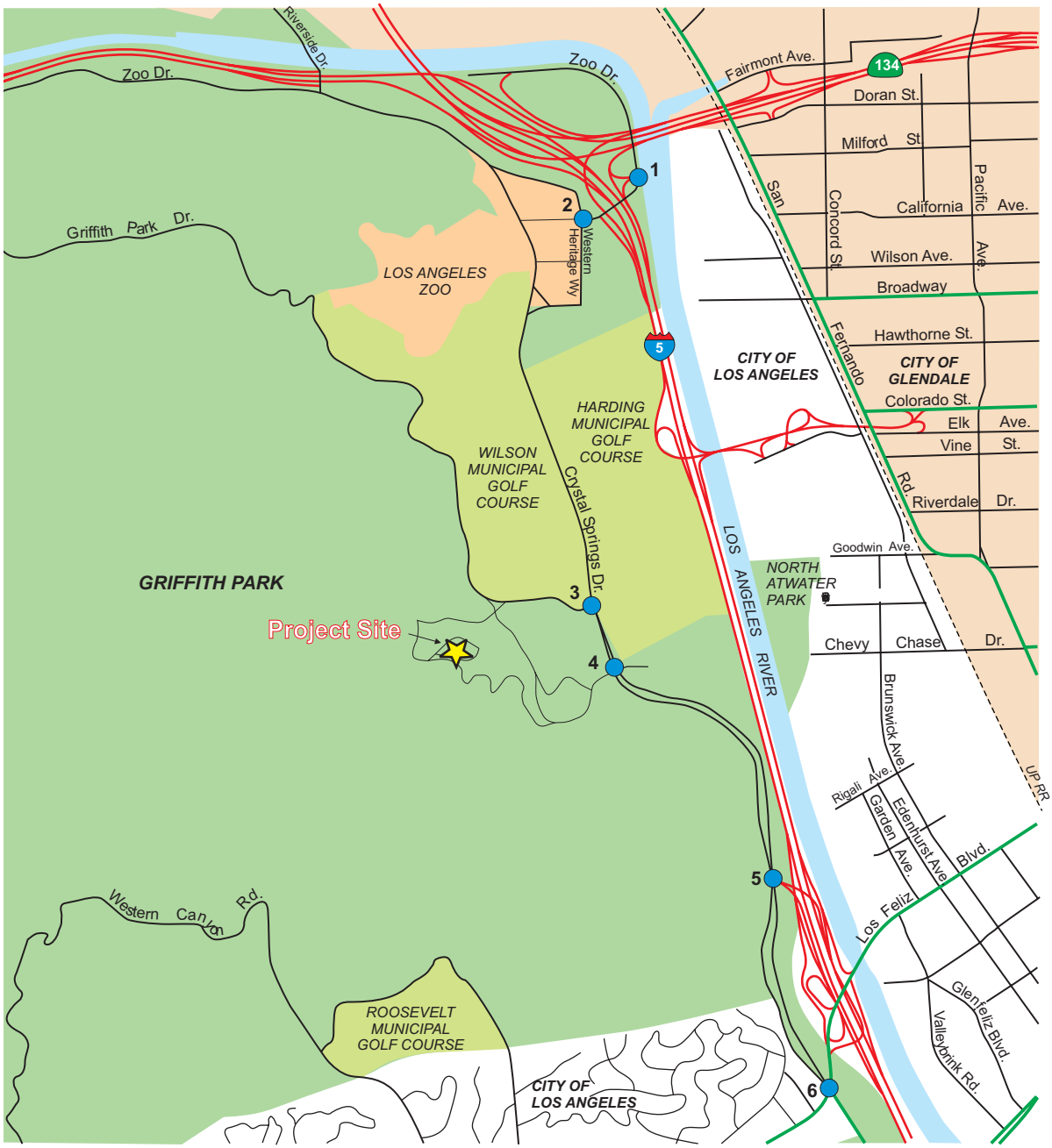
** - Unsignalized intersection*

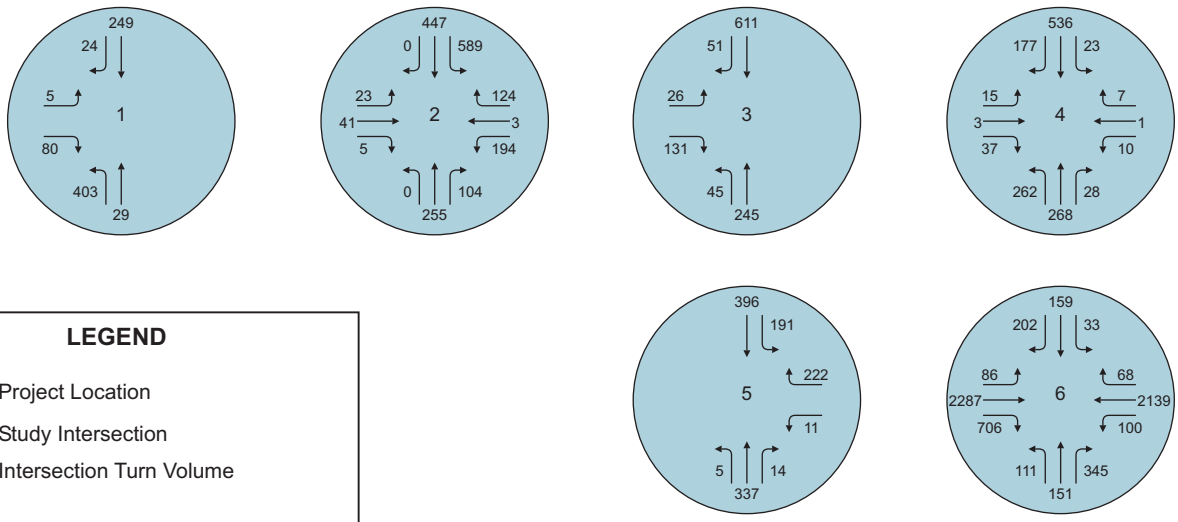
During an event, five of the six study intersections are projected to operate at LOS C or better during the weekday and weekend peak hours under the future with-project scenario. The Western Heritage Way/Zoo Drive intersection is projected to operate at LOS E during the weekday evening peak hour and LOS B during the weekend evening peak hour, when an event is occurring.

Baseline data applied to the analysis is from November counts. Conditions could be worse during the summer season due to Park activity, but background traffic and freeway-related traffic could be lower. The capacity of the analyzed locations is not expected to be exceeded during the summer months, under normal Park operating conditions.

The relevance and application of local agency significant traffic impact standards on project event conditions is discussed in the next report section.

The future with-project traffic volumes are illustrated on Figure 12 (weekday peak) and Figure 13 (weekend peak). The traffic analysis worksheets are provided in Appendix F of this report.





LEGEND

- Project Location
- Study Intersection
- XX Intersection Turn Volume

N

Not to Scale

KOA CORPORATION
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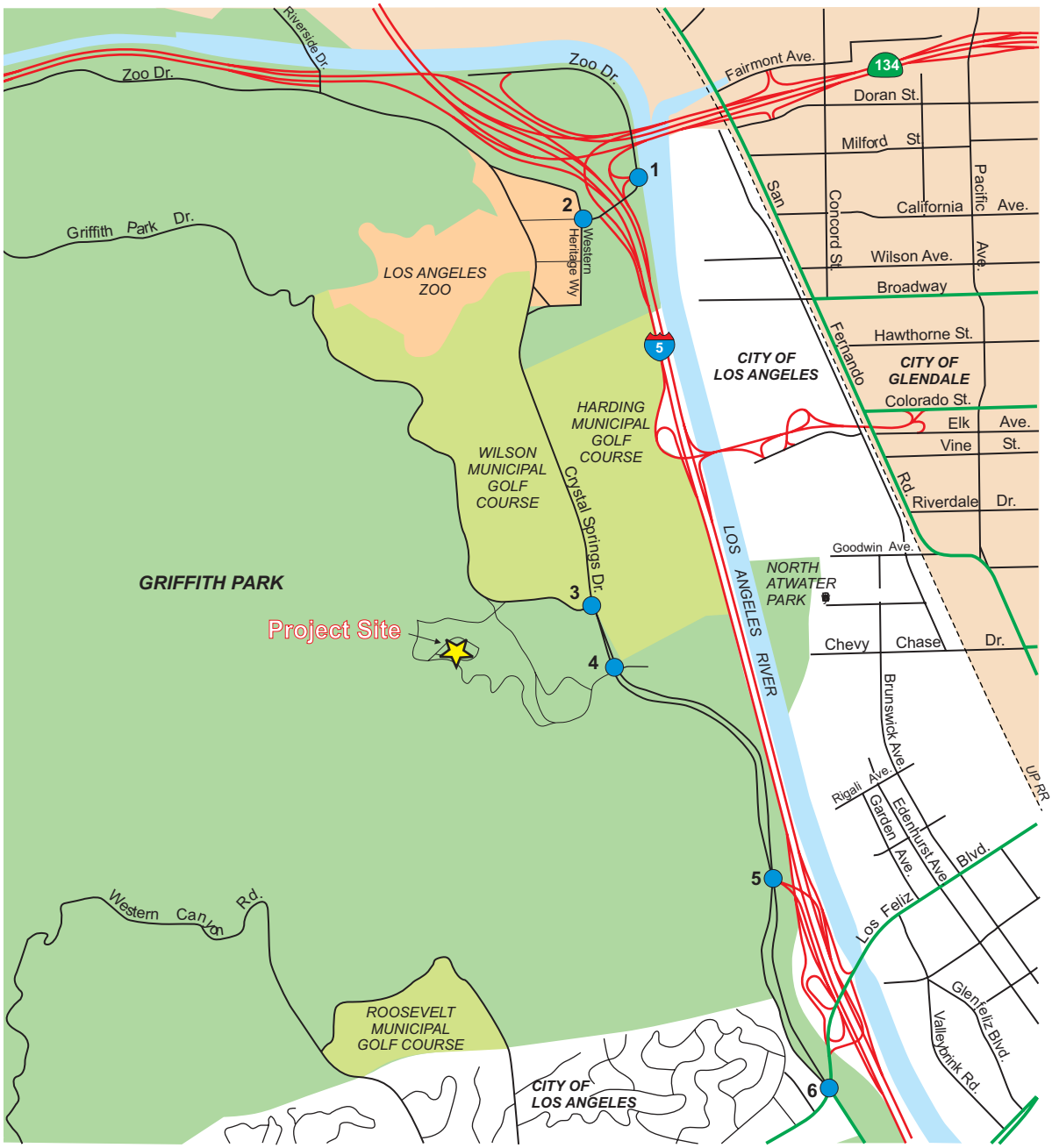
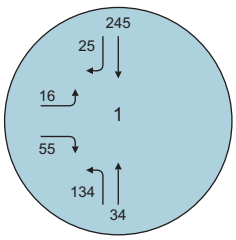
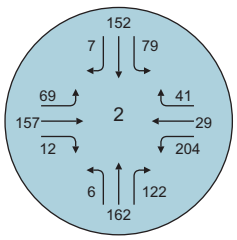
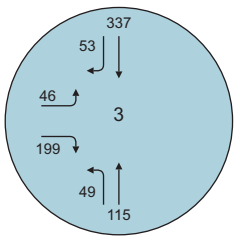
Griffith Park Outdoor Performance Center — Figure 12

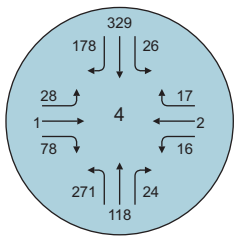
Future With-Project Weekday Evening Peak-Hour Turn Volumes

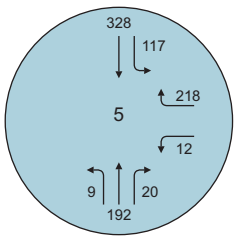


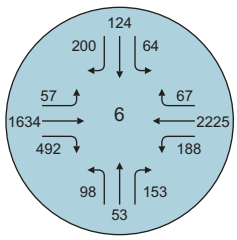












LEGEND

- Project Location
- Study Intersection
- XX — Intersection Turn Volume

N

Not to Scale

KOA CORPORATION
PLANNING & ENGINEERING

Griffith Park Outdoor Performance Center — Figure 13

Future With-Project Weekend Evening Peak-Hour Turn Volumes

7. Project Traffic and Parking Impacts

7.1 Determination of Traffic Impacts

Traffic impacts are identified if a proposed project will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency.

LADOT has established specific thresholds for project-related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. The following increases in peak-hour V/C ratios are considered significant traffic impacts:

Level of Service	Final V/C Ratio	Project Related V/C increase
C	> 0.701 – 0.800	Equal to or greater than 0.040
D	> 0.801 – 0.900	Equal to or greater than 0.020
E	> 0.901 – 1.000	Equal to or greater than 0.010
F	Greater than 1.000	Equal to or greater than 0.010

Impact significance standards are not defined for unsignalized intersections. Such intersections are only normally included in traffic study areas if they provide primary access to a site and analysis of traffic signal warrants may be necessary. Five of the six study intersections are unsignalized, and were included in the study area for this analysis due to their location along access points to parking areas (internal to Griffith Park) or at freeway or Park entrance/exit points.

7.2 Project Traffic Impacts – Construction Period

Project construction would include minimal grading, alteration of the existing landscape, or disturbance. Therefore, truck trips required for large-scale grading and dirt hauling would not be generated during the construction period.

The majority of construction activity would be for the trenching associated with relocation of on-site utility lines. Construction of the stage would require some minimal grading. A total of 130 to 150 truck trips would take place over the course of construction, based on estimates provided by RAP. These truck trips would be hauling decomposed granite, stage infrastructure, and other materials to the site. All construction activities would take place between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Travel lanes would be maintained on all park roadways and surrounding streets throughout the construction period.

Construction truck trips would be routed directly to freeway routes from park roadways, whenever feasible. A truck routing plan would be submitted to LADOT as part of construction plan approvals. Construction truck and employee trips will not be generated during peak usage time of the Park on weekends. Employee vehicle commute trips to and from the work site would be negligible in terms of potential impacts on the surrounding roadway network, due to the low-intensity nature of the construction work.

Due to the characteristics of the anticipated truck and employee vehicle trips generated during the construction period, impacts of those trips are anticipated to be less than significant.

7.3 Project Traffic Impacts – Existing with-Project Conditions

Traffic impacts for this scenario were determined by comparing the existing scenario conditions to the existing with-project scenario conditions. The latter scenario is estimated, based on currently active seasonal events.

Vehicle traffic generated by project events is not anticipated to result in a significant impact at any of the study intersections under existing conditions. The Western Heritage Way/Zoo Drive intersection is estimated to worsen in operations due to existing events from LOS D to LOS E in the weekday peak hour. The LOS E conditions represent near-capacity conditions, but capacity of the intersection is not exceeded. For seasonal events, this represents acceptable operations.

The intersection of Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard would operate at LOS C conditions, and the 0.004 change in the volume-to-capacity ratio would not be considered significant under typical traffic review by LADOT. The proposed project would not generate new trips, and as LOS C conditions represent good operating conditions (although other bottlenecks along the Los Feliz Boulevard corridor can cause peak-period congestion), this impact is not considered significant for the proposed project.

7.4 Project Traffic Impacts – Future with-Project Conditions

Traffic impacts for this scenario were determined by comparing the future without-project scenario conditions to the future with-project scenario conditions.

Vehicle traffic generated by project events is not anticipated to result in a significant impact at any of the study intersections under future conditions.

The Western Heritage Way/Zoo Drive intersection is projected to worsen in operations from LOS D to LOS E in the weekday peak hour when events are scheduled to occur, similar to the existing condition. Like the existing plus project conditions, the LOS E conditions represent near-capacity conditions, but capacity of the intersection is not exceeded. For special events, this would be acceptable operations, and these traffic conditions exist with current seasonal events.

As with the analysis of impacts with existing baseline conditions, the intersection of Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard would operate at LOS C conditions, and the 0.004 change in the volume-to-capacity ratio over future baseline conditions would not be considered significant under typical traffic review by the LADOT. As with the existing with-project analysis, this impact is not considered significant for the proposed project.

7.5 Project Parking Impacts

Table 8 provides a summary of parking demand within the three analyzed parking lots, with both background (general Park use) and project demand (active event). Project parking demand was based on the same average number of persons per vehicle at 2.5 (similar to the trip generation analysis) and intensity of demand was assumed to be 50 percent or 425 vehicles in the 5:00 p.m. hour and 100 percent in the 6:00 p.m. and later hours. Demand was accommodated in this order in the calculations: Lot 3, Lot 2, and then Lot 1.

Table 8 – Parking Lot Occupancy with Project Events

TIME	Lot 1 South of Carousel		Lot 2 North of Carousel			Lot 3 North of/Adjacent to Project Site			TOTAL All Three Lots		
	Spaces	Occupancy	Regular	Handicap	Occupancy	Regular	Handicap	Occupancy	Spaces	Occupancy	Overflow *
Supply	225	-	292	13	-	21	1	-	552	-	
Demand and Occupancy - Thursday, 11/21/13											
4:00 PM	20	8.9%	6	0	2.0%	7	0	31.8%	33	6.0%	0
5:00 PM	118	52.4%	292	13	100.0%	21	1	100.0%	445	80.6%	0
6:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	412
7:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	433
8:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	431
9:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	410
Demand and Occupancy - Saturday, 11/23/13											
4:00 PM	75	33.3%	35	0	11.5%	11	0	50.0%	121	21.9%	0
5:00 PM	168	74.7%	292	13	100.0%	21	1	100.0%	495	89.7%	0
6:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	411
7:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	402
8:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	400
9:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	404

** The estimated number of vehicles that must be parked in other parking areas, beyond those adjacent to the project site and the Carousel. Includes non-project (background) demand, and project demand of 450 vehicles in 5:00 p.m. hour and 900 vehicles in 6:00 p.m. and later hours.*

Overflow demand conditions are estimated to occur by the 6:00 p.m. hour for both weekday and weekend evening events. The overflow amount peaks at the 7:00 p.m. on weekday evenings at 433 vehicles, and peaks at the 6:00 p.m. hour on weekend evenings at 411 vehicles.

This overflow demand would be accommodated in other Park parking areas, as it is under current conditions. In these instances, vehicles are directed to park in other nearby parking lot areas such as the Crystal Springs Picnic area and walk to the event site.

7.6 Congestion Management Program Review

The CMP was created statewide because of Proposition 111 and was implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted where:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed project will add 50 or more vehicle trips during either a.m. or p.m. weekday peak hours.

- At CMP mainline freeway-monitoring locations, where the project will add 150 or more trips, in either direction, during either the a.m. or p.m. weekday peak hours.

Traffic Impact at CMP Arterial Monitoring Intersections

There are no CMP arterial monitoring stations within the general vicinity of the project site in Griffith Park. Therefore, no further analysis of CMP monitoring intersections is required.

Traffic Impact at CMP Mainline Freeway Monitoring Locations

The nearest CMP mainline freeway monitoring location to the project site is the I-5 Freeway south of the Colorado Boulevard Freeway Extension (Station 1005) located directly east of the project site, and the SR-134 Freeway east of Central Avenue (Station 1055) located about 1.5 miles east of the project site.

Based on the project trip generation estimates, the proposed project would add 150 new trips per hour in either direction to one of these freeway monitoring locations, at the SR-134 Freeway east of Central Avenue. Based on further analysis of this CMP freeway monitoring station, the additional trips onto this mainline location would not create a significant impact.

In addition, the trips are already occurring when special events are held at the project site. This does not represent a new project impact based on additional generated trips.

Transit Impact

The project is not anticipated to add new transit riders to existing transit facilities, primarily because the local bus line serving Griffith Park does not operate on park roadways into the evening hours. Therefore, a transit impact analysis was not required.

APPENDIX A
Traffic Count Data

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-001 **Day:** Thursday

City: Glendale **Date:** 11/21/2013

PM

NS/EW Streets:	Zoo Dr			Zoo Dr			I-34 EB/I-5 NB Ramps			I-34 EB/I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 0.5	WT 0	WR 1.5	TOTAL
5:00 PM	91	6			18	7	1		15				138
5:15 PM	93	9			24	6	1		16				149
5:30 PM	87	10			23	4	1		16				141
5:45 PM	102	3			19	6	2		11				143
6:00 PM	84	5			15	5	1		4				114
6:15 PM	95	3			12	2	0		10				122
6:30 PM	98	5			11	6	1		9				130
6:45 PM	60	4			9	4	2		3				82
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	710	45	0	0	131	40	9	0	84	0	0	0	1019
APPROACH %'s :	94.04%	5.96%	0.00%	0.00%	76.61%	23.39%	9.68%	0.00%	90.32%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	373	28	0	0	84	23	5	0	58	0	0	0	571
PEAK HR FACTOR :		0.955			0.892			0.926			0.000		0.958

UTURNS

	NB	SB	EB	WB
5:00 PM	1		0	
5:15 PM	0		1	
5:30 PM	1		0	
5:45 PM	1		0	
6:00 PM	0		0	
6:15 PM	1		0	
6:30 PM	0		0	
6:45 PM	0		0	
TOTAL VOLUMES :	4	0	1	0

CONTROL : 1-Way Stop (EB)

ITM Peak Hour Summary

Prepared by:

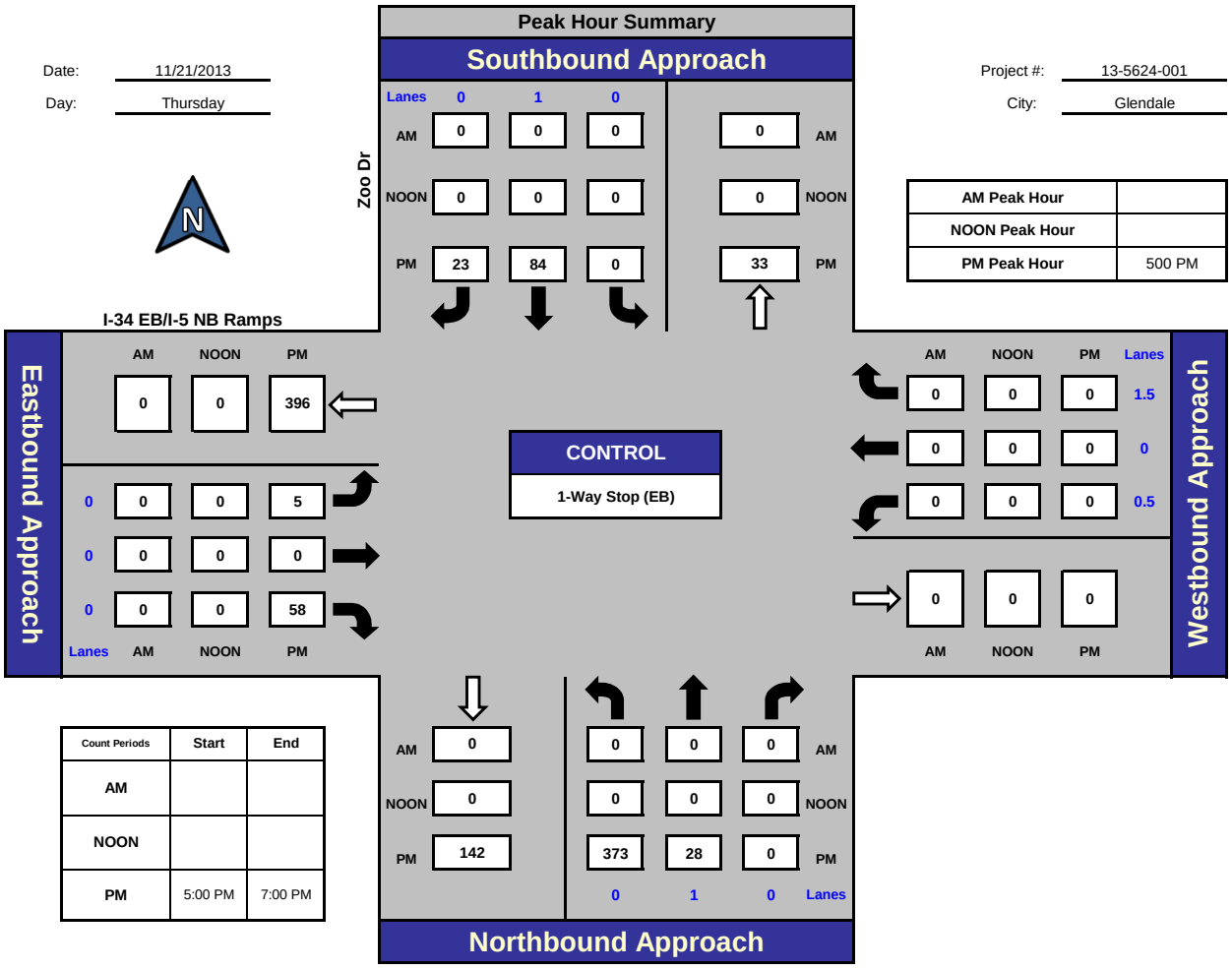
National Data & Surveying Services

Zoo Dr and I-34 EB/I-5 NB Ramps , Glendale

Date: 11/21/2013
Day: Thursday

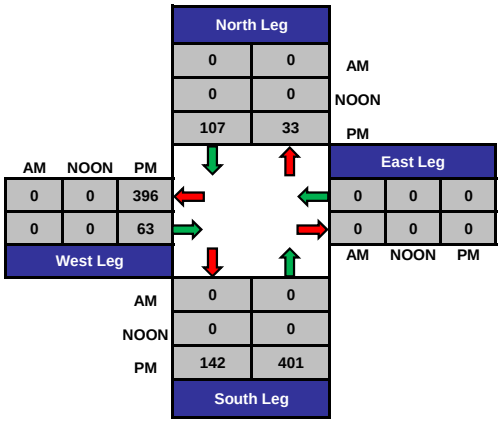
Project #: 13-5624-001
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

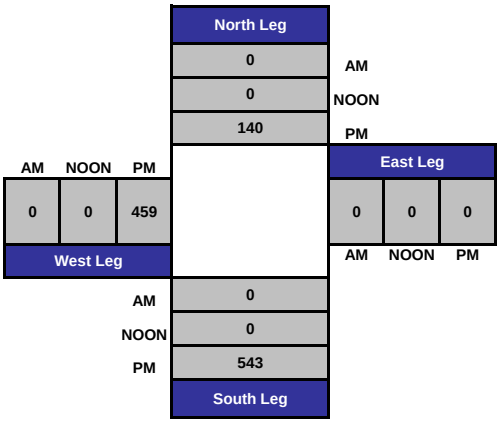


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-001 **Day:** Saturday

City: Glendale **Date:** 11/16/2013

PM

NS/EW Streets:	Zoo Dr			Zoo Dr			I-34 EB/I-5 NB Ramps			I-34 EB/I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 0.5	WT 0	WR 1.5	TOTAL
5:00 PM	44	7			16	5	6		12				90
5:15 PM	32	16			19	9	4		6				86
5:30 PM	17	8			23	8	1		8				65
5:45 PM	21	2			22	2	4		8				59
6:00 PM	19	3			10	3	2		6				43
6:15 PM	8	6			5	1	1		11				32
6:30 PM	7	1			2	1	3		3				17
6:45 PM	6	2			7	1	0		4				20
TOTAL VOLUMES :	NL 154	NT 45	NR 0	SL 0	ST 104	SR 30	EL 21	ET 0	ER 58	WL 0	WT 0	WR 0	TOTAL 412
APPROACH %'s :	77.39%	22.61%	0.00%	0.00%	77.61%	22.39%	26.58%	0.00%	73.42%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	114	33	0	0	80	24	15	0	34	0	0	0	300
PEAK HR FACTOR :		0.721			0.839			0.681			0.000		0.833

UTURNS	NB	SB	EB	WB
	0	0	0	0

CONTROL : 1-Way Stop (EB)

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Zoo Dr and I-34 EB/I-5 NB Ramps , Glendale

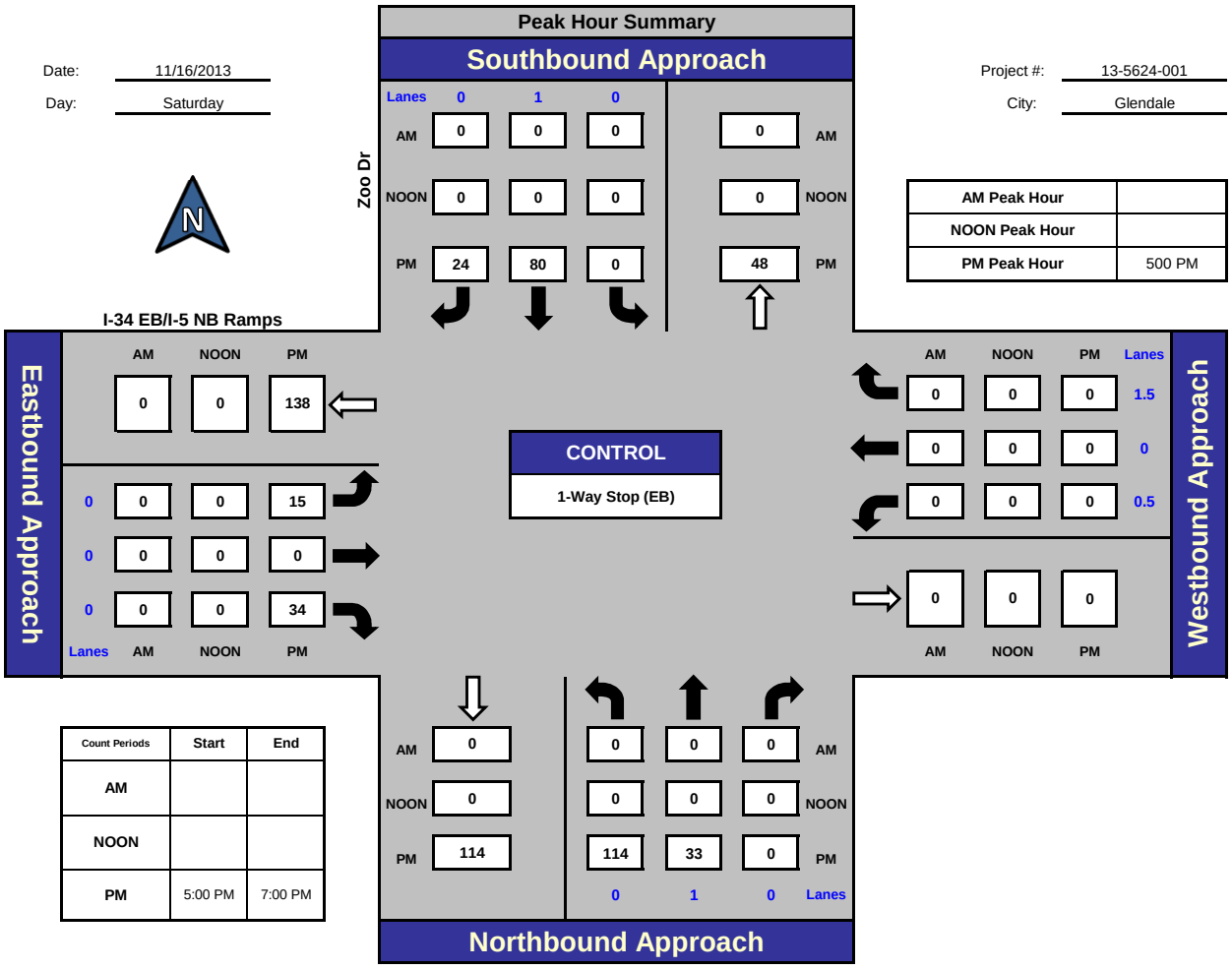
Date: 11/16/2013

Day: Saturday

Project #: 13-5624-001

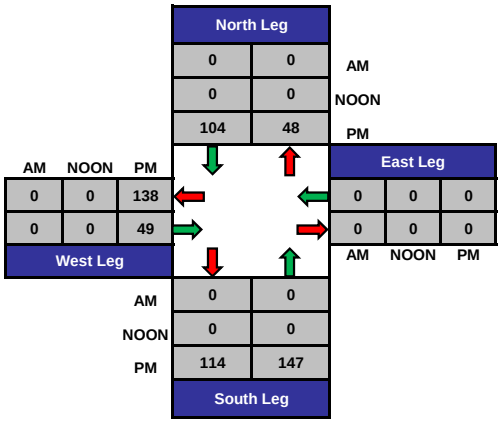
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

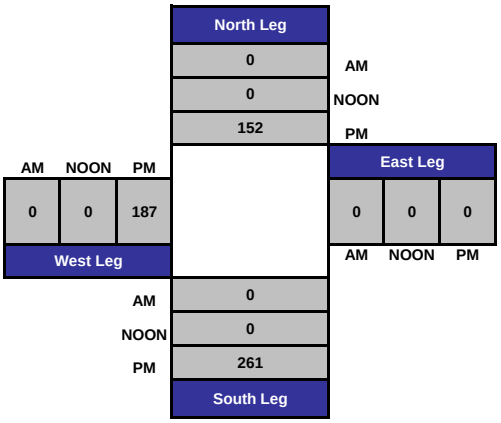


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-002 **Day:** Thursday

City: Glendale **Date:** 11/21/2013

PM

NS/EW Streets:	Western Heritage Way			Western Heritage Way			Zoo Dr			Zoo Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 1	TOTAL
5:00 PM		54	20	130	88	0	14	21	3	0	1	29	360
5:15 PM		72	20	145	98	0	6	10	1	6	1	32	391
5:30 PM		66	23	142	96	0	2	6	0	2	0	35	372
5:45 PM		48	19	149	96	0	0	2	1	4	1	23	343
6:00 PM		57	14	157	103	0	1	2	2	1	1	14	352
6:15 PM		41	6	168	100	1	0	0	0	5	0	8	329
6:30 PM		27	7	154	104	1	3	1	0	5	3	9	314
6:45 PM		28	6	134	79	0	0	1	0	4	0	6	258
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	393	115	1179	764	2	26	43	7	27	7	156	2719
APPROACH %'s :	0.00%	77.36%	22.64%	60.62%	39.28%	0.10%	34.21%	56.58%	9.21%	14.21%	3.68%	82.11%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	240	82	566	378	0	22	39	5	12	3	119	1466
PEAK HR FACTOR :		0.875			0.963			0.434			0.859		0.937

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : 4-Way Stop (NB/SB/EB/WB)

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Western Heritage Way and Zoo Dr , Glendale

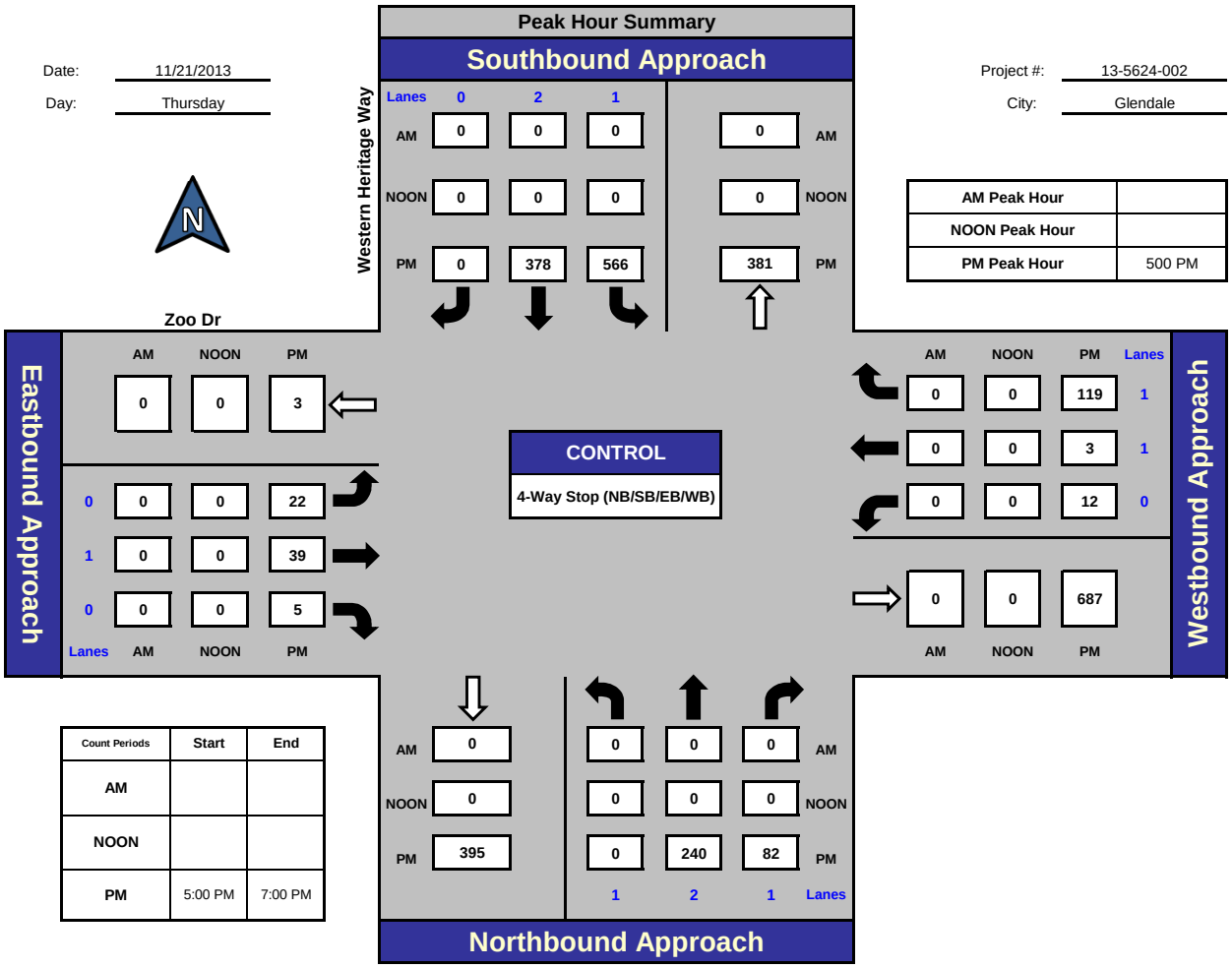
Date: 11/21/2013

Day: Thursday

Project #: 13-5624-002

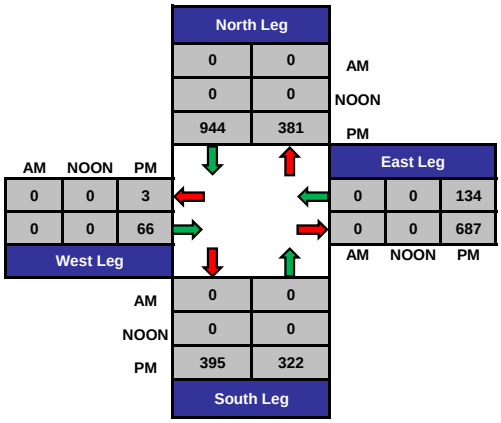
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

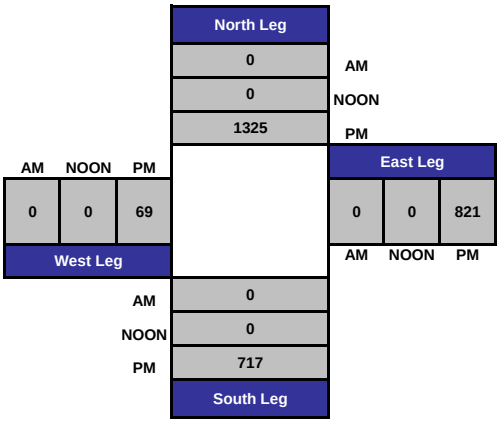


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-002 **Day:** Saturday

City: Glendale **Date:** 11/16/2013

PM

NS/EW Streets:	Western Heritage Way			Western Heritage Way			Zoo Dr			Zoo Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 1	TOTAL
5:00 PM	4	61	39	32	25	1	27	63	3	12	4	8	279
5:15 PM	0	47	28	17	24	2	26	52	4	2	6	12	220
5:30 PM	0	18	19	12	24	3	6	20	2	1	12	10	127
5:45 PM	2	25	13	15	21	1	7	16	3	6	6	9	124
6:00 PM	1	13	9	20	35	1	2	13	3	3	2	5	107
6:15 PM	1	17	9	22	33	1	1	4	3	5	3	7	106
6:30 PM	0	12	3	13	20	0	4	2	1	1	0	3	59
6:45 PM	0	24	5	9	11	1	3	5	0	3	2	5	68
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	8	217	125	140	193	10	76	175	19	33	35	59	1090
APPROACH %'s :	2.29%	62.00%	35.71%	40.82%	56.27%	2.92%	28.15%	64.81%	7.04%	25.98%	27.56%	46.46%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	6	151	99	76	94	7	66	151	12	21	28	39	750
PEAK HR FACTOR :		0.615			0.763			0.616			0.917		0.672

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : 4-Way Stop (NB/SB/EB/WB)

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Western Heritage Way and Zoo Dr , Glendale

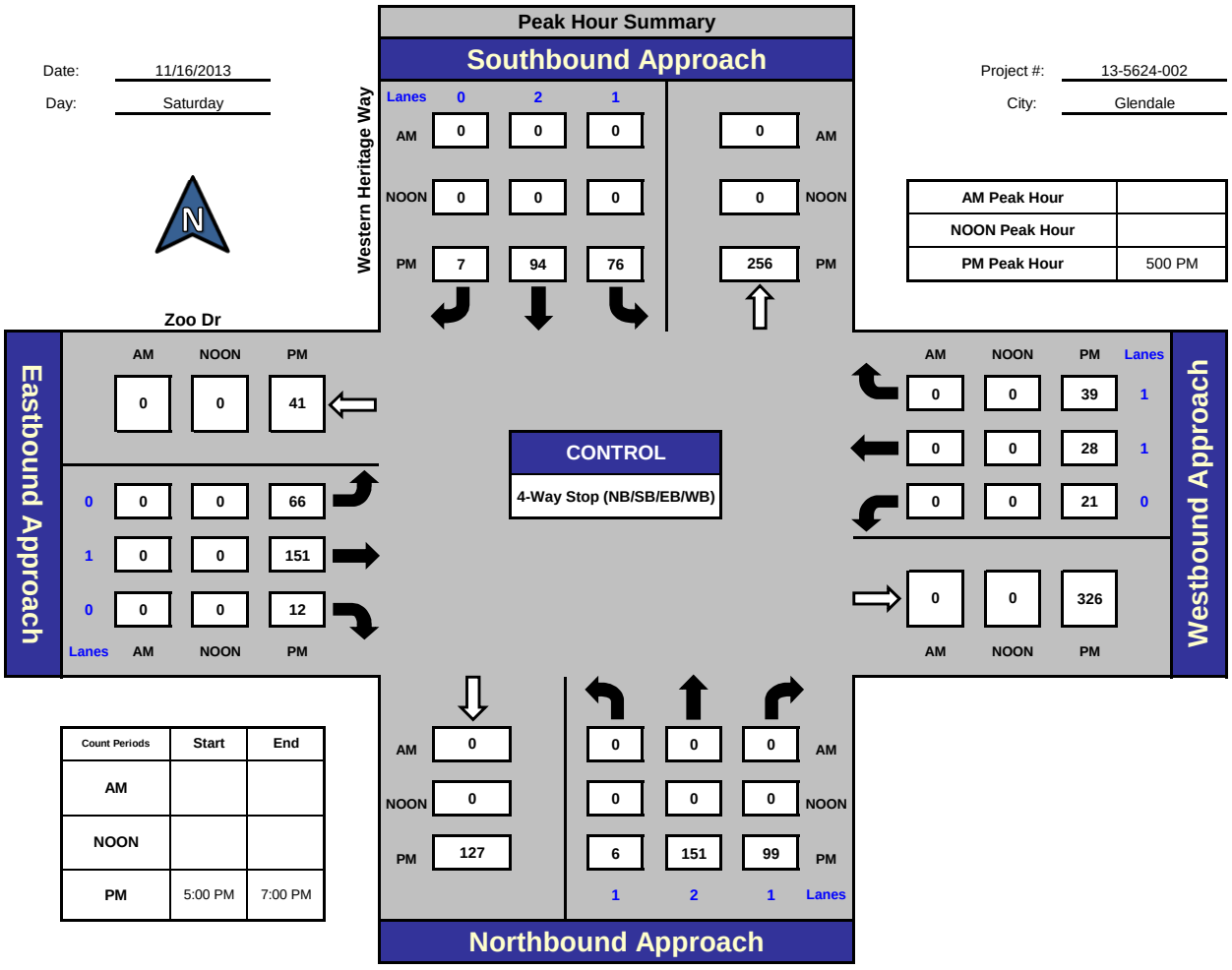
Date: 11/16/2013

Day: Saturday

Project #: 13-5624-002

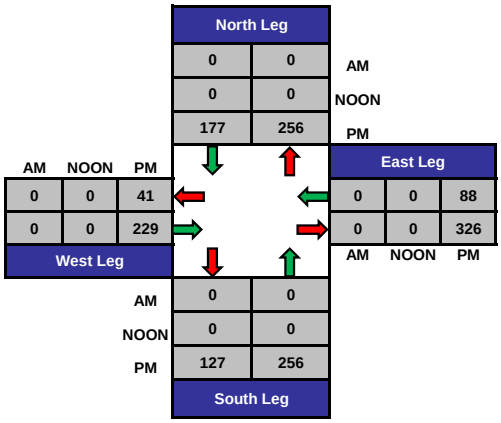
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

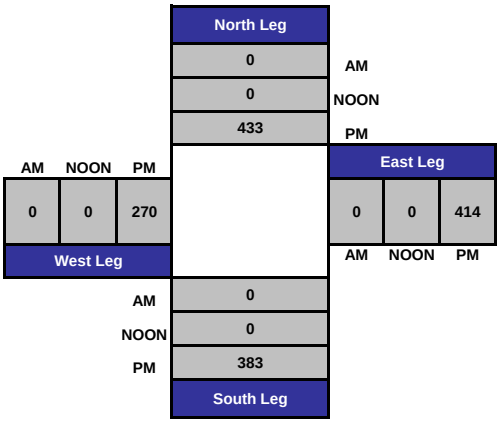


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-003 **Day:** Thursday

City: Glendale **Date:** 11/21/2013

PM

NS/EW Streets:	Crystal Springs Dr			Crystal Springs Dr			Griffith Park Dr			Griffith Park Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 0	WR 0	TOTAL
5:00 PM	6	55			78	1	4		42				186
5:15 PM	3	59			110	1	5		44				222
5:30 PM	1	63			98	1	2		27				192
5:45 PM	4	50			88	1	3		32				178
6:00 PM	2	54			110	0	1		19				186
6:15 PM	2	38			95	2	1		29				167
6:30 PM	4	30			104	0	3		20				161
6:45 PM	4	28			87	0	0		25				144
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	26	377	0	0	770	6	19	0	238	0	0	0	1436
APPROACH %'s :	6.45%	93.55%	0.00%	0.00%	99.23%	0.77%	7.39%	0.00%	92.61%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	515 PM												TOTAL
PEAK HR VOL :	10	226	0	0	406	3	11	0	122	0	0	0	778
PEAK HR FACTOR :		0.922			0.921			0.679			0.000		0.876

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : 3-Way Stop (NB/SB/EB)

ITM Peak Hour Summary

Prepared by:

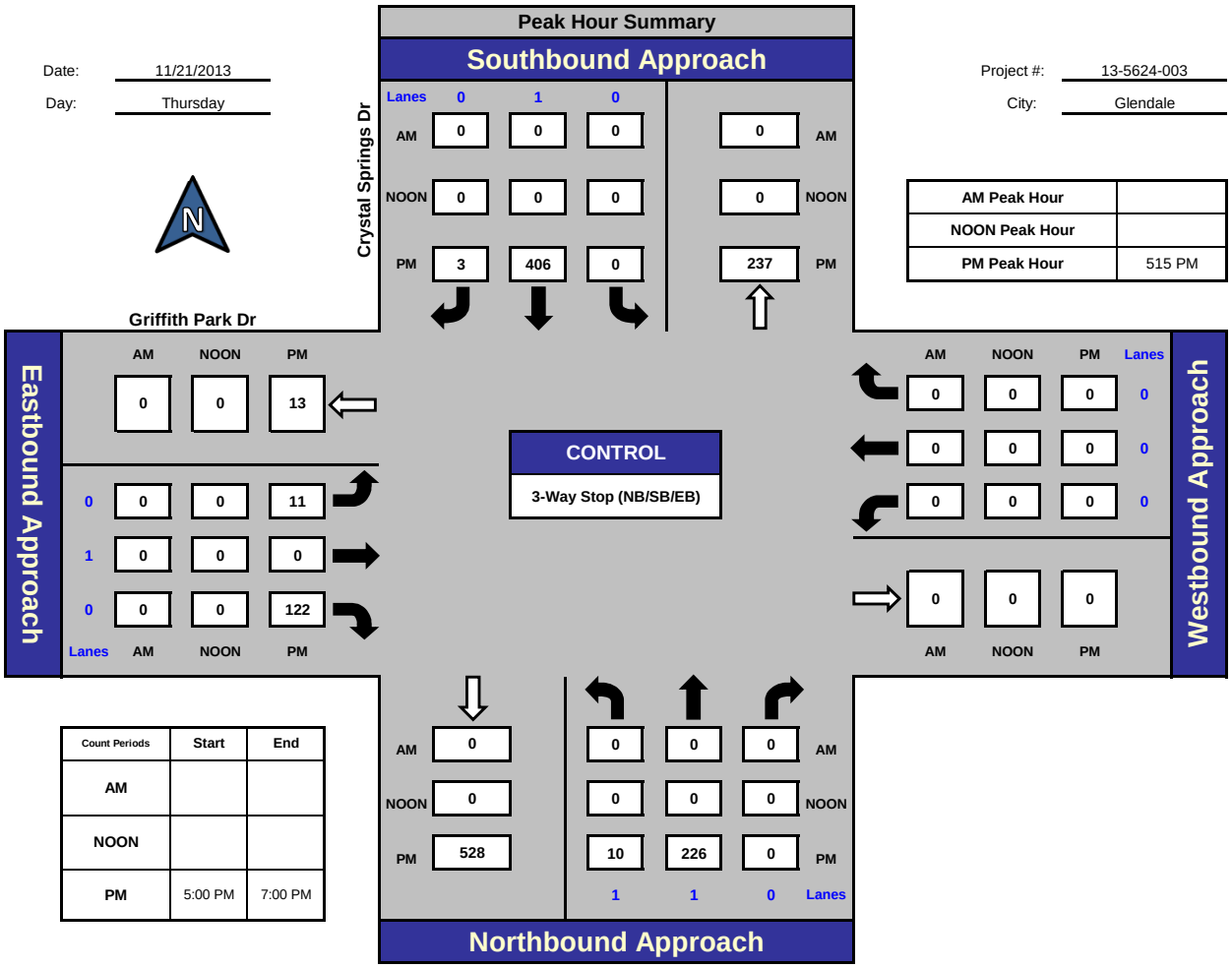
National Data & Surveying Services

Crystal Springs Dr and Griffith Park Dr , Glendale

Date: 11/21/2013
Day: Thursday

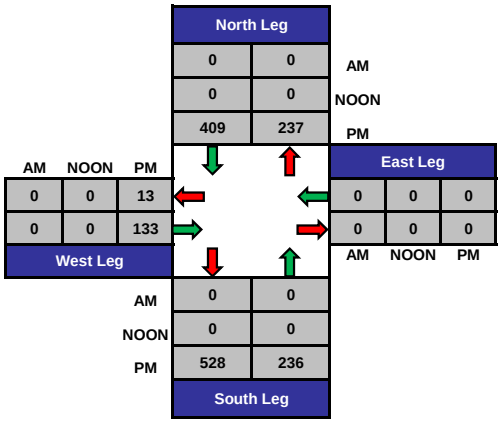
Project #: 13-5624-003
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	515 PM

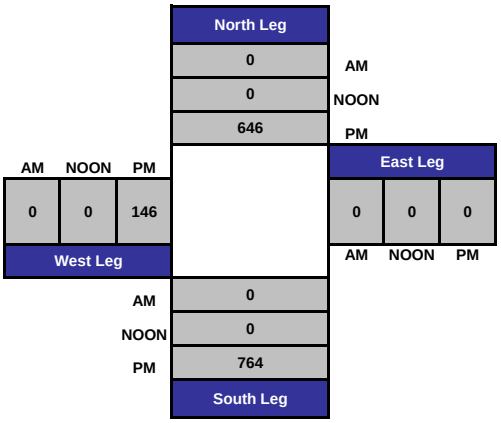


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-003 **Day:** Saturday

City: Glendale **Date:** 11/16/2013

PM

NS/EW Streets:	Crystal Springs Dr			Crystal Springs Dr			Griffith Park Dr			Griffith Park Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 0	WR 0	TOTAL
5:00 PM	5	31			41	2	11		59				149
5:15 PM	3	28			44	1	10		74				160
5:30 PM	3	18			31	1	4		38				95
5:45 PM	2	24			26	1	5		16				74
6:00 PM	6	14			30	2	1		10				63
6:15 PM	5	15			38	2	2		10				72
6:30 PM	3	16			25	2	1		8				55
6:45 PM	4	20			13	2	1		5				45
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	31	166	0	0	248	13	35	0	220	0	0	0	713
APPROACH %'s :	15.74%	84.26%	0.00%	0.00%	95.02%	4.98%	13.73%	0.00%	86.27%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	13	101	0	0	142	5	30	0	187	0	0	0	478
PEAK HR FACTOR :		0.792			0.817			0.646			0.000		0.747

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : 3-Way Stop (NB/SB/EB)

ITM Peak Hour Summary

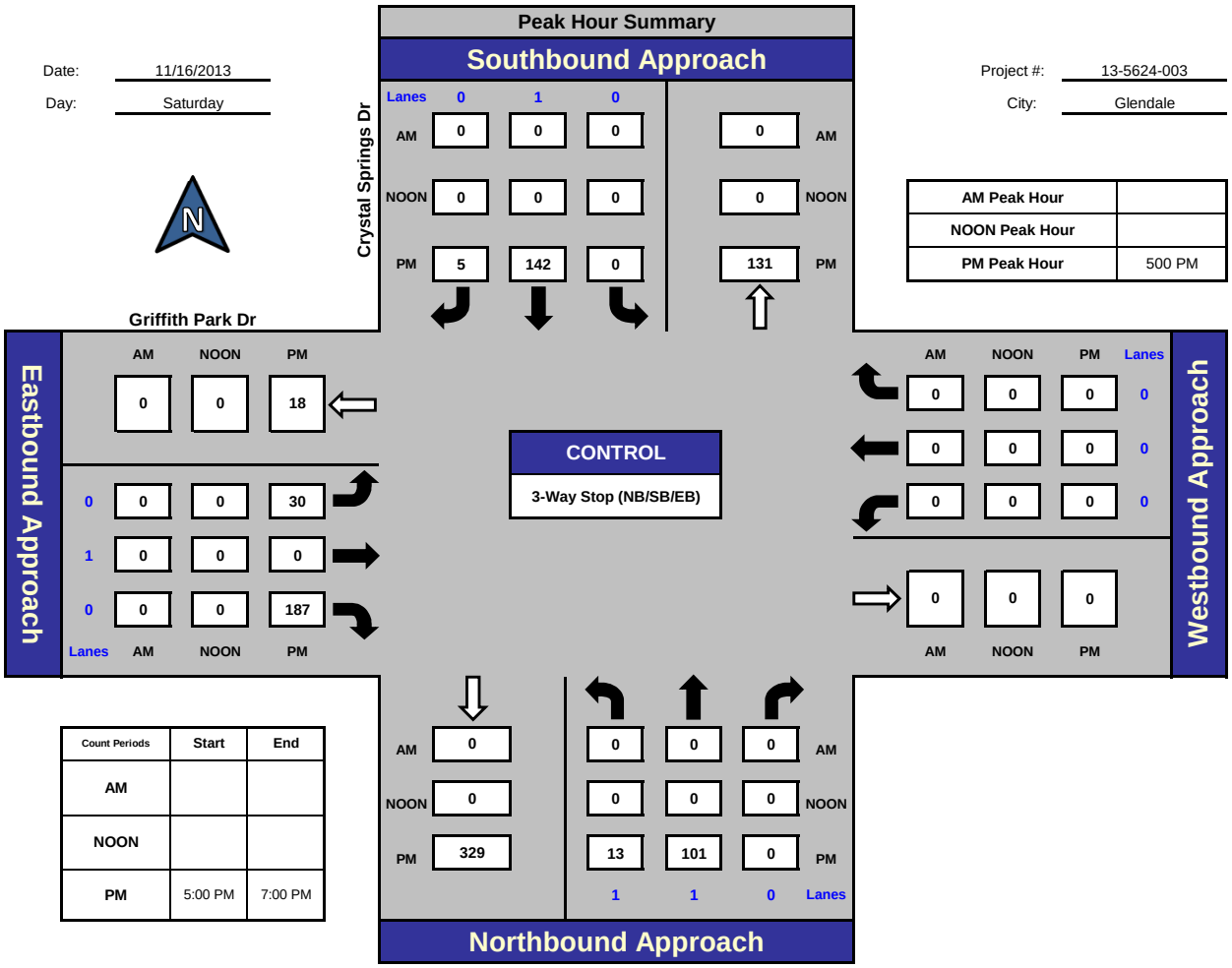
Prepared by:

National Data & Surveying Services

Crystal Springs Dr and Griffith Park Dr , Glendale

Date: 11/16/2013
Day: Saturday

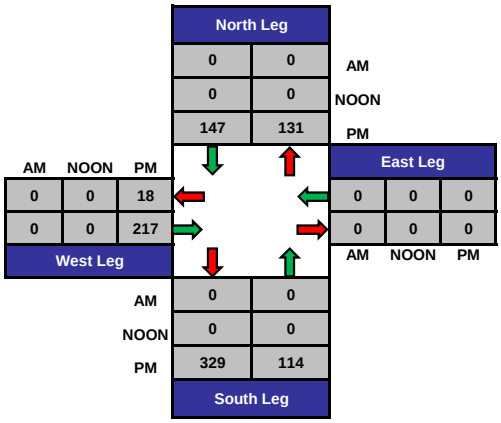
Project #: 13-5624-003
City: Glendale



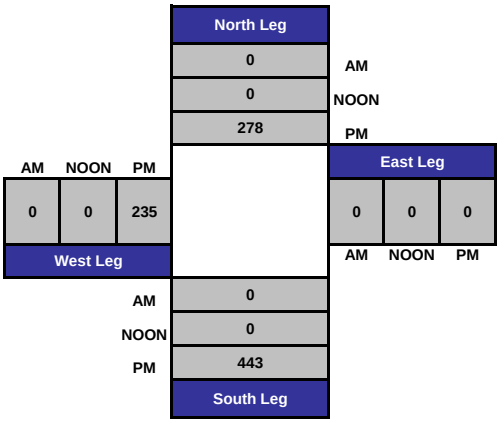
AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-004 **Day:** Thursday

City: Glendale **Date:** 11/21/2013

PM

NS/EW Streets:	Crystal Springs Dr			Crystal Springs Dr			Fire Rd			Fire Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 0	SL 0	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
5:00 PM	4	58	2	2	120	1	1	0	6	9	0	2	205
5:15 PM	5	55	0	1	151	2	3	1	6	0	0	3	227
5:30 PM	7	61	1	2	123	1	0	0	0	1	0	0	196
5:45 PM	0	50	1	2	117	0	1	2	1	0	1	2	177
6:00 PM	5	53	1	0	128	1	0	0	1	1	0	3	193
6:15 PM	2	39	0	1	120	4	0	0	3	1	0	0	170
6:30 PM	3	32	1	0	113	7	3	0	1	2	0	0	162
6:45 PM	7	35	0	0	106	9	0	0	3	0	0	0	160
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	33	383	6	8	978	25	8	3	21	14	1	10	1490
APPROACH %'s :	7.82%	90.76%	1.42%	0.79%	96.74%	2.47%	25.00%	9.38%	65.63%	56.00%	4.00%	40.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	16	224	4	7	511	4	5	3	13	10	1	7	805
PEAK HR FACTOR :		0.884			0.847			0.525			0.409		0.887

UTURNS				
NB	SB	EB	WB	
3	0			
1	0			
4	1			
0	0			
1	0			
0	0			
1	0			
0	0			
NB	SB	EB	WB	
10	1	0	0	

CONTROL : 4-Way Stop (NB/SB/EB/WB)

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Crystal Springs Dr and Fire Rd , Glendale

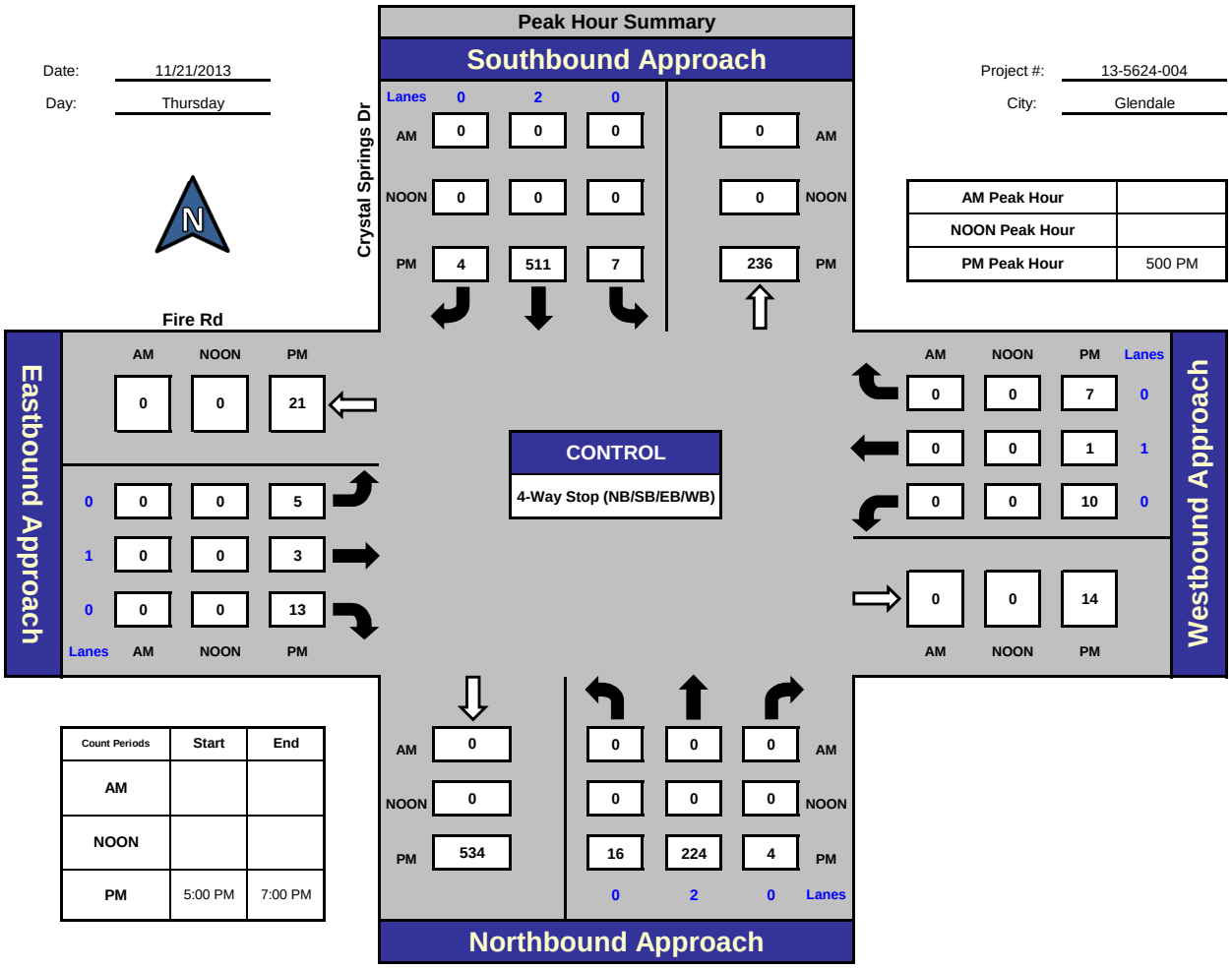
Date: 11/21/2013

Day: Thursday

Project #: 13-5624-004

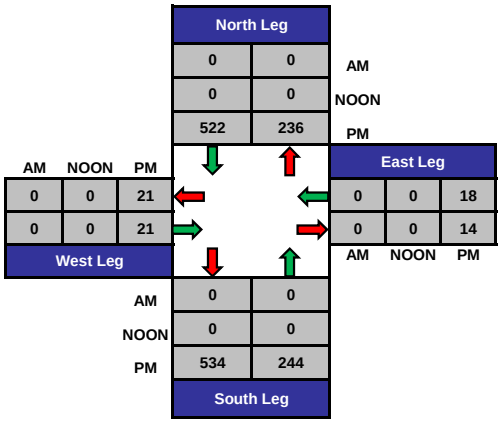
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

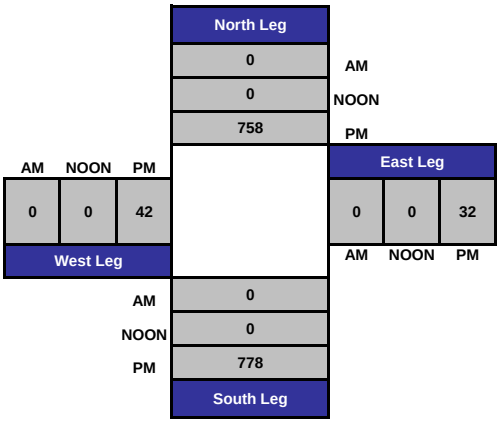


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-004 **Day:** Saturday

City: Glendale **Date:** 11/16/2013

PM

NS/EW Streets:	Crystal Springs Dr			Crystal Springs Dr			Fire Rd			Fire Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	2	0	0	2	0	0	1	0	0	1	0	
5:00 PM	2	25	0	5	93	1	7	0	19	4	0	3	159
5:15 PM	7	19	0	4	112	2	4	1	25	3	1	7	185
5:30 PM	5	17	0	1	66	1	1	0	5	5	0	3	104
5:45 PM	11	19	0	0	41	1	5	0	4	3	1	3	88
6:00 PM	3	18	0	1	38	1	0	0	5	1	0	1	68
6:15 PM	1	19	0	1	44	2	0	0	12	2	0	0	81
6:30 PM	1	19	0	0	35	0	0	0	4	0	0	0	59
6:45 PM	2	21	1	2	18	0	1	0	3	1	0	3	52
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	32	157	1	14	447	8	18	1	77	19	2	20	796
APPROACH %'s :	16.84%	82.63%	0.53%	2.99%	95.31%	1.71%	18.75%	1.04%	80.21%	46.34%	4.88%	48.78%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	25	80	0	10	312	5	17	1	53	15	2	16	536
PEAK HR FACTOR :		0.875			0.693			0.592			0.750		0.724

UTURNS				
NB	SB	EB	WB	
2	1			
3	1			
2	0			
11	0			
2	0			
1	1			
1	0			
1	1			
NB	SB	EB	WB	
23	4	0	0	

CONTROL : 4-Way Stop (NB/SB/EB/WB)

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Crystal Springs Dr and Fire Rd , Glendale

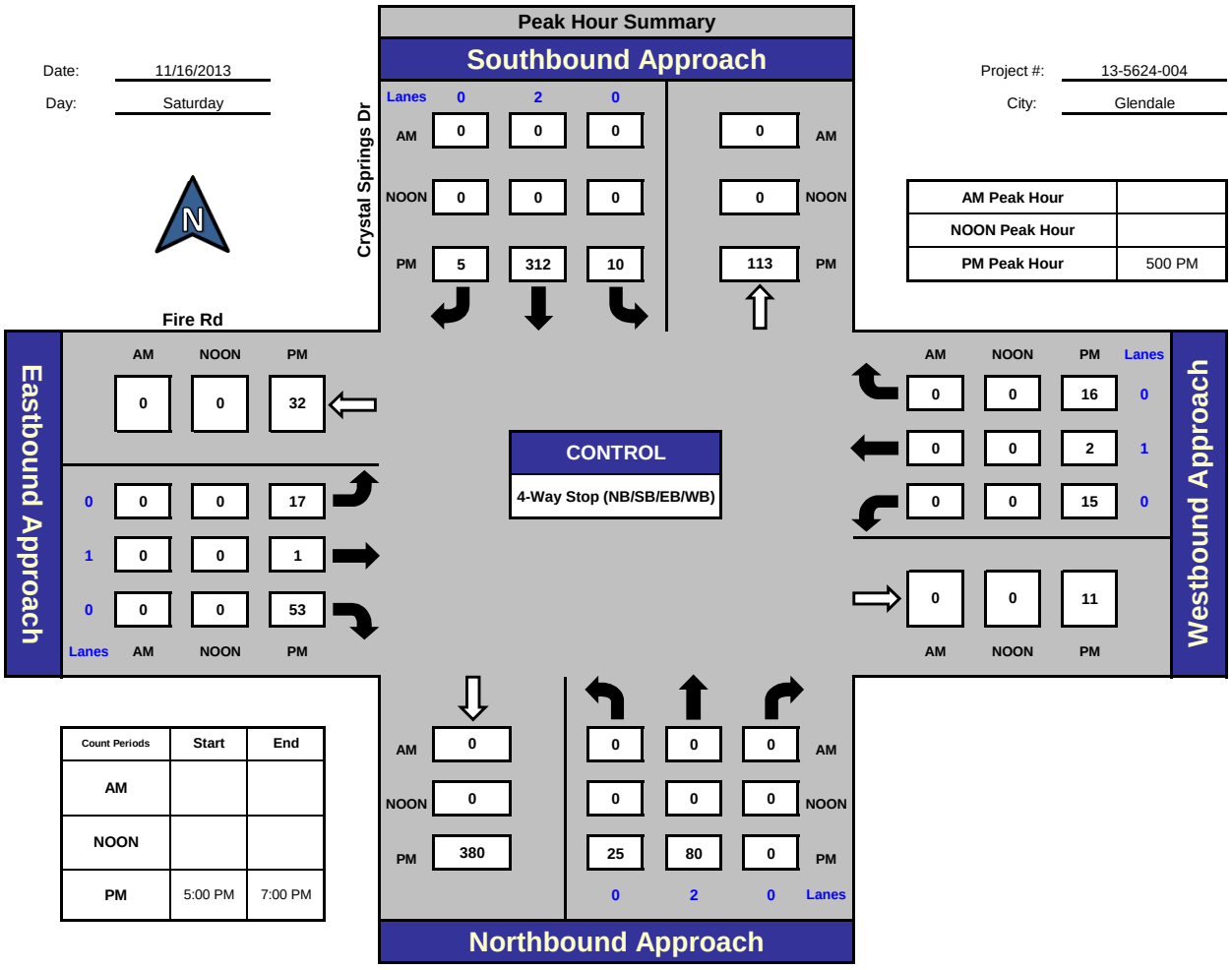
Date: 11/16/2013

Day: Saturday

Project #: 13-5624-004

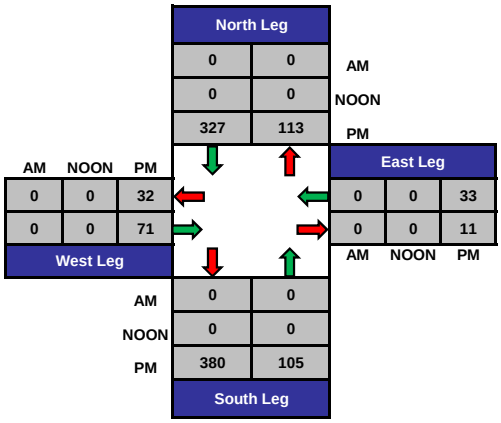
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

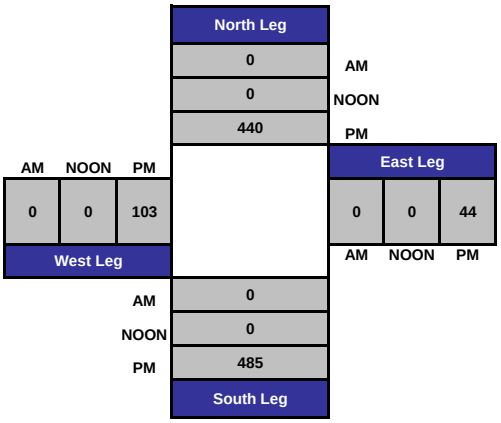


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-005 **Day:** Thursday

City: Glendale **Date:** 11/21/2013

PM

NS/EW Streets:	Crystal Springs Dr			Crystal Springs Dr			I-5 NB off-ramp			I-5 NB off-ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0.5	0.5	0	1	0	0	0	0	1	0	1	
5:00 PM	3	54	4	44	91					1		8	205
5:15 PM	1	57	5	46	112					3		5	229
5:30 PM	0	60	3	38	88					5		9	203
5:45 PM	1	49	1	40	80					2		3	176
6:00 PM	1	53	2	42	91					0		5	194
6:15 PM	0	38	0	40	79					1		2	160
6:30 PM	0	31	1	33	89					0		4	158
6:45 PM	0	34	3	34	77					0		5	153
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	376	19	317	707	0	0	0	0	12	0	41	1478
APPROACH %'s :	1.50%	93.77%	4.74%	30.96%	69.04%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	22.64%	0.00%	77.36%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	5	220	13	168	371	0	0	0	0	11	0	25	813
PEAK HR FACTOR :		0.944			0.853			0.000			0.643		0.888

UTURNS				
NB	SB	EB	WB	
3	0			
1	0			
0	0			
1	0			
1	0			
0	1			
0	0			
0	0			
NB	SB	EB	WB	
6	1	0	0	

CONTROL : 3-Way Stop (NB/SB/EB)

ITM Peak Hour Summary

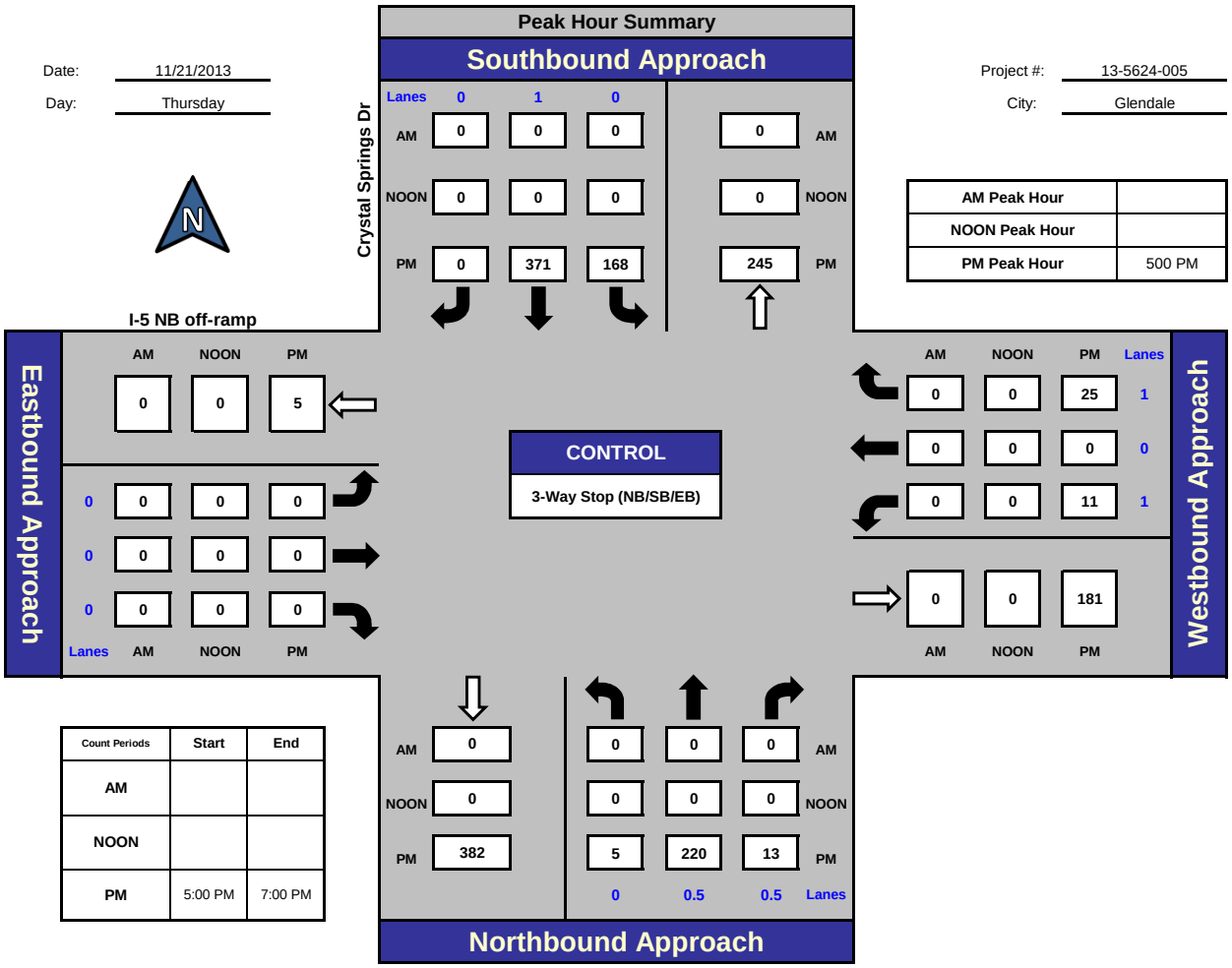
Prepared by:

National Data & Surveying Services

Crystal Springs Dr and I-5 NB off-ramp , Glendale

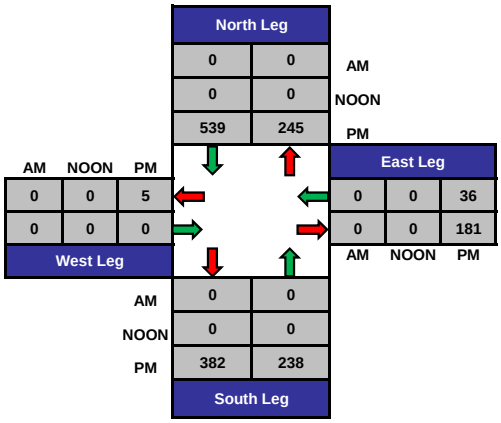
Date: 11/21/2013
Day: Thursday
Project #: 13-5624-005
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

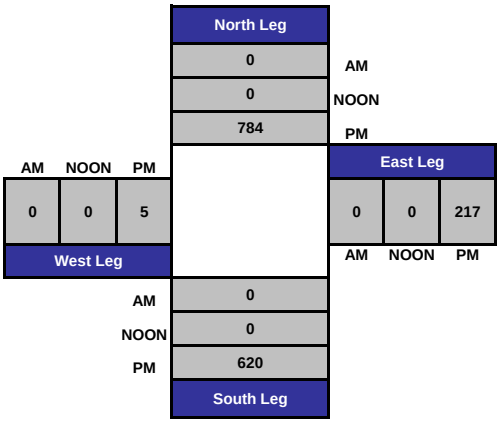


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-005 **Day:** Saturday

City: Glendale **Date:** 11/16/2013

PM

NS/EW Streets:	Crystal Springs Dr			Crystal Springs Dr			I-5 NB off-ramp			I-5 NB off-ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0.5	0.5	0	1	0	0	0	0	1	0	1	
5:00 PM	7	20	12	28	91					3		5	166
5:15 PM	1	21	3	39	104					3		5	176
5:30 PM	0	23	3	12	69					2		2	111
5:45 PM	1	17	1	18	42					4		9	92
6:00 PM	0	15	0	8	30					1		3	57
6:15 PM	1	18	0	16	46					0		1	82
6:30 PM	0	19	0	10	33					2		3	67
6:45 PM	0	22	2	6	17					2		2	51
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	10	155	21	137	432	0	0	0	0	17	0	30	802
APPROACH %'s :	5.38%	83.33%	11.29%	24.08%	75.92%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	36.17%	0.00%	63.83%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	9	81	19	97	306	0	0	0	0	12	0	21	545
PEAK HR FACTOR :		0.699			0.705			0.000			0.635		0.774

UTURNS				
NB	SB	EB	WB	
7	0		0	
1	0		1	
0	0		0	
1	1		0	
0	0		0	
1	0		0	
0	0		1	
0	1		0	
NB	SB	EB	WB	
10	2	0	2	

CONTROL : 3-Way Stop (NB/SB/EB)

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Crystal Springs Dr and I-5 NB off-ramp , Glendale

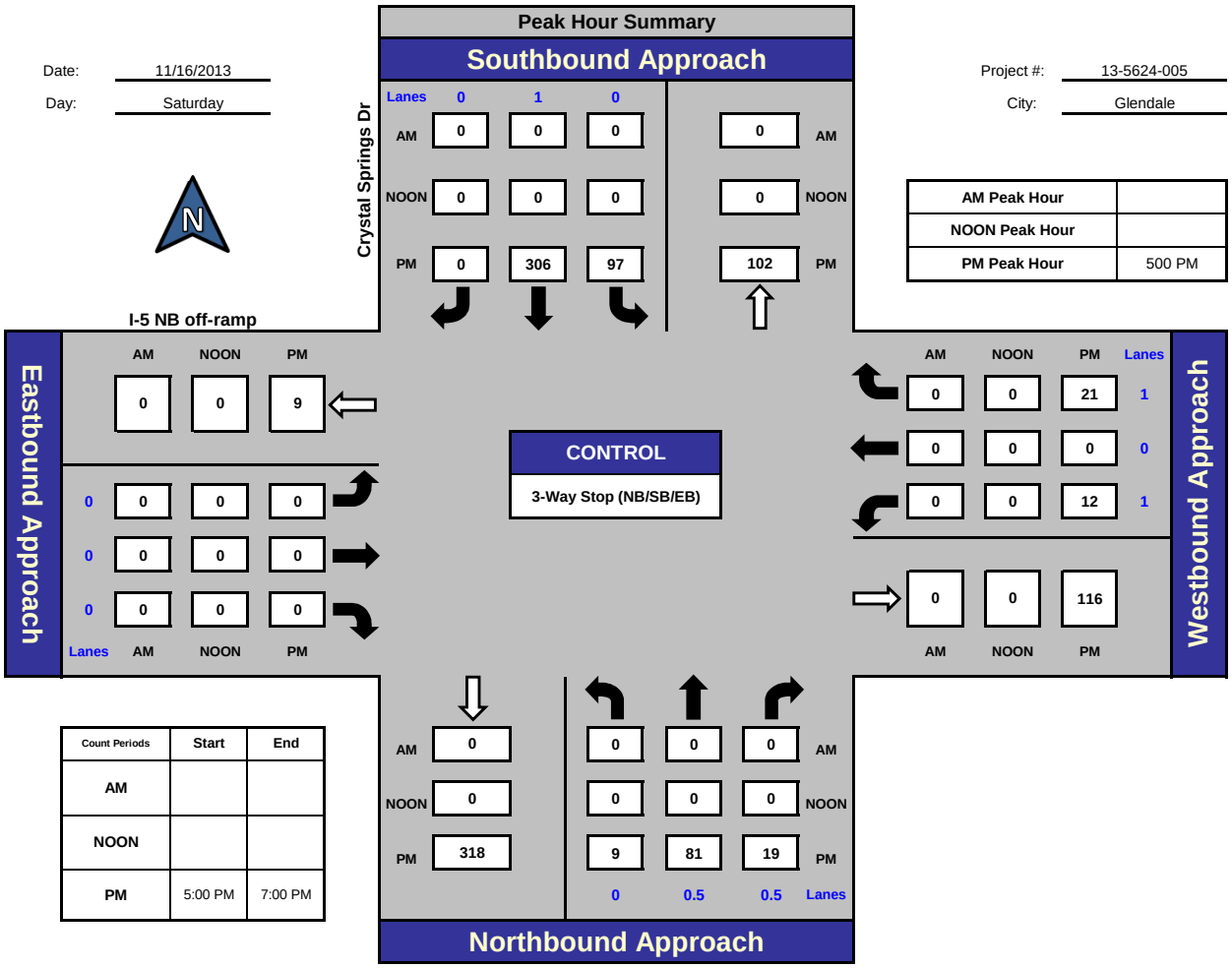
Date: 11/16/2013

Day: Saturday

Project #: 13-5624-005

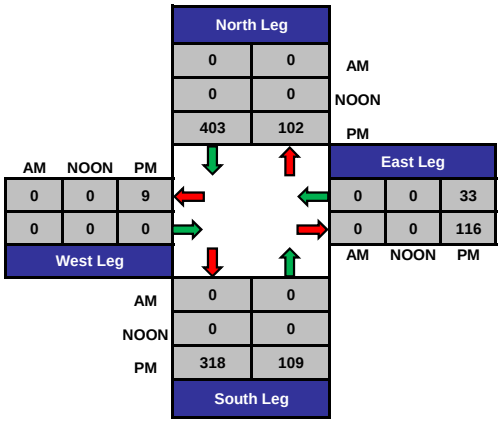
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM

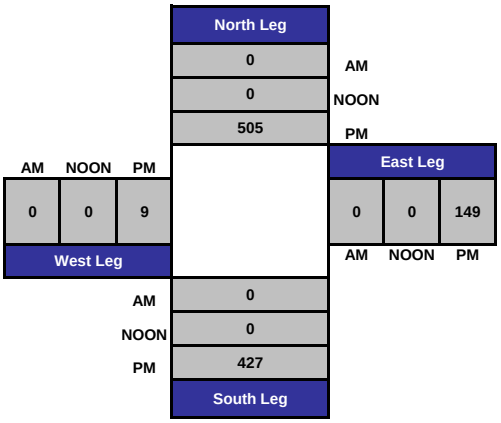


Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Total Ins & Outs



Total Volume Per Leg



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-006 **Day:** Thursday

City: Glendale **Date:** 11/21/2013

PM

NS/EW Streets:	Riverside Dr			Riverside Dr			Los Feliz Blvd			Los Feliz Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 3	ER 1	WL 1	WT 3	WR 1	TOTAL
5:00 PM	38	25	46	8	44	47	25	546	150	18	458	12	1417
5:15 PM	25	30	70	12	46	54	21	535	172	34	509	6	1514
5:30 PM	24	25	67	10	42	46	28	540	164	19	467	2	1434
5:45 PM	28	37	72	8	48	44	17	548	170	22	516	3	1513
6:00 PM	30	31	71	7	34	56	18	556	160	22	490	4	1479
6:15 PM	30	23	87	2	29	45	15	539	167	23	533	4	1497
6:30 PM	19	22	96	10	39	46	9	541	182	24	505	6	1499
6:45 PM	29	18	78	9	40	34	13	553	164	21	470	8	1437
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	223	211	587	66	322	372	146	4358	1329	183	3948	45	11790
APPROACH %'s :	21.84%	20.67%	57.49%	8.68%	42.37%	48.95%	2.50%	74.71%	22.78%	4.38%	94.54%	1.08%	
PEAK HR START TIME :	545 PM												TOTAL
PEAK HR VOL :	107	113	326	27	150	191	59	2184	679	91	2044	17	5988
PEAK HR FACTOR :		0.975			0.920			0.994			0.961		0.989

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Riverside Dr and Los Feliz Blvd , Glendale

Date: 11/21/2013
Day: Thursday
Project #: 13-5624-006
City: Glendale

AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	545 PM

Riverside Dr

Los Feliz Blvd

Peak Hour Summary

Southbound Approach

Lanes	1	1	1		
AM	0	0	0	0	AM
NOON	0	0	0	0	NOON
PM	191	150	27	189	PM

Eastbound Approach

Lanes	AM	NOON	PM
	0	0	2342
1	0	0	59
3	0	0	2184
1	0	0	679
Lanes	AM	NOON	PM

Westbound Approach

AM	NOON	PM	Lanes
0	0	17	1
0	0	2044	3
0	0	91	1
0	0	2537	
AM	NOON	PM	

CONTROL

Signalized

Count Periods	Start	End
AM		
NOON		
PM	5:00 PM	7:00 PM

Northbound Approach

AM	0	0	0	0	AM
NOON	0	0	0	0	NOON
PM	920	107	113	326	PM
		1	1	1	Lanes

Total Ins & Outs

North Leg	
0	0
0	0
368	189

West Leg		
AM	NOON	PM
0	0	2342
0	0	2922

East Leg		
0	0	2152
0	0	2537
AM	NOON	PM

South Leg	
0	0
0	0
920	546

AM / NOON / PM

Total Volume Per Leg

North Leg
0
0
557

West Leg		
AM	NOON	PM
0	0	5264

East Leg		
0	0	4689
AM	NOON	PM

South Leg
0
0
1466

AM / NOON / PM

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 13-5624-006 **Day:** Saturday

City: Glendale **Date:** 11/16/2013

PM

NS/EW Streets:	Riverside Dr			Riverside Dr			Los Feliz Blvd			Los Feliz Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 3	ER 1	WL 1	WT 3	WR 1	TOTAL
5:00 PM	26	7	40	21	47	54	6	395	123	32	493	7	1251
5:15 PM	32	4	34	15	27	61	6	382	115	45	498	1	1220
5:30 PM	12	4	23	13	26	51	8	398	125	54	566	6	1286
5:45 PM	24	4	38	8	16	23	11	367	110	42	557	2	1202
6:00 PM	21	10	27	7	16	14	4	330	129	38	510	2	1108
6:15 PM	18	6	36	6	18	24	9	338	116	29	545	7	1152
6:30 PM	20	11	22	5	14	19	6	349	103	36	504	5	1094
6:45 PM	13	4	30	2	10	18	10	374	114	35	551	8	1169
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	166	50	250	77	174	264	60	2933	935	311	4224	38	9482
APPROACH %'s :	35.62%	10.73%	53.65%	14.95%	33.79%	51.26%	1.53%	74.67%	23.80%	6.80%	92.37%	0.83%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	94	19	135	57	116	189	31	1542	473	173	2114	16	4959
PEAK HR FACTOR :		0.849			0.742			0.963			0.920		0.964

UTURNS

NB	SB	EB	WB
1			0
1			0
2			0
0			0
0			0
0			0
0			0
0			0
0			1
NB	SB	EB	WB
4	0	0	1

CONTROL : Signalized

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Riverside Dr and Los Feliz Blvd , Glendale

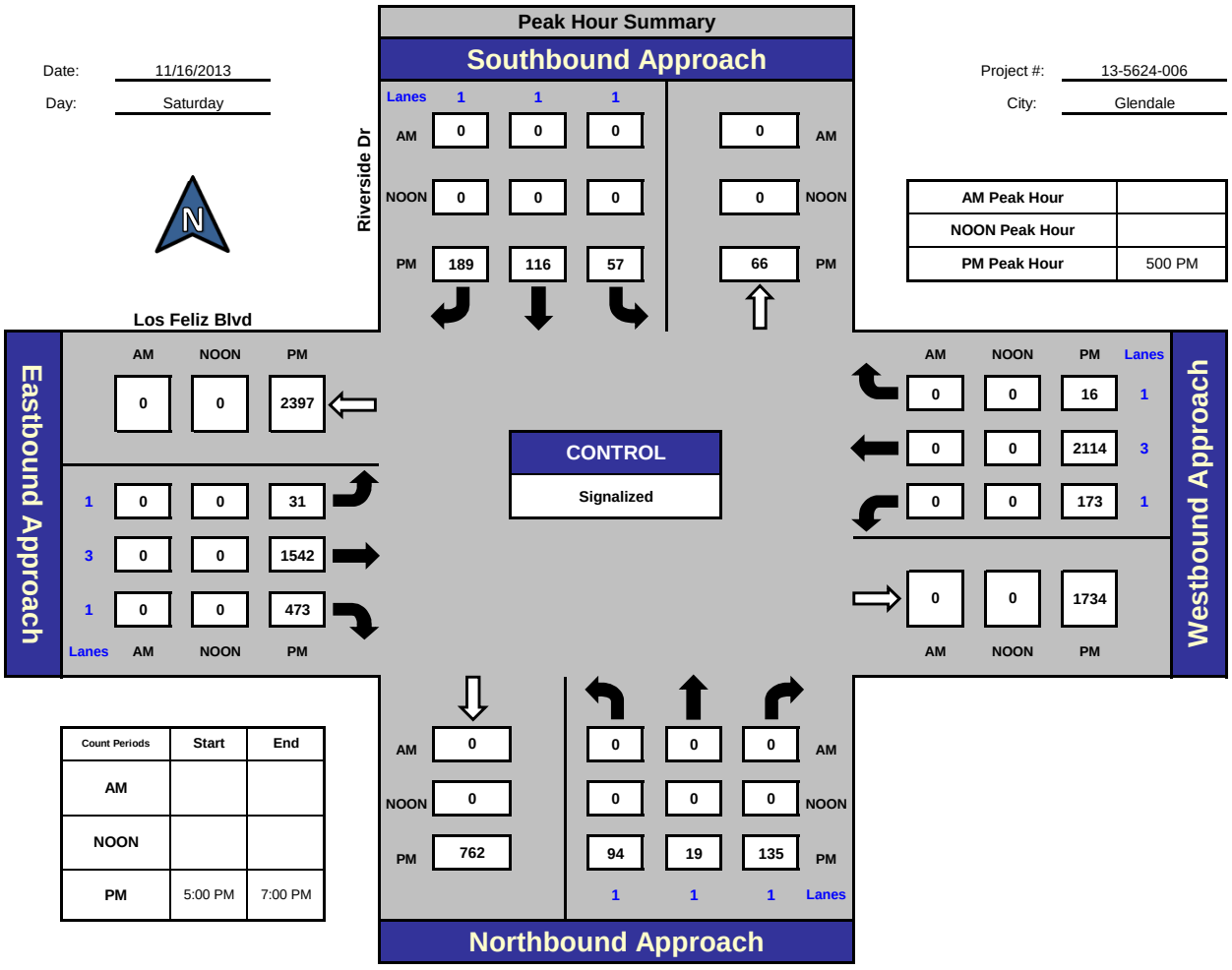
Date: 11/16/2013

Day: Saturday

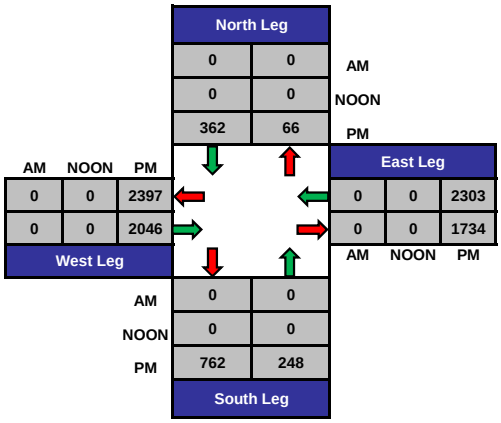
Project #: 13-5624-006

City: Glendale

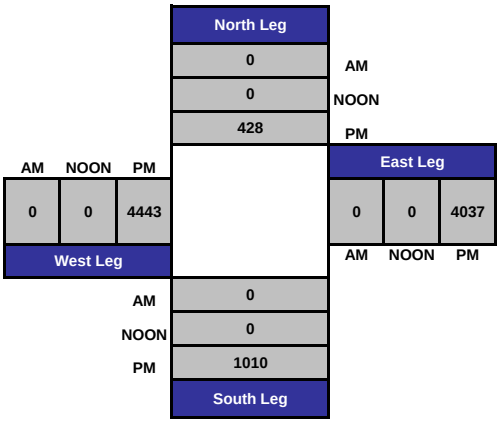
AM Peak Hour	
NOON Peak Hour	
PM Peak Hour	500 PM



Total Ins & Outs



Total Volume Per Leg



APPENDIX B
LOS Operation Worksheets – Existing Conditions

Griffith Park Performance Center
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Zoo Dr & I-5 NB off Ramp / SR 134 EB on Ramp

Average Delay (sec/veh): 6.4 Worst Case Level Of Service: A[9.8]

Street Name:	Zoo Dr						I-5 NB off Ramp / SR 134 EB on Ra					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0	0	0 0	0 1	0	1 0	0 0	1	0	0 0	0 0
Volume Module:												
Base Vol:	373 28	0	0	84	23		5	0	58	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	373 28	0	0	84	23		5	0	58	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	373 28	0	0	84	23		5	0	58	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	373 28	0	0	84	23		5	0	58	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	107 xxxx	xxxxx	xxxx	xxxx	xxxxx		870	xxxx	96	xxxx	xxxx	xxxxx
Potent Cap.:	1497 xxxx	xxxxx	xxxx	xxxx	xxxxx		325	xxxx	967	xxxx	xxxx	xxxxx
Move Cap.:	1497 xxxx	xxxxx	xxxx	xxxx	xxxxx		246	xxxx	967	xxxx	xxxx	xxxxx
Volume/Cap:	0.25 xxxx	xxxx	xxxx	xxxx	xxxx		0.02	xxxx	0.06	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1	xxxx	0.2	xxxx	xxxx	xxxxx
Control Del:	8.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		20.0	xxxx	9.0	xxxxx	xxxx	xxxxx
LOS by Move:	A *	*	*	*	*		C	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	1.0 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A *	*	*	*	*		*	*	*	*	*	*
ApproachDel:	xxxxxx		xxxxxx				9.8			xxxxxx		
ApproachLOS:	*		*				A			*		

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Western Heritage Way & Zoo Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	0	Average Delay (sec/veh):	26.2
Optimal Cycle:	0	Level Of Service:	D

Street Name:	Western Heritage Way						Zoo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	0 240		82	566	378	0	22	39	5	12	3	119
Growth Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 240		82	566	378	0	22	39	5	12	3	119
User Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0 240		0	566	378	0	22	39	5	12	3	0
Reduct Vol:	0 0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0 240		0	566	378	0	22	39	5	12	3	0
PCE Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0 240		0	566	378	0	22	39	5	12	3	0
Saturation Flow Module:												
Adjustment:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00 2.00		1.00	1.00	2.00	0.00	0.33	0.59	0.08	0.80	0.20	1.00
Final Sat.:	490 1056		587	606	1312	0	172	305	39	364	91	528
Capacity Analysis Module:												
Vol/Sat:	0.00 0.23		0.00	0.93	0.29	xxxx	0.13	0.13	0.13	0.03	0.03	0.00
Crit Moves:		****			****			****			****	
Delay/Veh:	0.0 11.2		0.0	45.5	10.3	0.0	10.8	10.8	10.8	10.5	10.5	0.0
Delay Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0 11.2		0.0	45.5	10.3	0.0	10.8	10.8	10.8	10.5	10.5	0.0
LOS by Move:	*	B	*	E	B	*	B	B	B	B	B	*
ApproachDel:		11.2			31.4			10.8			10.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.2			31.4			10.8			10.5	
LOS by Appr:		B			D			B			B	
AllWayAvgQ:	0.0 0.3		0.0	6.2	0.4	0.4	0.1	0.1	0.1	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Crystal Springs Dr & Griffith Park Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.532
Loss Time (sec):	0	Average Delay (sec/veh):	11.2
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						Griffith Park Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0	0	0	0	0 1	0	0	1! 0	0	0	0 0 0
Volume Module:												
Base Vol:	10	226	0	0	406	3	11	0	122	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	226	0	0	406	3	11	0	122	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	226	0	0	406	3	11	0	122	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	226	0	0	406	3	11	0	122	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	226	0	0	406	3	11	0	122	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.99	0.01	0.08	0.00	0.92	0.00	0.00	0.00
Final Sat.:	625	684	0	0	763	6	57	0	629	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.33	xxxx	xxxx	0.53	0.53	0.19	xxxx	0.19	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	8.4	10.3	0.0	0.0	12.5	12.5	8.8	0.0	8.8	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	10.3	0.0	0.0	12.5	12.5	8.8	0.0	8.8	0.0	0.0	0.0
LOS by Move:	A	B	*	*	B	B	A	*	A	*	*	*
ApproachDel:	10.2			12.5			8.8			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	10.2			12.5			8.8			xxxxxx		
LOS by Appr:	B			B			A			*		
AllWayAvgQ:	0.0	0.5	0.0	1.1	1.1	1.1	0.2	0.2	0.2	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Crystal Springs Dr & Fire Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.353
Loss Time (sec):	0	Average Delay (sec/veh):	9.6
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						Fire Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	16	224	4	7	511	4	5	3	13	10	1	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	224	4	7	511	4	5	3	13	10	1	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	224	4	7	511	4	5	3	13	10	1	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	224	4	7	511	4	5	3	13	10	1	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	224	4	7	511	4	5	3	13	10	1	7
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.13	1.84	0.03	0.03	1.96	0.01	0.62	0.38	1.00	0.55	0.06	0.39
Final Sat.:	91	1280	23	20	1452	11	323	194	605	314	31	219
Capacity Analysis Module:												
Vol/Sat:	0.18	0.17	0.17	0.35	0.35	0.35	0.02	0.02	0.02	0.03	0.03	0.03
Crit Moves:	****			****					****	****		
Delay/Veh:	8.9	8.8	8.8	10.1	10.1	10.1	9.2	9.2	8.2	9.1	9.1	9.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.9	8.8	8.8	10.1	10.1	10.1	9.2	9.2	8.2	9.1	9.1	9.1
LOS by Move:	A	A	A	B	B	B	A	A	A	A	A	A
ApproachDel:	8.8			10.1			8.6			9.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.8			10.1			8.6			9.1		
LOS by Appr:	A			B			A			A		
AllWayAvgQ:	0.2	0.2	0.2	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Crystal Springs Dr & I-5 on/off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.266
Loss Time (sec):	0	Average Delay (sec/veh):	9.5
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						I-5 SB on / NB off Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 0	1	0 0	0 1
Volume Module:												
Base Vol:	5	220	13	168	371	0	0	0	0	11	0	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	220	13	168	371	0	0	0	0	11	0	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	220	13	168	371	0	0	0	0	11	0	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	220	13	168	371	0	0	0	0	11	0	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	220	13	168	371	0	0	0	0	11	0	25
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	1.85	0.11	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	29	1270	76	636	1395	0	0	0	0	509	0	613
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.26	0.27	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.04
Crit Moves:	****				****							****
Delay/Veh:	8.9	8.8	8.7	10.3	9.6	0.0	0.0	0.0	0.0	9.4	0.0	8.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.9	8.8	8.7	10.3	9.6	0.0	0.0	0.0	0.0	9.4	0.0	8.3
LOS by Move:	A	A	A	B	A	*	*	*	*	A	*	A
ApproachDel:	8.8			9.8			xxxxxx			8.7		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	8.8			9.8			xxxxxx			8.7		
LOS by Appr:	A			A			*			A		
AllWayAvgQ:	0.2	0.2	0.2	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 Crystal Springs Dr & Los Feliz Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.786
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	107	Level Of Service:	C

Street Name:	Crystal Springs Dr						Los Feliz Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	107	113	326	27	150	191	59	2184	679	91	2044	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	113	326	27	150	191	59	2184	679	91	2044	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	107	113	326	27	150	191	59	2184	0	91	2044	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	113	326	27	150	191	59	2184	0	91	2044	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	107	113	326	27	150	191	59	2184	0	91	2044	0
Saturation Flow Module:												
Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	4125	1375	1375	4125	1375
Capacity Analysis Module:												
Vol/Sat:	0.08	0.04	0.24	0.02	0.05	0.14	0.04	0.53	0.00	0.07	0.50	0.00
Crit Volume:			326	27				728		0		
Crit Moves:			****	****				****		****		

Griffith Park Performance Center
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1 Zoo Dr & I-5 NB off Ramp / SR 134 EB on Ramp

Average Delay (sec/veh): 4.4 Worst Case Level Of Service: A[9.5]

Street Name:	Zoo Dr						I-5 NB off Ramp / SR 134 EB on Ra					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0	0 1	0	1 0	0 0	1	0	0 0	0 0
Volume Module:												
Base Vol:	114	33	0	0	80	24	15	0	34	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	114	33	0	0	80	24	15	0	34	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	114	33	0	0	80	24	15	0	34	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	114	33	0	0	80	24	15	0	34	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	104 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	353	xxxx	92	xxxx	xxxx	xxxxx
Potent Cap.:	1500 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	649	xxxx	971	xxxx	xxxx	xxxxx
Move Cap.:	1500 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	609	xxxx	971	xxxx	xxxx	xxxxx
Volume/Cap:	0.08 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	7.6 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	11.1	xxxx	8.8	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	0.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	7.6 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	
ApproachDel:	xxxxxx			xxxxxx			9.5			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #2 Western Heritage Way & Zoo Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.361
Loss Time (sec):	0	Average Delay (sec/veh):	10.0
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Western Heritage Way						Zoo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	6	151	99	76	94	7	66	151	12	21	28	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	6	151	99	76	94	7	66	151	12	21	28	39
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	6	151	0	76	94	7	66	151	12	21	28	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	151	0	76	94	7	66	151	12	21	28	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	6	151	0	76	94	7	66	151	12	21	28	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.86	0.14	0.29	0.66	0.05	0.43	0.57	1.00
Final Sat.:	549	1188	671	554	1126	85	183	419	33	248	331	677
Capacity Analysis Module:												
Vol/Sat:	0.01	0.13	0.00	0.14	0.08	0.08	0.36	0.36	0.36	0.08	0.08	0.00
Crit Moves:		****		****			****				****	
Delay/Veh:	9.0	9.2	0.0	9.8	8.9	8.8	11.4	11.4	11.4	9.1	9.1	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.0	9.2	0.0	9.8	8.9	8.8	11.4	11.4	11.4	9.1	9.1	0.0
LOS by Move:	A	A	*	A	A	A	B	B	B	A	A	*
ApproachDel:		9.2			9.3			11.4			9.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.2			9.3			11.4			9.1	
LOS by Appr:		A			A			B			A	
AllWayAvgQ:	0.0	0.1	0.0	0.1	0.1	0.1	0.5	0.5	0.5	0.1	0.1	0.0

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Crystal Springs Dr & Griffith Park Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.253
Loss Time (sec):	0	Average Delay (sec/veh):	8.5
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						Griffith Park Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	13	101	0	0	142	5	30	0	187	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	101	0	0	142	5	30	0	187	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	101	0	0	142	5	30	0	187	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	101	0	0	142	5	30	0	187	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	101	0	0	142	5	30	0	187	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.97	0.03	0.14	0.00	0.86	0.00	0.00	0.00
Final Sat.:	625	684	0	0	733	26	119	0	740	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	xxxx	xxxx	0.19	0.19	0.25	xxxx	0.25	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	8.4	8.6	0.0	0.0	8.6	8.6	8.3	0.0	8.3	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	8.6	0.0	0.0	8.6	8.6	8.3	0.0	8.3	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	A	A	*	A	*	*	*
ApproachDel:		8.6			8.6			8.3			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		8.6			8.6			8.3			xxxxxx	
LOS by Appr:		A			A			A			*	
AllWayAvgQ:	0.0	0.2	0.0	0.2	0.2	0.2	0.3	0.3	0.3	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #4 Crystal Springs Dr & Fire Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.226
Loss Time (sec):	0	Average Delay (sec/veh):	8.7
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						Fire Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	25	80	0	10	312	5	17	1	53	15	2	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	80	0	10	312	5	17	1	53	15	2	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	80	0	10	312	5	17	1	53	15	2	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	80	0	10	312	5	17	1	53	15	2	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	80	0	10	312	5	17	1	53	15	2	16
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.48	1.52	0.00	0.06	1.91	0.03	0.94	0.06	1.00	0.45	0.06	0.49
Final Sat.:	317	1044	0	44	1391	22	537	32	699	288	38	307
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	xxxx	0.23	0.22	0.22	0.03	0.03	0.08	0.05	0.05	0.05
Crit Moves:	****			****					****		****	
Delay/Veh:	8.4	8.2	0.0	9.0	8.9	8.9	8.9	8.9	7.9	8.6	8.6	8.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	8.2	0.0	9.0	8.9	8.9	8.9	8.9	7.9	8.6	8.6	8.6
LOS by Move:	A	A	*	A	A	A	A	A	A	A	A	A
ApproachDel:	8.3			8.9			8.1			8.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.3			8.9			8.1			8.6		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.3	0.3	0.3	0.0	0.0	0.1	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Crystal Springs Dr & I-5 on/off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.206
Loss Time (sec):	0	Average Delay (sec/veh):	8.6
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						I-5 SB on / NB off Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 0	1	0 0	0 1
Volume Module:												
Base Vol:	9	81	19	97	306	0	0	0	0	12	0	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	81	19	97	306	0	0	0	0	12	0	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	81	19	97	306	0	0	0	0	12	0	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	81	19	97	306	0	0	0	0	12	0	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	81	19	97	306	0	0	0	0	12	0	21
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.16	1.49	0.35	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	116	1072	261	672	1482	0	0	0	0	558	0	684
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.07	0.14	0.21	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.03
Crit Moves:	****				****							****
Delay/Veh:	8.1	8.0	7.7	8.9	8.7	0.0	0.0	0.0	0.0	8.9	0.0	7.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.1	8.0	7.7	8.9	8.7	0.0	0.0	0.0	0.0	8.9	0.0	7.7
LOS by Move:	A	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:	7.9			8.8			xxxxxx			8.2		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	7.9			8.8			xxxxxx			8.2		
LOS by Appr:	A			A			*			A		
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Base Volume Alternative)

Intersection #6 Crystal Springs Dr & Los Feliz Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.718
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	Level Of Service:	C

Street Name:	Crystal Springs Dr						Los Feliz Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	94	19	135	57	116	189	31	1542	473	173	2114	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	19	135	57	116	189	31	1542	473	173	2114	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	94	19	135	57	116	189	31	1542	0	173	2114	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	19	135	57	116	189	31	1542	0	173	2114	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	94	19	135	57	116	189	31	1542	0	173	2114	0
Saturation Flow Module:												
Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	4125	1375	1375	4125	1375
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.10	0.04	0.04	0.14	0.02	0.37	0.00	0.13	0.51	0.00
Crit Volume:	94					189	0				705	
Crit Moves:	****					****	****				****	

APPENDIX C
LOS Operation Worksheets – Existing with-Project Conditions

Griffith Park Performance Center
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Zoo Dr & I-5 NB off Ramp / SR 134 EB on Ramp

Average Delay (sec/veh): 5.7 Worst Case Level Of Service: B[10.9]

Street Name:	Zoo Dr						I-5 NB off Ramp / SR 134 EB on Ra					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	373	28	0	0	84	23	5	0	58	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	373	28	0	0	84	23	5	0	58	0	0	0
Added Vol:	15	0	0	0	150	0	0	0	20	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	388	28	0	0	234	23	5	0	78	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	388	28	0	0	234	23	5	0	78	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	388	28	0	0	234	23	5	0	78	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4 xxxx		6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5 xxxx		3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	257 xxxx	xxxxx	xxxx	xxxx	xxxxx		1050 xxxx		246	xxxx	xxxx	xxxxx
Potent Cap.:	1320 xxxx	xxxxx	xxxx	xxxx	xxxxx		254 xxxx		798	xxxx	xxxx	xxxxx
Move Cap.:	1320 xxxx	xxxxx	xxxx	xxxx	xxxxx		180 xxxx		798	xxxx	xxxx	xxxxx
Volume/Cap:	0.29 xxxx	xxxx	xxxx	xxxx	xxxx		0.03 xxxx		0.10	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.2 xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1 xxxx		0.3	xxxx	xxxx	xxxxx
Control Del:	8.9 xxxx	xxxxx	xxxxx	xxxx	xxxxx		25.6 xxxx		10.0	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	D	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	1.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	8.9 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.9			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Western Heritage Way & Zoo Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	1.064
Loss Time (sec):	0	Average Delay (sec/veh):	39.4
Optimal Cycle:	0	Level Of Service:	E

Street Name:	Western Heritage Way						Zoo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	0 240		82	566	378	0	22	39	5	12	3	119
Growth Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 240		82	566	378	0	22	39	5	12	3	119
Added Vol:	0 5		19	0	50	0	0	0	0	170	0	0
PasserByVol:	0 0		0	0	0	0	0	0	0	0	0	0
Initial Fut:	0 245		101	566	428	0	22	39	5	182	3	119
User Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0 245		0	566	428	0	22	39	5	182	3	0
Reduct Vol:	0 0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0 245		0	566	428	0	22	39	5	182	3	0
PCE Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0 245		0	566	428	0	22	39	5	182	3	0
Saturation Flow Module:												
Adjustment:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00 2.00		1.00	1.00	2.00	0.00	0.33	0.59	0.08	0.98	0.02	1.00
Final Sat.:	435 930		509	532	1136	0	154	274	35	438	7	519
Capacity Analysis Module:												
Vol/Sat:	0.00 0.26		0.00	1.06	0.38	xxxx	0.14	0.14	0.14	0.42	0.42	0.00
Crit Moves:		****		****				****			****	
Delay/Veh:	0.0 12.8		0.0	82.1	12.6	0.0	11.7	11.7	11.7	15.9	15.9	0.0
Delay Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0 12.8		0.0	82.1	12.6	0.0	11.7	11.7	11.7	15.9	15.9	0.0
LOS by Move:	*	B	*	F	B	*	B	B	B	C	C	*
ApproachDel:		12.8			52.2			11.7			15.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.8			52.2			11.7			15.9	
LOS by Appr:		B			F			B			C	
AllWayAvgQ:	0.0 0.3		0.0	10.7	0.6	0.6	0.2	0.2	0.2	0.7	0.7	0.0

Griffith Park Performance Center
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Crystal Springs Dr & Griffith Park Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.832
Loss Time (sec):	0	Average Delay (sec/veh):	19.7
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Crystal Springs Dr						Griffith Park Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0 0
Volume Module:												
Base Vol:	10	226	0	0	406	3	11	0	122	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	226	0	0	406	3	11	0	122	0	0	0
Added Vol:	35	10	0	0	173	48	15	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	236	0	0	579	51	26	0	126	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	236	0	0	579	51	26	0	126	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	236	0	0	579	51	26	0	126	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	236	0	0	579	51	26	0	126	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.92	0.08	0.17	0.00	0.83	0.00	0.00	0.00
Final Sat.:	591	644	0	0	696	61	106	0	513	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.37	xxxx	xxxx	0.83	0.83	0.25	xxxx	0.25	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	9.1	11.1	0.0	0.0	26.0	26.0	10.0	0.0	10.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	11.1	0.0	0.0	26.0	26.0	10.0	0.0	10.0	0.0	0.0	0.0
LOS by Move:	A	B	*	*	D	D	B	*	B	*	*	*
ApproachDel:	10.8			26.0			10.0			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	10.8			26.0			10.0			xxxxxx		
LOS by Appr:	B			D			B			*		
AllWayAvgQ:	0.1	0.5	0.0	3.8	3.8	3.8	0.3	0.3	0.3	0.0	0.0	0.0

Griffith Park Performance Center
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Crystal Springs Dr & Fire Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.522
Loss Time (sec):	0	Average Delay (sec/veh):	12.4
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						Fire Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	16	224	4	7	511	4	5	3	13	10	1	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	224	4	7	511	4	5	3	13	10	1	7
Added Vol:	245	35	0	0	4	173	10	0	23	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	261	259	4	7	515	177	15	3	36	10	1	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	261	259	4	7	515	177	15	3	36	10	1	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	261	259	4	7	515	177	15	3	36	10	1	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	261	259	4	7	515	177	15	3	36	10	1	7
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.99	0.01	0.02	1.47	0.51	0.83	0.17	1.00	0.55	0.06	0.39
Final Sat.:	595	644	10	13	1010	364	375	75	524	275	27	192
Capacity Analysis Module:												
Vol/Sat:	0.44	0.40	0.40	0.52	0.51	0.49	0.04	0.04	0.07	0.04	0.04	0.04
Crit Moves:	****			****					****			****
Delay/Veh:	13.1	11.6	11.6	13.5	13.0	12.1	10.4	10.4	9.4	10.0	10.0	10.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.1	11.6	11.6	13.5	13.0	12.1	10.4	10.4	9.4	10.0	10.0	10.0
LOS by Move:	B	B	B	B	B	B	B	B	A	B	B	B
ApproachDel:	12.3			12.8			9.7			10.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.3			12.8			9.7			10.0		
LOS by Appr:	B			B			A			B		
AllWayAvgQ:	0.7	0.6	0.6	1.0	0.9	0.9	0.0	0.0	0.1	0.0	0.0	0.0

Griffith Park Performance Center
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Crystal Springs Dr & I-5 on/off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.350
Loss Time (sec):	0	Average Delay (sec/veh):	11.3
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						I-5 SB on / NB off Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1 0	1 0		1 0 2	0 0		0 0 0	0 0 0		1 0	0 0 1	
Volume Module:												
Base Vol:	5	220	13	168	371	0	0	0	0	11	0	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	5	220	13	168	371	0	0	0	0	11	0	25
Added Vol:	0	100	0	16	10	0	0	0	0	0	0	180
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	320	13	184	381	0	0	0	0	11	0	205
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	320	13	184	381	0	0	0	0	11	0	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	320	13	184	381	0	0	0	0	11	0	205
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	320	13	184	381	0	0	0	0	11	0	205
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	1.89	0.08	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	18	1130	46	546	1182	0	0	0	0	487	0	585
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.28	0.34	0.32	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.35
Crit Moves:	****			****								****
Delay/Veh:	10.8	10.7	10.6	12.3	11.4	0.0	0.0	0.0	0.0	9.9	0.0	11.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.8	10.7	10.6	12.3	11.4	0.0	0.0	0.0	0.0	9.9	0.0	11.4
LOS by Move:	B	B	B	B	B	*	*	*	*	A	*	B
ApproachDel:	10.7			11.7			xxxxxx			11.3		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	10.7			11.7			xxxxxx			11.3		
LOS by Appr:	B			B			*			B		
AllWayAvgQ:	0.4	0.4	0.4	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.5

Griffith Park Performance Center
Existing + Project Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #6 Crystal Springs Dr & Los Feliz Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	108	Level Of Service:	C

Street Name:	Crystal Springs Dr						Los Feliz Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	107	113	326	27	150	191	59	2184	679	91	2044	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	113	326	27	150	191	59	2184	679	91	2044	17
Added Vol:	0	25	0	5	3	3	25	0	0	0	0	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	138	326	32	153	194	84	2184	679	91	2044	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	107	138	326	32	153	194	84	2184	0	91	2044	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	138	326	32	153	194	84	2184	0	91	2044	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	107	138	326	32	153	194	84	2184	0	91	2044	0
Saturation Flow Module:												
Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	4125	1375	1375	4125	1375
Capacity Analysis Module:												
Vol/Sat:	0.08	0.05	0.24	0.02	0.06	0.14	0.06	0.53	0.00	0.07	0.50	0.00
Crit Volume:			326	32				728		0		
Crit Moves:			****	****				****		****		

Griffith Park Performance Center
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Zoo Dr & I-5 NB off Ramp / SR 134 EB on Ramp

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: B[10.5]

Street Name:	Zoo Dr						I-5 NB off Ramp / SR 134 EB on Ra					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0	0	0 0	0 1	0	1 0	0 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	114	33	0	0	80	24	15	0	34	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	33	0	0	80	24	15	0	34	0	0	0
Added Vol:	15	0	0	0	150	0	0	0	20	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	33	0	0	230	24	15	0	54	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	33	0	0	230	24	15	0	54	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	129	33	0	0	230	24	15	0	54	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	254	xxxx	xxxxx	xxxx	xxxx	xxxxx	533	xxxx	242	xxxx	xxxx	xxxxx
Potent Cap.:	1323	xxxx	xxxxx	xxxx	xxxx	xxxxx	511	xxxx	802	xxxx	xxxx	xxxxx
Move Cap.:	1323	xxxx	xxxxx	xxxx	xxxx	xxxxx	470	xxxx	802	xxxx	xxxx	xxxxx
Volume/Cap:	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.2	xxxx	xxxx	xxxxx
Control Del:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.9	xxxx	9.8	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	A	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.5			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Western Heritage Way & Zoo Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.404
Loss Time (sec):	0	Average Delay (sec/veh):	11.7
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Western Heritage Way									Zoo Dr								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Stop Sign					Stop Sign				
Rights:	Ignore					Include					Include					Ignore				
Min. Green:	0	0	0			0	0	0			0	0	0			0	0	0		
Lanes:	1	0	2	0	1	1	0	1	1	0	0	0	1!	0	0	0	1	0	0	1
Volume Module:																				
Base Vol:	6	151		99		76	94		7		66	151		12		21	28		39	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	6	151		99		76	94		7		66	151		12		21	28		39	
Added Vol:	0	5		19		0	50		0		0	0		0		170	0		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	6	156		118		76	144		7		66	151		12		191	28		39	
User Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00	
PHF Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00	
PHF Volume:	6	156		0		76	144		7		66	151		12		191	28		0	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Reduced Vol:	6	156		0		76	144		7		66	151		12		191	28		0	
PCE Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00	
MLF Adj:	1.00	1.00		0.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		0.00	
FinalVolume:	6	156		0		76	144		7		66	151		12		191	28		0	
Saturation Flow Module:																				
Adjustment:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Lanes:	1.00	2.00		1.00		1.00	1.91		0.09		0.29	0.66		0.05		0.87	0.13		1.00	
Final Sat.:	479	1028		570		494	1017		50		165	378		30		473	69		648	
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.15		0.00		0.15	0.14		0.14		0.40	0.40		0.40		0.40	0.40		0.00	
Crit Moves:		****				****						****					****			
Delay/Veh:	9.8	10.3		0.0		10.7	10.0		10.0		12.7	12.7		12.7		13.1	13.1		0.0	
Delay Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
AdjDel/Veh:	9.8	10.3		0.0		10.7	10.0		10.0		12.7	12.7		12.7		13.1	13.1		0.0	
LOS by Move:	A	B		*		B	B		A		B	B		B		B	B		*	
ApproachDel:	10.3					10.3					12.7					13.1				
Delay Adj:	1.00					1.00					1.00					1.00				
ApprAdjDel:	10.3					10.3					12.7					13.1				
LOS by Appr:	B					B					B					B				
AllWayAvgQ:	0.0	0.2		0.0		0.2	0.1		0.1		0.6	0.6		0.6		0.6	0.6		0.0	

Griffith Park Performance Center
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Crystal Springs Dr & Griffith Park Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.492
Loss Time (sec):	0	Average Delay (sec/veh):	10.6
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						Griffith Park Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0 0
Volume Module:												
Base Vol:	13	101	0	0	142	5	30	0	187	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	101	0	0	142	5	30	0	187	0	0	0
Added Vol:	35	10	0	0	173	48	15	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	111	0	0	315	53	45	0	191	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	111	0	0	315	53	45	0	191	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	111	0	0	315	53	45	0	191	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	48	111	0	0	315	53	45	0	191	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.86	0.14	0.19	0.00	0.81	0.00	0.00	0.00
Final Sat.:	588	641	0	0	641	108	138	0	586	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	xxxx	xxxx	0.49	0.49	0.33	xxxx	0.33	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	9.1	9.2	0.0	0.0	11.9	11.9	9.7	0.0	9.7	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	9.2	0.0	0.0	11.9	11.9	9.7	0.0	9.7	0.0	0.0	0.0
LOS by Move:	A	A	*	*	B	B	A	*	A	*	*	*
ApproachDel:	9.1			11.9			9.7			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	9.1			11.9			9.7			xxxxxx		
LOS by Appr:	A			B			A			*		
AllWayAvgQ:	0.1	0.2	0.0	0.9	0.9	0.9	0.4	0.4	0.4	0.0	0.0	0.0

Griffith Park Performance Center
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Crystal Springs Dr & Fire Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.451
Loss Time (sec):	0	Average Delay (sec/veh):	11.0
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						Fire Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	25	80	0	10	312	5	17	1	53	15	2	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	80	0	10	312	5	17	1	53	15	2	16
Added Vol:	245	35	0	0	4	173	10	0	23	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	270	115	0	10	316	178	27	1	76	15	2	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	115	0	10	316	178	27	1	76	15	2	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	115	0	10	316	178	27	1	76	15	2	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	270	115	0	10	316	178	27	1	76	15	2	16
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.04	1.25	0.71	0.96	0.04	1.00	0.45	0.06	0.49
Final Sat.:	598	648	0	26	849	515	462	17	569	235	31	251
Capacity Analysis Module:												
Vol/Sat:	0.45	0.18	xxxx	0.38	0.37	0.35	0.06	0.06	0.13	0.06	0.06	0.06
Crit Moves:	****			****					****		****	
Delay/Veh:	13.2	9.2	0.0	11.2	10.9	10.0	10.1	10.1	9.3	9.8	9.8	9.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.2	9.2	0.0	11.2	10.9	10.0	10.1	10.1	9.3	9.8	9.8	9.8
LOS by Move:	B	A	*	B	B	A	B	B	A	A	A	A
ApproachDel:	12.0			10.6			9.5			9.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.0			10.6			9.5			9.8		
LOS by Appr:	B			B			A			A		
AllWayAvgQ:	0.8	0.2	0.2	0.6	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1

Griffith Park Performance Center
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Crystal Springs Dr & I-5 on/off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.311
Loss Time (sec):	0	Average Delay (sec/veh):	9.9
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						I-5 SB on / NB off Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	1	0 2	0 0	0	0 0	0 0	1	0 0	0 1
Volume Module:												
Base Vol:	9	81	19	97	306	0	0	0	0	12	0	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	81	19	97	306	0	0	0	0	12	0	21
Added Vol:	0	100	0	16	10	0	0	0	0	0	0	180
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	181	19	113	316	0	0	0	0	12	0	201
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	181	19	113	316	0	0	0	0	12	0	201
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	181	19	113	316	0	0	0	0	12	0	201
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	181	19	113	316	0	0	0	0	12	0	201
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	1.73	0.18	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	53	1083	115	576	1253	0	0	0	0	529	0	646
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.16	0.20	0.25	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.31
Crit Moves:	****				****							****
Delay/Veh:	9.4	9.3	9.1	10.2	10.1	0.0	0.0	0.0	0.0	9.3	0.0	10.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.4	9.3	9.1	10.2	10.1	0.0	0.0	0.0	0.0	9.3	0.0	10.2
LOS by Move:	A	A	A	B	B	*	*	*	*	A	*	B
ApproachDel:	9.3			10.1			xxxxxx			10.1		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	9.3			10.1			xxxxxx			10.1		
LOS by Appr:	A			B			*			B		
AllWayAvgQ:	0.2	0.2	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Griffith Park Performance Center
Existing + Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #6 Crystal Springs Dr & Los Feliz Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.720
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Street Name:	Crystal Springs Dr						Los Feliz Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	94	19	135	57	116	189	31	1542	473	173	2114	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	94	19	135	57	116	189	31	1542	473	173	2114	16
Added Vol:	0	25	0	5	3	3	25	0	0	0	0	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	94	44	135	62	119	192	56	1542	473	173	2114	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	94	44	135	62	119	192	56	1542	0	173	2114	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	44	135	62	119	192	56	1542	0	173	2114	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	94	44	135	62	119	192	56	1542	0	173	2114	0
Saturation Flow Module:												
Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	4125	1375	1375	4125	1375
Capacity Analysis Module:												
Vol/Sat:	0.07	0.02	0.10	0.05	0.04	0.14	0.04	0.37	0.00	0.13	0.51	0.00
Crit Volume:	94					192	0				705	
Crit Moves:	****					****	****				****	

APPENDIX D
LOS Operation Worksheets – Cumulative/Area Project Trip Generation

Griffith Park TIS
Related Projects

#	Project Name	Project Location	Jurisdiction	Land Use	Intensity	Unit	Daily Total	PM Peak			Daily Total	Saturday Midday		
								Total	In	Out		Total	In	Out
1	Public Storage Facility	5500 San Fernando Rd	Glendale	Other	180.000	ksf	0	0	0	0	0	0	0	0
2	Condominiums	124 W Colorado St	Glendale	Residential	50	du	291	26	17	9	284	24	13	11
3	Hotel	315 S Brand Blvd	Glendale	Hotel	94	du	768	56	29	28	770	68	38	30
4	Mixed-Use	3901 San Fernando Rd	Glendale	Apartments	142	du	944	88	57	31	907	74	37	37
				Retail	2.600	ksf	111	10	5	5	130	13	7	6
				Office	8.600	ksf	29	4	1	3	5	1	1	0
				Live/Work	5.000	ksf	17	2	0	2	3	0	0	0
						Subtotal:	***1,100***	***104***	***63***	***41***	***1,045***	***88***	***44***	***43***
5	Griffith Park Baseball Fields	4730 N Crystal Springs Dr	Los Angeles	Other	2	fields	320	40	40	0	320	40	40	0
6	New Life Vision Church	2861 W Los Feliz Blvd	Los Angeles	Institutional	85.631	ksf	602	36	17	19	686	234	166	68
7	Kaiser Permanente	4905 W Hollywood Blvd	Los Angeles	Office	43.000	ksf	1,285	127	36	91	385	156	89	67
8	Mixed-Use	4900 W Hollywood Blvd	Los Angeles	Apartments	200	du					1,278	104	52	52
				Retail	25.000	ksf					1,249	121	63	58
						Subtotal:	***1,585***	***89***	***52***	***37***	***2,527***	***225***	***115***	***110***
9	Restaurant & Deli	5500 W Hollywood Blvd	Los Angeles	Restaurant	4.648	ksf					439	50	30	20
				Deli	5.323	ksf					843	75	40	35
				Banquet Hall	9.750	ksf					0	0	0	0
						Subtotal:	***441***	***37***	***23***	***14***	***1,282***	***125***	***69***	***56***
10	High Line West	5550 W Hollywood Blvd	Los Angeles	Apartments	278	du					1,776	145	72	72
				Retail	12.500	ksf					625	60	31	29
						Subtotal:	***1,267***	***64***	***39***	***25***	***2,401***	***205***	***104***	***101***
						NET TOTAL	**7,659**	**580**	**316**	**264**	**9,699**	**1,163**	**678**	**486**

Source: ITE Trip Generation, 9th Edition

APPENDIX E
LOS Operation Worksheets – Future without-Project Conditions

Griffith Park Performance Center
Future Pre-Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Zoo Dr & I-5 NB off Ramp / SR 134 EB on Ramp

Average Delay (sec/veh): 6.4 Worst Case Level Of Service: B[10.0]

Street Name:	Zoo Dr						I-5 NB off Ramp / SR 134 EB on Ra					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0	0	0 0	0 1	0	1 0	0 0	1	0	0 0	0 0
Volume Module:												
Base Vol:	373 28	0	0	84	23	0	5	0	58	0	0	0
Growth Adj:	1.04 1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	388 29	0	0	87	24	0	5	0	60	0	0	0
Added Vol:	0 0	0	0	12	0	0	0	0	0	0	0	0
PasserByVol:	0 0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	388 29	0	0	99	24	0	5	0	60	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	388 29	0	0	99	24	0	5	0	60	0	0	0
Reduct Vol:	0 0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	388 29	0	0	99	24	0	5	0	60	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4 xxxx		6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5 xxxx		3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	123 xxxx	xxxxx	xxxx	xxxx	xxxxx		917 xxxx		111	xxxx	xxxx	xxxxx
Potent Cap.:	1476 xxxx	xxxxx	xxxx	xxxx	xxxxx		305 xxxx		947	xxxx	xxxx	xxxxx
Move Cap.:	1476 xxxx	xxxxx	xxxx	xxxx	xxxxx		225 xxxx		947	xxxx	xxxx	xxxxx
Volume/Cap:	0.26 xxxx	xxxx	xxxx	xxxx	xxxx		0.02 xxxx		0.06	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1 xxxx		0.2	xxxx	xxxx	xxxxx
Control Del:	8.3 xxxx	xxxxx	xxxxx	xxxx	xxxxx		21.3 xxxx		9.1	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*		C	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	1.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	8.3 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*	*	*		*	*	*	*	*	
ApproachDel:	xxxxxx		xxxxxx				10.0		xxxxxx			
ApproachLOS:	*		*				B		*			

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Future Pre-Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Western Heritage Way & Zoo Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.987
Loss Time (sec):	0	Average Delay (sec/veh):	31.6
Optimal Cycle:	0	Level Of Service:	D

Street Name:	Western Heritage Way						Zoo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	0 240		82	566	378	0	22	39	5	12	3	119
Growth Adj:	1.04 1.04		1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0 250		85	589	393	0	23	41	5	12	3	124
Added Vol:	0 0		0	0	4	0	0	0	0	12	0	0
PasserByVol:	0 0		0	0	0	0	0	0	0	0	0	0
Initial Fut:	0 250		85	589	397	0	23	41	5	24	3	124
User Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	0 250		0	589	397	0	23	41	5	24	3	0
Reduct Vol:	0 0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0 250		0	589	397	0	23	41	5	24	3	0
PCE Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00 1.00		0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	0 250		0	589	397	0	23	41	5	24	3	0
Saturation Flow Module:												
Adjustment:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00 2.00		1.00	1.00	2.00	0.00	0.33	0.59	0.08	0.89	0.11	1.00
Final Sat.:	484 1040		577	597	1289	0	170	302	39	398	51	524
Capacity Analysis Module:												
Vol/Sat:	0.00 0.24		0.00	0.99	0.31	xxxx	0.13	0.13	0.13	0.06	0.06	0.00
Crit Moves:		****		****				****		****		
Delay/Veh:	0.0 11.6		0.0	57.5	10.6	0.0	11.0	11.0	11.0	10.9	10.9	0.0
Delay Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0 11.6		0.0	57.5	10.6	0.0	11.0	11.0	11.0	10.9	10.9	0.0
LOS by Move:	*	B	*	F	B	*	B	B	B	B	B	*
ApproachDel:		11.6			38.7			11.0			10.9	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.6			38.7			11.0			10.9	
LOS by Appr:		B			E			B			B	
AllWayAvgQ:	0.0 0.3		0.0	8.1	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.0

Griffith Park Performance Center
Future Pre-Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Crystal Springs Dr & Griffith Park Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.578
Loss Time (sec):	0	Average Delay (sec/veh):	11.9
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						Griffith Park Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0	0	0	0	0 1	0	0	1! 0	0	0	0 0 0
Volume Module:												
Base Vol:	10	226	0	0	406	3	11	0	122	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	10	235	0	0	422	3	11	0	127	0	0	0
Added Vol:	0	0	0	0	16	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	235	0	0	438	3	11	0	127	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	235	0	0	438	3	11	0	127	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	235	0	0	438	3	11	0	127	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	235	0	0	438	3	11	0	127	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.99	0.01	0.08	0.00	0.92	0.00	0.00	0.00
Final Sat.:	618	676	0	0	759	5	56	0	616	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.35	xxxx	xxxx	0.58	0.58	0.21	xxxx	0.21	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	8.5	10.5	0.0	0.0	13.6	13.6	9.0	0.0	9.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.5	10.5	0.0	0.0	13.6	13.6	9.0	0.0	9.0	0.0	0.0	0.0
LOS by Move:	A	B	*	*	B	B	A	*	A	*	*	*
ApproachDel:	10.4			13.6			9.0			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	10.4			13.6			9.0			xxxxxx		
LOS by Appr:	B			B			A			*		
AllWayAvgQ:	0.0	0.5	0.0	1.3	1.3	1.3	0.2	0.2	0.2	0.0	0.0	0.0

Griffith Park Performance Center
Future Pre-Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Crystal Springs Dr & Fire Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.383
Loss Time (sec):	0	Average Delay (sec/veh):	10.0
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						Fire Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	16	224	4	7	511	4	5	3	13	10	1	7
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	17	233	4	7	532	4	5	3	14	10	1	7
Added Vol:	0	0	24	16	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	233	28	23	532	4	5	3	14	10	1	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	233	28	23	532	4	5	3	14	10	1	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	233	28	23	532	4	5	3	14	10	1	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	233	28	23	532	4	5	3	14	10	1	7
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	1.68	0.20	0.08	1.91	0.01	0.62	0.38	1.00	0.55	0.06	0.39
Final Sat.:	82	1170	144	61	1394	11	316	190	590	307	31	215
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.20	0.38	0.38	0.38	0.02	0.02	0.02	0.03	0.03	0.03
Crit Moves:	****			****					****	****		
Delay/Veh:	9.2	9.0	8.8	10.6	10.5	10.4	9.4	9.4	8.4	9.2	9.2	9.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.2	9.0	8.8	10.6	10.5	10.4	9.4	9.4	8.4	9.2	9.2	9.2
LOS by Move:	A	A	A	B	B	B	A	A	A	A	A	A
ApproachDel:	9.0			10.5			8.8			9.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	9.0			10.5			8.8			9.2		
LOS by Appr:	A			B			A			A		
AllWayAvgQ:	0.2	0.2	0.2	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0

Griffith Park Performance Center
Future Pre-Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Crystal Springs Dr & I-5 on/off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.282
Loss Time (sec):	0	Average Delay (sec/veh):	9.7
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						I-5 SB on / NB off Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1 0	1 0		1 0 2 0	0		0 0 0 0	0		1 0 0 0	1	
Volume Module:												
Base Vol:	5	220	13	168	371	0	0	0	0	11	0	25
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	5	229	14	175	386	0	0	0	0	11	0	26
Added Vol:	0	8	0	0	0	0	0	0	0	0	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	237	14	175	386	0	0	0	0	11	0	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	237	14	175	386	0	0	0	0	11	0	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	237	14	175	386	0	0	0	0	11	0	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	237	14	175	386	0	0	0	0	11	0	42
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	1.85	0.11	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	27	1250	72	624	1368	0	0	0	0	503	0	603
Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.19	0.28	0.28	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.07
Crit Moves:	****				****							****
Delay/Veh:	9.1	9.0	9.0	10.5	9.9	0.0	0.0	0.0	0.0	9.5	0.0	8.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	9.0	9.0	10.5	9.9	0.0	0.0	0.0	0.0	9.5	0.0	8.6
LOS by Move:	A	A	A	B	A	*	*	*	*	A	*	A
ApproachDel:	9.0			10.1			xxxxxx			8.8		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	9.0			10.1			xxxxxx			8.8		
LOS by Appr:	A			B			*			A		
AllWayAvgQ:	0.2	0.2	0.2	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Griffith Park Performance Center
Future Pre-Project Conditions
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Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #6 Crystal Springs Dr & Los Feliz Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.826
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	131	Level Of Service:	D

Street Name:	Crystal Springs Dr						Los Feliz Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	107	113	326	27	150	191	59	2184	679	91	2044	17
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	111	118	339	28	156	199	61	2272	706	95	2127	18
Added Vol:	0	8	6	0	0	0	0	15	0	5	12	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	126	345	28	156	199	61	2287	706	100	2139	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	111	126	345	28	156	199	61	2287	0	100	2139	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	126	345	28	156	199	61	2287	0	100	2139	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	111	126	345	28	156	199	61	2287	0	100	2139	0
Saturation Flow Module:												
Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	4125	1375	1375	4125	1375
Capacity Analysis Module:												
Vol/Sat:	0.08	0.05	0.25	0.02	0.06	0.14	0.04	0.55	0.00	0.07	0.52	0.00
Crit Volume:			345	28				762		0		
Crit Moves:			****	****				****		****		

Griffith Park Performance Center
Future Pre-Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Zoo Dr & I-5 NB off Ramp / SR 134 EB on Ramp

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: A[9.7]

Street Name:	Zoo Dr						I-5 NB off Ramp / SR 134 EB on Ra					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 0	0	0 0	1 0	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	114	33	0	0	80	24	15	0	34	0	0	0
Growth Adj:	1.04 1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	119	34	0	0	83	25	16	0	35	0	0	0
Added Vol:	0	0	0	0	12	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	119	34	0	0	95	25	16	0	35	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	119	34	0	0	95	25	16	0	35	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	119	34	0	0	95	25	16	0	35	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:												
Cnflict Vol:	120 xxxx	xxxxx	xxxx	xxxx	xxxxx	379	xxxx	108	xxxx	xxxx	xxxxx	
Potent Cap.:	1480 xxxx	xxxxx	xxxx	xxxx	xxxxx	627	xxxx	952	xxxx	xxxx	xxxxx	
Move Cap.:	1480 xxxx	xxxxx	xxxx	xxxx	xxxxx	586	xxxx	952	xxxx	xxxx	xxxxx	
Volume/Cap:	0.08 xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	0.04	xxxx	xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.3 xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	0.1	xxxx	xxxx	xxxxx	
Control Del:	7.6 xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.3	xxxx	8.9	xxxxx	xxxx	xxxxx	
LOS by Move:	A	*	*	*	*	*	B	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	0.3 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	7.6 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.7			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Future Pre-Project Conditions
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Western Heritage Way & Zoo Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.381
Loss Time (sec):	0	Average Delay (sec/veh):	10.3
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Western Heritage Way						Zoo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	6	151	99	76	94	7	66	151	12	21	28	39
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	6	157	103	79	98	7	69	157	12	22	29	41
Added Vol:	0	0	0	0	4	0	0	0	0	12	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	157	103	79	102	7	69	157	12	34	29	41
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	6	157	0	79	102	7	69	157	12	34	29	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	157	0	79	102	7	69	157	12	34	29	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	6	157	0	79	102	7	69	157	12	34	29	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.87	0.13	0.29	0.66	0.05	0.54	0.46	1.00
Final Sat.:	538	1164	654	545	1107	80	180	413	33	305	262	667
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.00	0.15	0.09	0.09	0.38	0.38	0.38	0.11	0.11	0.00
Crit Moves:		****		****					****	****		
Delay/Veh:	9.1	9.4	0.0	10.0	9.0	9.0	11.8	11.8	11.8	9.4	9.4	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.1	9.4	0.0	10.0	9.0	9.0	11.8	11.8	11.8	9.4	9.4	0.0
LOS by Move:	A	A	*	B	A	A	B	B	B	A	A	*
ApproachDel:		9.4			9.4			11.8			9.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.4			9.4			11.8			9.4	
LOS by Appr:		A			A			B			A	
AllWayAvgQ:	0.0	0.1	0.0	0.2	0.1	0.1	0.6	0.6	0.6	0.1	0.1	0.0

Griffith Park Performance Center
Future Pre-Project Conditions
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Crystal Springs Dr & Griffith Park Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.268
Loss Time (sec):	0	Average Delay (sec/veh):	8.6
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						Griffith Park Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0	0	1 0	0	0	1! 0	0	0	0 0
Volume Module:												
Base Vol:	13	101	0	0	142	5	30	0	187	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	14	105	0	0	148	5	31	0	195	0	0	0
Added Vol:	0	0	0	0	16	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	14	105	0	0	164	5	31	0	195	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	105	0	0	164	5	31	0	195	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	105	0	0	164	5	31	0	195	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	105	0	0	164	5	31	0	195	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.97	0.03	0.14	0.00	0.86	0.00	0.00	0.00
Final Sat.:	619	677	0	0	731	23	117	0	727	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	xxxx	xxxx	0.22	0.22	0.27	xxxx	0.27	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	8.4	8.7	0.0	0.0	8.9	8.9	8.5	0.0	8.5	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.4	8.7	0.0	0.0	8.9	8.9	8.5	0.0	8.5	0.0	0.0	0.0
LOS by Move:	A	A	*	*	A	A	A	*	A	*	*	*
ApproachDel:	8.7			8.9			8.5			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	8.7			8.9			8.5			xxxxxx		
LOS by Appr:	A			A			A			*		
AllWayAvgQ:	0.0	0.2	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0

Griffith Park Performance Center
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Crystal Springs Dr & Fire Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.250
Loss Time (sec):	0	Average Delay (sec/veh):	8.9
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						Fire Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	25	80	0	10	312	5	17	1	53	15	2	16
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	26	83	0	10	325	5	18	1	55	16	2	17
Added Vol:	0	0	24	16	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	83	24	26	325	5	18	1	55	16	2	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	83	24	26	325	5	18	1	55	16	2	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	83	24	26	325	5	18	1	55	16	2	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	83	24	26	325	5	18	1	55	16	2	17
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.39	1.25	0.36	0.15	1.82	0.03	0.94	0.06	1.00	0.45	0.06	0.49
Final Sat.:	259	867	260	106	1312	21	524	31	677	280	37	299
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	0.09	0.25	0.25	0.25	0.03	0.03	0.08	0.06	0.06	0.06
Crit Moves:	****			****					****		****	
Delay/Veh:	8.6	8.3	8.0	9.3	9.2	9.1	9.0	9.0	8.1	8.8	8.8	8.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	8.3	8.0	9.3	9.2	9.1	9.0	9.0	8.1	8.8	8.8	8.8
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:	8.3			9.2			8.3			8.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.3			9.2			8.3			8.8		
LOS by Appr:	A			A			A			A		
AllWayAvgQ:	0.1	0.1	0.1	0.3	0.3	0.3	0.0	0.0	0.1	0.1	0.1	0.1

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Crystal Springs Dr & I-5 on/off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.219
Loss Time (sec):	0	Average Delay (sec/veh):	8.7
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Crystal Springs Dr						I-5 SB on / NB off Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1 0	1 0		2 0 0			0 0 0 0 0			1 0 0 0 1		
Volume Module:												
Base Vol:	9	81	19	97	306	0	0	0	0	12	0	21
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	84	20	101	318	0	0	0	0	12	0	22
Added Vol:	0	8	0	0	0	0	0	0	0	0	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	92	20	101	318	0	0	0	0	12	0	38
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	92	20	101	318	0	0	0	0	12	0	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	92	20	101	318	0	0	0	0	12	0	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	92	20	101	318	0	0	0	0	12	0	38
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	1.52	0.33	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	106	1076	238	660	1455	0	0	0	0	552	0	675
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.08	0.15	0.22	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.06
Crit Moves:	****				****							****
Delay/Veh:	8.3	8.1	7.9	9.0	8.9	0.0	0.0	0.0	0.0	9.0	0.0	7.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.3	8.1	7.9	9.0	8.9	0.0	0.0	0.0	0.0	9.0	0.0	7.9
LOS by Move:	A	A	A	A	A	*	*	*	*	A	*	A
ApproachDel:	8.1			9.0			xxxxxx			8.2		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	8.1			9.0			xxxxxx			8.2		
LOS by Appr:	A			A			*			A		
AllWayAvgQ:	0.1	0.1	0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Griffith Park Performance Center
Future Pre-Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #6 Crystal Springs Dr & Los Feliz Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.754
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	93	Level Of Service:	C

Street Name:	Crystal Springs Dr						Los Feliz Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	94	19	135	57	116	189	31	1542	473	173	2114	16
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	98	20	140	59	121	197	32	1604	492	180	2199	17
Added Vol:	0	8	13	0	0	0	0	30	0	8	26	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	28	153	59	121	197	32	1634	492	188	2225	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	98	28	153	59	121	197	32	1634	0	188	2225	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	28	153	59	121	197	32	1634	0	188	2225	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	98	28	153	59	121	197	32	1634	0	188	2225	0
Saturation Flow Module:												
Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	4125	1375	1375	4125	1375
Capacity Analysis Module:												
Vol/Sat:	0.07	0.01	0.11	0.04	0.04	0.14	0.02	0.40	0.00	0.14	0.54	0.00
Crit Volume:	98					197	0				742	
Crit Moves:	****					****	****				****	

APPENDIX F
LOS Operation Worksheets – Future with-Project Conditions

Griffith Park Performance Center
Future Post-Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Zoo Dr & I-5 NB off Ramp / SR 134 EB on Ramp

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: B[11.2]

Street Name:	Zoo Dr						I-5 NB off Ramp / SR 134 EB on Ra					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0 1	0		1 0 0	0 1		0 0 0	0 0	
Volume Module:												
Base Vol:	373 28 0	0 0		84 23	5		0 58	0		0 0	0	
Growth Adj:	1.04 1.04 1.04	1.04 1.04		1.04 1.04	1.04		1.04 1.04	1.04		1.04 1.04	1.04	
Initial Bse:	388 29 0	0 0		87 24	5		0 60	0		0 0	0	
Added Vol:	15 0 0	0 0		162 0	0		0 20	0		0 0	0	
PasserByVol:	0 0 0	0 0		0 0	0		0 0	0		0 0	0	
Initial Fut:	403 29 0	0 0		249 24	5		0 80	0		0 0	0	
User Adj:	1.00 1.00 1.00	1.00 1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00 1.00	1.00 1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	403 29 0	0 0		249 24	5		0 80	0		0 0	0	
Reduct Vol:	0 0 0	0 0		0 0	0		0 0	0		0 0	0	
FinalVolume:	403 29 0	0 0		249 24	5		0 80	0		0 0	0	
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	xxxxx xxxx	xxxxx	6.4 xxxx		6.2	xxxxx xxxx	xxxxx				
FollowUpTim:	2.2 xxxx xxxxx	xxxxx xxxx	xxxxx	3.5 xxxx		3.3	xxxxx xxxx	xxxxx				
Capacity Module:												
Cnflict Vol:	273 xxxx xxxxx	xxxx xxxx	xxxxx	1097 xxxx		261	xxxx xxxx	xxxxx				
Potent Cap.:	1302 xxxx xxxxx	xxxx xxxx	xxxxx	238 xxxx		782	xxxx xxxx	xxxxx				
Move Cap.:	1302 xxxx xxxxx	xxxx xxxx	xxxxx	164 xxxx		782	xxxx xxxx	xxxxx				
Volume/Cap:	0.31 xxxx xxxx	xxxx xxxx	xxxx	0.03 xxxx		0.10	xxxx xxxx	xxxx				
Level Of Service Module:												
2Way95thQ:	1.3 xxxx xxxxx	xxxx xxxx	xxxxx	0.1 xxxx		0.3	xxxx xxxx	xxxxx				
Control Del:	9.0 xxxx xxxxx	xxxxx xxxx	xxxxx	27.7 xxxx		10.1	xxxxx xxxx	xxxxx				
LOS by Move:	A *	* *	*	D *		B	* *	*				
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx	xxxxx	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx				
SharedQueue:	1.3 xxxx xxxxx	xxxxx xxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx				
Shrd ConDel:	9.0 xxxx xxxxx	xxxxx xxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx				
Shared LOS:	A *	* *	*	* *		*	* *	*				
ApproachDel:	xxxxxx	xxxxxx		11.2			xxxxxx					
ApproachLOS:	*	*		B			*					

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Future Post-Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Western Heritage Way & Zoo Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	1.124
Loss Time (sec):	0	Average Delay (sec/veh):	47.2
Optimal Cycle:	0	Level Of Service:	E

Street Name:	Western Heritage Way									Zoo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R			
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign					
Rights:	Ignore			Include			Include			Ignore					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	1	0 2	0 1	1	0 1	1 0	0	0 1!	0 0	0	1	0 0 1			
Volume Module:															
Base Vol:	0	240	82	566	378	0	22	39	5	12	3	119			
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04			
Initial Bse:	0	250	85	589	393	0	23	41	5	12	3	124			
Added Vol:	0	5	19	0	54	0	0	0	0	182	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	0	255	104	589	447	0	23	41	5	194	3	124			
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00			
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00			
PHF Volume:	0	255	0	589	447	0	23	41	5	194	3	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	0	255	0	589	447	0	23	41	5	194	3	0			
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00			
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00			
FinalVolume:	0	255	0	589	447	0	23	41	5	194	3	0			
Saturation Flow Module:															
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Lanes:	1.00	2.00	1.00	1.00	2.00	0.00	0.33	0.59	0.08	0.98	0.02	1.00			
Final Sat.:	429	917	501	524	1118	0	153	270	35	435	7	514			
Capacity Analysis Module:															
Vol/Sat:	0.00	0.28	0.00	1.12	0.40	xxxx	0.15	0.15	0.15	0.45	0.45	0.00			
Crit Moves:		****		****				****			****				
Delay/Veh:	0.0	13.2	0.0	102.2	13.2	0.0	11.9	11.9	11.9	16.7	16.7	0.0			
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	0.0	13.2	0.0	102.2	13.2	0.0	11.9	11.9	11.9	16.7	16.7	0.0			
LOS by Move:	*	B	*	F	B	*	B	B	B	C	C	*			
ApproachDel:		13.2			63.8			11.9			16.7				
Delay Adj:		1.00			1.00			1.00			1.00				
ApprAdjDel:		13.2			63.8			11.9			16.7				
LOS by Appr:		B			F			B			C				
AllWayAvgQ:	0.0	0.4	0.0	13.5	0.6	0.6	0.2	0.2	0.2	0.7	0.7	0.0			

Griffith Park Performance Center
Future Post-Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Crystal Springs Dr & Griffith Park Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.880
Loss Time (sec):	0	Average Delay (sec/veh):	23.1
Optimal Cycle:	0	Level Of Service:	C

Street Name:	Crystal Springs Dr						Griffith Park Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0 0
Volume Module:												
Base Vol:	10	226	0	0	406	3	11	0	122	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	10	235	0	0	422	3	11	0	127	0	0	0
Added Vol:	35	10	0	0	189	48	15	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	45	245	0	0	611	51	26	0	131	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	245	0	0	611	51	26	0	131	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	245	0	0	611	51	26	0	131	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	245	0	0	611	51	26	0	131	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.92	0.08	0.17	0.00	0.83	0.00	0.00	0.00
Final Sat.:	586	636	0	0	695	58	104	0	514	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.39	xxxx	xxxx	0.88	0.88	0.25	xxxx	0.25	xxxx	xxxx	xxxx
Crit Moves:		****				****	****					
Delay/Veh:	9.2	11.5	0.0	0.0	31.5	31.5	10.2	0.0	10.2	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.2	11.5	0.0	0.0	31.5	31.5	10.2	0.0	10.2	0.0	0.0	0.0
LOS by Move:	A	B	*	*	D	D	B	*	B	*	*	*
ApproachDel:	11.1			31.5			10.2			xxxxxx		
Delay Adj:	1.00			1.00			1.00			xxxxx		
ApprAdjDel:	11.1			31.5			10.2			xxxxxx		
LOS by Appr:	B			D			B			*		
AllWayAvgQ:	0.1	0.6	0.0	5.0	5.0	5.0	0.3	0.3	0.3	0.0	0.0	0.0

Griffith Park Performance Center
Future Post-Project Conditions
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Crystal Springs Dr & Fire Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.557
Loss Time (sec):	0	Average Delay (sec/veh):	13.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						Fire Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	16	224	4	7	511	4	5	3	13	10	1	7
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	17	233	4	7	532	4	5	3	14	10	1	7
Added Vol:	245	35	24	16	4	173	10	0	23	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	262	268	28	23	536	177	15	3	37	10	1	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	262	268	28	23	536	177	15	3	37	10	1	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	262	268	28	23	536	177	15	3	37	10	1	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	262	268	28	23	536	177	15	3	37	10	1	7
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.94	0.96	0.10	0.06	1.46	0.48	0.83	0.17	1.00	0.55	0.06	0.39
Final Sat.:	556	621	66	42	986	341	368	76	514	272	27	191
Capacity Analysis Module:												
Vol/Sat:	0.47	0.43	0.43	0.56	0.54	0.52	0.04	0.04	0.07	0.04	0.04	0.04
Crit Moves:	****			****					****			****
Delay/Veh:	13.7	12.1	12.0	14.5	13.9	12.9	10.5	10.5	9.5	10.1	10.1	10.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.7	12.1	12.0	14.5	13.9	12.9	10.5	10.5	9.5	10.1	10.1	10.1
LOS by Move:	B	B	B	B	B	B	B	B	A	B	B	B
ApproachDel:	12.9			13.7			9.8			10.1		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.9			13.7			9.8			10.1		
LOS by Appr:	B			B			A			B		
AllWayAvgQ:	0.8	0.7	0.7	1.2	1.0	1.0	0.0	0.0	0.1	0.0	0.0	0.0

Griffith Park Performance Center
Future Post-Project Conditions
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Crystal Springs Dr & I-5 on/off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.384
Loss Time (sec):	0	Average Delay (sec/veh):	11.7
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						I-5 SB on / NB off Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1 0	1 0		1 0	2 0	0	0 0	0 0	0	1 0	0 0	1
Volume Module:												
Base Vol:	5	220	13	168	371	0	0	0	0	11	0	25
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	5	229	14	175	386	0	0	0	0	11	0	26
Added Vol:	0	108	0	16	10	0	0	0	0	0	0	196
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	337	14	191	396	0	0	0	0	11	0	222
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	5	337	14	191	396	0	0	0	0	11	0	222
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	337	14	191	396	0	0	0	0	11	0	222
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	337	14	191	396	0	0	0	0	11	0	222
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	1.89	0.08	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	17	1110	45	536	1159	0	0	0	0	481	0	578
Capacity Analysis Module:												
Vol/Sat:	0.31	0.30	0.30	0.36	0.34	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.38
Crit Moves:	****			****								****
Delay/Veh:	11.1	11.1	11.0	12.7	11.8	0.0	0.0	0.0	0.0	10.0	0.0	12.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.1	11.1	11.0	12.7	11.8	0.0	0.0	0.0	0.0	10.0	0.0	12.0
LOS by Move:	B	B	B	B	B	*	*	*	*	A	*	B
ApproachDel:	11.1			12.1			xxxxxx			11.9		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	11.1			12.1			xxxxxx			11.9		
LOS by Appr:	B			B			*			B		
AllWayAvgQ:	0.4	0.4	0.4	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5

Griffith Park Performance Center
Future Post-Project Conditions
PM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #6 Crystal Springs Dr & Los Feliz Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.830
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	134	Level Of Service:	D

Street Name:	Crystal Springs Dr						Los Feliz Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	107	113	326	27	150	191	59	2184	679	91	2044	17
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	111	118	339	28	156	199	61	2272	706	95	2127	18
Added Vol:	0	33	6	5	3	3	25	15	0	5	12	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	111	151	345	33	159	202	86	2287	706	100	2139	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	111	151	345	33	159	202	86	2287	0	100	2139	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	151	345	33	159	202	86	2287	0	100	2139	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	111	151	345	33	159	202	86	2287	0	100	2139	0
Saturation Flow Module:												
Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	4125	1375	1375	4125	1375
Capacity Analysis Module:												
Vol/Sat:	0.08	0.05	0.25	0.02	0.06	0.15	0.06	0.55	0.00	0.07	0.52	0.00
Crit Volume:			345	33				762		0		
Crit Moves:			****	****				****		****		

Griffith Park Performance Center
Future Post-Project Conditions
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Zoo Dr & I-5 NB off Ramp / SR 134 EB on Ramp

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: B[10.7]

Street Name:	Zoo Dr						I-5 NB off Ramp / SR 134 EB on Ra					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 0	0	0 0 1	0	1 0	0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	114	33	0	0	80	24	15	0	34	0	0	0
Growth Adj:	1.04 1.04	1.04	1.04	1.04	1.04	1.04	1.04 1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	119	34	0	0	83	25	16	0	35	0	0	0
Added Vol:	15	0	0	0	162	0	0	0	20	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	34	0	0	245	25	16	0	55	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	134	34	0	0	245	25	16	0	55	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	134	34	0	0	245	25	16	0	55	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4 xxxx		6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5 xxxx		3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	270 xxxx	xxxxx	xxxx	xxxx	xxxxx		559 xxxx		258	xxxx	xxxx	xxxxx
Potent Cap.:	1305 xxxx	xxxxx	xxxx	xxxx	xxxxx		493 xxxx		786	xxxx	xxxx	xxxxx
Move Cap.:	1305 xxxx	xxxxx	xxxx	xxxx	xxxxx		452 xxxx		786	xxxx	xxxx	xxxxx
Volume/Cap:	0.10 xxxx	xxxx	xxxx	xxxx	xxxx		0.03 xxxx		0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3 xxxx	xxxxx	xxxx	xxxx	xxxxx		0.1 xxxx		0.2	xxxx	xxxx	xxxxx
Control Del:	8.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		13.3 xxxx		9.9	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	B	*	A	*	*	*
Movement:	LT - LTR	- RT	LT - LTR	- RT			LT - LTR	- RT	LT - LTR	- RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx		xxxxxx				10.7		xxxxxx			
ApproachLOS:	*		*				B		*			

Note: Queue reported is the number of cars per lane.

Griffith Park Performance Center
Future Post-Project Conditions
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #2 Western Heritage Way & Zoo Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	0	Average Delay (sec/veh):	12.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Western Heritage Way						Zoo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Ignore			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0	1	1 0	0 0	1!	0 0	0 1	0	0 1
Volume Module:												
Base Vol:	6	151	99	76	94	7	66	151	12	21	28	39
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	6	157	103	79	98	7	69	157	12	22	29	41
Added Vol:	0	5	19	0	54	0	0	0	0	182	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	6	162	122	79	152	7	69	157	12	204	29	41
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	6	162	0	79	152	7	69	157	12	204	29	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	6	162	0	79	152	7	69	157	12	204	29	0
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	6	162	0	79	152	7	69	157	12	204	29	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.91	0.09	0.29	0.66	0.05	0.87	0.13	1.00
Final Sat.:	470	1007	556	486	999	48	163	372	30	469	67	638
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.00	0.16	0.15	0.15	0.42	0.42	0.42	0.43	0.43	0.00
Crit Moves:		****		****				****		****		
Delay/Veh:	10.0	10.5	0.0	11.0	10.2	10.2	13.3	13.3	13.3	13.8	13.8	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.0	10.5	0.0	11.0	10.2	10.2	13.3	13.3	13.3	13.8	13.8	0.0
LOS by Move:	A	B	*	B	B	B	B	B	B	B	B	*
ApproachDel:	10.5			10.5			13.3			13.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.5			10.5			13.3			13.8		
LOS by Appr:	B			B			B			B		
AllWayAvgQ:	0.0	0.2	0.0	0.2	0.2	0.2	0.6	0.6	0.6	0.7	0.7	0.0

Griffith Park Performance Center
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Crystal Springs Dr & Griffith Park Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0	Average Delay (sec/veh):	11.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						Griffith Park Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	13	101	0	0	142	5	30	0	187	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	14	105	0	0	148	5	31	0	195	0	0	0
Added Vol:	35	10	0	0	189	48	15	0	4	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	115	0	0	337	53	46	0	199	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	115	0	0	337	53	46	0	199	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	115	0	0	337	53	46	0	199	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	115	0	0	337	53	46	0	199	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.86	0.14	0.19	0.00	0.81	0.00	0.00	0.00
Final Sat.:	582	634	0	0	642	101	135	0	579	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	xxxx	xxxx	0.52	0.52	0.34	xxxx	0.34	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	9.2	9.3	0.0	0.0	12.6	12.6	9.9	0.0	9.9	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.2	9.3	0.0	0.0	12.6	12.6	9.9	0.0	9.9	0.0	0.0	0.0
LOS by Move:	A	A	*	*	B	B	A	*	A	*	*	*
ApproachDel:		9.3			12.6			9.9		xxxxxx		
Delay Adj:		1.00			1.00			1.00		xxxxx		
ApprAdjDel:		9.3			12.6			9.9		xxxxxx		
LOS by Appr:		A			B			A		*		
AllWayAvgQ:	0.1	0.2	0.0	1.0	1.0	1.0	0.4	0.4	0.4	0.0	0.0	0.0

Griffith Park Performance Center
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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #4 Crystal Springs Dr & Fire Rd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.458
Loss Time (sec):	0	Average Delay (sec/veh):	11.3
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						Fire Rd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1	0 1	0	0 1	0 1	0	0 1	0 0	1	0 0	1! 0	0
Volume Module:												
Base Vol:	25	80	0	10	312	5	17	1	53	15	2	16
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	26	83	0	10	325	5	18	1	55	16	2	17
Added Vol:	245	35	24	16	4	173	10	0	23	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	271	118	24	26	329	178	28	1	78	16	2	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	271	118	24	26	329	178	28	1	78	16	2	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	271	118	24	26	329	178	28	1	78	16	2	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	271	118	24	26	329	178	28	1	78	16	2	17
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.88	0.12	0.10	1.23	0.67	0.96	0.04	1.00	0.45	0.06	0.49
Final Sat.:	592	574	75	64	823	479	455	17	559	231	31	247
Capacity Analysis Module:												
Vol/Sat:	0.46	0.21	0.32	0.41	0.40	0.37	0.06	0.06	0.14	0.07	0.07	0.07
Crit Moves:	****			****					****		****	
Delay/Veh:	13.5	9.5	9.5	11.8	11.4	10.4	10.2	10.2	9.5	9.9	9.9	9.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	13.5	9.5	9.5	11.8	11.4	10.4	10.2	10.2	9.5	9.9	9.9	9.9
LOS by Move:	B	A	A	B	B	B	B	B	A	A	A	A
ApproachDel:	12.1			11.1			9.7			9.9		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.1			11.1			9.7			9.9		
LOS by Appr:	B			B			A			A		
AllWayAvgQ:	0.8	0.3	0.3	0.7	0.6	0.6	0.1	0.1	0.1	0.1	0.1	0.1

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Crystal Springs Dr & I-5 on/off Ramps

Cycle (sec):	100	Critical Vol./Cap.(X):	0.342
Loss Time (sec):	0	Average Delay (sec/veh):	10.2
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Crystal Springs Dr						I-5 SB on / NB off Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 1 0	1 0		1 0 2 0	0		0 0 0 0	0		1 0 0	0	1
Volume Module:												
Base Vol:	9	81	19	97	306	0	0	0	0	12	0	21
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	84	20	101	318	0	0	0	0	12	0	22
Added Vol:	0	108	0	16	10	0	0	0	0	0	0	196
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	192	20	117	328	0	0	0	0	12	0	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	192	20	117	328	0	0	0	0	12	0	218
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	192	20	117	328	0	0	0	0	12	0	218
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	192	20	117	328	0	0	0	0	12	0	218
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.08	1.74	0.18	1.00	2.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	51	1067	111	567	1232	0	0	0	0	523	0	638
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.21	0.27	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	0.34
Crit Moves:	****				****							****
Delay/Veh:	9.6	9.5	9.3	10.4	10.3	0.0	0.0	0.0	0.0	9.4	0.0	10.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.6	9.5	9.3	10.4	10.3	0.0	0.0	0.0	0.0	9.4	0.0	10.6
LOS by Move:	A	A	A	B	B	*	*	*	*	A	*	B
ApproachDel:	9.5			10.4			xxxxxx			10.5		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	9.5			10.4			xxxxxx			10.5		
LOS by Appr:	A			B			*			B		
AllWayAvgQ:	0.2	0.2	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4

Griffith Park Performance Center
Future Post-Project Conditions
AM Peak Hour

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #6 Crystal Springs Dr & Los Feliz Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	93	Level Of Service:	C

Street Name:	Crystal Springs Dr						Los Feliz Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ignore			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	3 0	1	1 0	3 0	1
Volume Module:												
Base Vol:	94	19	135	57	116	189	31	1542	473	173	2114	16
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	98	20	140	59	121	197	32	1604	492	180	2199	17
Added Vol:	0	33	13	5	3	3	25	30	0	8	26	50
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	53	153	64	124	200	57	1634	492	188	2225	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	98	53	153	64	124	200	57	1634	0	188	2225	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	98	53	153	64	124	200	57	1634	0	188	2225	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	98	53	153	64	124	200	57	1634	0	188	2225	0
Saturation Flow Module:												
Sat/Lane:	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	1.00	1.00	3.00	1.00
Final Sat.:	1375	2750	1375	1375	2750	1375	1375	4125	1375	1375	4125	1375
Capacity Analysis Module:												
Vol/Sat:	0.07	0.02	0.11	0.05	0.04	0.15	0.04	0.40	0.00	0.14	0.54	0.00
Crit Volume:	98					200	0				742	
Crit Moves:	****					****	****				****	