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PHASE I TRAFFIC ANALYSIS
FOR THE 6045 STOW CANYON ROAD PROJECT - CITY OF GOLETA

Associated Transportation Engineers (ATE) is submitting the following Phase I traffic analysis for the 6045 Stow Canyon Road Project (the "Project"), located in the City of Goleta. The purpose of the Phase I analysis is to develop trip generation estimates based on operational data provided by the applicant and provide a qualitative assessment of potential roadway and intersection impacts based on City traffic impact thresholds.

PROJECT DESCRIPTION

Figure 1 (attached) illustrates the location of the Project site. The Project site is currently occupied by several existing buildings that serve as the Chabad of Santa Barbara. The Project is proposing to construct a new approximately 6,936 SF synagogue building. It is noted that many of the uses and activities that would be housed in the new building area are currently occurring on the Project site. Figure 2 illustrates the Project site plan.

EXISTING CUP

The Project's existing CUP allows for a maximum of 50 individuals in attendance at the synagogue and 40 students at the school/daycare facility (25 at school + 15 at daycare).

CURRENT ACTIVITIES

The current weekly operations and activities that occur on site include a Hebrew School for 10 children and 2 instructors, a morning service for 10 participants, an after-school program

for 10 children and 2 instructors, adult classes for 15-20 students and 1 instructor, Friday evening sundown service for 30 participants and Saturday morning service for 40 participants. During the summer, a summer camp operates with 40 participants for 4 weeks in July. These current operations are within the parameters of the existing CUP approved by the County of Santa Barbara.

A detailed table summarizing the existing and proposed operations and activities is attached for reference. Current synagogue operations also include 13 special events a year which consist of 5 Bar Mitzvahs, 5 holiday events, and 3 high holiday services. These events and services, typical of a synagogue, are not specifically provided for in the existing approved CUP and are intended to be included in the current CUP approval request. These existing events and services are part of the existing baseline traffic condition and do not contribute AM or PM peak hour trips as they either occur outside the applicable PM peak hours or they are simply occasional events.

It should be noted that attendees at services and holiday events often do not drive, consistent with religious practice on the recognized "sabbath", i.e. day of religious observance.

NEW ACTIVITIES

The Project is proposing to add daily pre-school classes, an additional weekly adult class, and a monthly teen event. The pre-school classes would include 10 students and 1 instructor and occur Monday-Friday from 9:00 AM – 3:00 PM. The adult class would include 20 students and 1 instructor once a week from 8:00 PM – 9:00 PM. The teen event would include 15 students and 1 instructor once a month and would occur outside the peak hours from 7:00 PM – 9:00 PM. Trip generation estimates were forecast for the proposed weekly activities based on operational data provided by the applicant and are shown in Table 1.

Table 1
Estimated Project Trips Added - Proposed Activities

Activity	Size	AVO	ADT		AM Peak Hour		PM Peak Hour	
			Rate	Trips	Rate	Trips	Rate	Trips
Pre-School								
Students (a)	10	1.5	4.0	27	2.00	13	0.00	0
Instructor	2	1.0	2.0	4	1.00	2	0.00	0
Adult Classes								
Students	20	1.0	2.00	40	0.00	0	0.00	0
Instructors	1	1.0	2.00	2	0.00	0	0.00	0
Total				**73**		**15**		**0**

(a) Carpool drop-off assumes 1.5 AVO

The data in Table 1 show that the Project is forecast to generate 73 average daily trips, 15 AM peak hour trips, and 0 PM peak hour trips. The additional activities would continue to operate within the parameters of the existing CUP and would not generate impacts or additional PM peak hour trips.

PROJECT TRIP DISTRIBUTION

Trip distribution percentages were developed for the Project based on existing traffic patterns and consideration of population centers in Santa Barbara-Goleta area. The trip distribution pattern is presented in Table 2. Figure 3 shows the distribution and assignment of Project traffic on the study-area street network.

Table 2
Project Trip Distribution

Origin/Destination	Direction	Percent
US 101	East	30%
US 101	West	15%
Cathedral Oaks Road	East	20%
Cathedral Oaks Road	West	10%
Fairview Avenue s/o US 101	South	10%
Local – East of Fairview Avenue	East	10%
Local – West of Fairview Avenue	West	5%
Total		**100%**

THRESHOLDS OF SIGNIFICANCE

The Phase I traffic study evaluates potential impacts using the City of Goleta CEQA traffic impact thresholds, which are outlined below.

A. The project will result in a significant impact on transportation and circulation if proposed project traffic increases the volume to capacity (V/C) ratio at local intersections by the values provided in the following table:

Significant Changes in Levels of Service	
Intersection Level of Service (Including Project)	**Increase in V/C or Trips Greater Than**
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	15 Trips
LOS E	10 Trips
LOS F	5 Trips

B. The project's access to a major road or arterial road would require access that would create an unsafe situation, a new traffic signal, or major revisions to an existing traffic signal.

C. The project would add traffic to a roadway that has design features (e.g., narrow width, road-side ditches, sharp curves, poor sight distance, inadequate pavement structure) that would become a potential safety problem with the addition of project traffic.

D. Project traffic would utilize a substantial portion of an intersection's capacity where the intersection is currently operating at acceptable levels of service, but with cumulative traffic would degrade to or approach LOS D (V/C 0.80) or lower. Substantial is defined as a minimum change of 0.03 for an intersection which would operate from 0.80 to 0.85, a change of 0.02 for an intersection which would operate from 0.86 to 0.90 and a change of 0.01 for an intersection which would operate greater than 0.90 (LOS E or worse).

The City of Goleta's roadway impact threshold defines a significant roadway impact if a project would increase traffic volumes by more than 1.0 percent (either project-specific or project contribution to cumulative impacts) on a roadway that currently exceeds its Acceptable Capacity or is forecast to exceed its Acceptable Capacity under cumulative conditions.

POTENTIAL IMPACTS

Based on the trip generation estimates presented in Table 1 and the City of Goleta traffic impact thresholds, the Project would not have the potential to significantly impact the adjacent roadways and/or intersections.

Potential Roadway Impacts

As shown on Figure 3, the Project would add approximately between 7 and 40 average daily trips to the roadways segments within the study-area. These trip additions would be well below the City of Goleta's roadway impact threshold of a volume increase of greater than 1%.

Intersection Impacts

Tables 3 and 4 show the Existing and Cumulative levels of service for the key intersections and the number of trips that would be added to each intersection by the Project. The level of service data was obtained from the traffic study completed for the 6210 Hollister Avenue Project[1].

Table 3
Key Intersections – AM Peak Hour

Intersection	Existing		Cumulative		Project Added	
	V/C	LOS	V/C	LOS	Trips	Impact
Calle Real/Fairview Avenue	0.61	B	0.836	D	9	No
US101 NB Ramps/Fairview Avenue	0.65	B	0.748	C	9	No
US 101 SB Ramps/Fairview Avenue	0.53	A	0.685	B	5	No

Table 4
Key Intersections – PM Peak Hour

Intersection	Existing		Cumulative		Project Added	
	V/C	V/C	V/C	LOS	Trips	Impact
Calle Real/Fairview Avenue	0.71	C	0.791	C	0	No
US101 NB Ramps/Fairview Avenue	0.60	A	0.885	D	0	No
US 101 SB Ramps/Fairview Avenue	0.59	A	0.785	C	0	No

The Project's traffic additions would not significantly impact the operations at the US 101/Fairview Avenue interchange or the Fairview Avenue/Calle Real intersection. As shown in Tables 3 and 4, the study-area intersections currently operate in the LOS A-C range with Existing conditions and the Project would add between 0 and 9 peak hour trips to these locations which would not exceed the City's project-specific impact thresholds.

The Calle Real/Fairview Avenue intersection is forecast to operate at LOS D during the AM peak hour with Cumulative volumes. The Project would add 9 peak hour trips to this intersection during the AM peak hour period. Therefore, the Project would not generate significant impacts based on City of Goleta thresholds (increase in V/C ratio of 0.03).

1 6210 Hollister Avenue Updated Traffic, Circulation and Parking Study, Associated Transportation Engineers, 2017.

The US 101 NB Ramps/Fairview Avenue intersection is forecast to operate at LOS D during the PM peak hour with Cumulative volumes. The Project would add 0 peak hour trips to these intersections during the PM peak hour period; and would not generate significant impacts based on City of Goleta thresholds (increase in V/C ratio of 0.02).

This concludes our Phase I traffic analysis for the 6045 Stow Canyon Road Project. We appreciate the opportunity to assist with the Project.

Associated Transportation Engineers

Scott A. Schell, AICP, PTP
Principal Transportation Planner

SAS/DLD

Attachments

Existing Weekly Operations and Activities

Day of the Week & Time	Event/Program	Approximate # of Participants	Notes	Comparison w/ 92-CP-018*
Sunday 10am-12pm	Hebrew School	10 children + 2 teachers	Carpool dropoff, parents don't stay or park, 2 teachers park	Within school/daycare parameters of 92-CP-018.
Monday 7am-7:45am	Morning Service	10		Within parameters of 92-CP-018.
Monday 3:45-5:30pm	After School Children Program	10 + 2 teachers	Carpool dropoff, parents don't stay or park, 2 teachers park	Within school/daycare parameters of 92-CP-018.
Tuesday 3:45-5:30pm	After School Children Program	10 + 2 teachers	Carpool dropoff, parents don't stay or park, 2 teachers park	Within school/daycare parameters of 92-CP-018.
Tuesday 8:00-9:00pm	Adult Class (Evening)	20 + 1 instructor		Within school/daycare parameters of 92-CP-018.
Wednesday 3:45-5:30pm	Hebrew School	10 students, 1 teacher	Carpool dropoff, parents don't stay or park.	Within school/daycare parameters of 92-CP-018.
Thursday 8:00-9:00pm	Adult Class (Evening)	15 + 1 instructor		Within school/daycare parameters of 92-CP-018.
Friday Evening Sundown for 30 minutes	Services	30	Many participants do not drive as per Shabbat restrictions (approx. 20 walking,10 driving)	Within synagogue parameters of 92-CP-018.
Saturday 10:00 am-1:00 pm	Services	40	Many participants do not drive as per Shabbat restrictions (approx. 25 walking, 15 driving)	Within synagogue parameters of 92-CP-018.

Existing Holiday & Seasonal Operations & Activities

Day of the Week & Time	Event/Program	Approximate # of Participants	Notes	Comparison w/ 92-CP-018*
5 Times a year on Saturday 10:00 am-1:00 pm	Bar Mitzvah	100	Many participants do not drive as per Shabbat restrictions (approximately 50 walking, 50 driving)	No PM PHTs. Will need to be updated in current CUP.
5 Times a year – Holiday Events on Weekday Usually 5:00 - 7:00 pm	Holiday Events	113 (including 2 staff)		Occasional special events do not count toward PM PHTs. Will need to be updated in current CUP.
M-F for 4 weeks in July 9:00 am-3:00 pm	Summer Camp	40 children, 6 instructors who carpool in one van	Carpool dropoff, parents don't stay	No PM PHTs. Will need to be updated in current CUP.
High Holiday Services 3 days in Sept. 10:00 am - 2:00pm	Services	80 (including 5 staff)	Many participants do not drive as per Holiday restrictions (50 walking, 30 driving)	No PM PHTs. Will need to be updated in current CUP.

Proposed New Operations & Activities

Day of the Week & Time	Event/Program	Approximate # of Participants	Notes	Comparison w/ 92-CP-018*
+1/week 8:00 pm - 9:00 pm	Adult Class (Evening)	20 + 1 instructor		Within school/daycare parameters of 92-CP-018.
+1/month 7pm-9pm	Teen Events	15 + 1 instructor		Within school/daycare parameters of 92-CP-018.
Monday through Friday daily 9am - 3pm	Preschool Classes	10 students + 1 instructor	Parents don't stay or park.	Within school/daycare parameters of 92-CP-018.

9/26/2018

***92-CP-018**

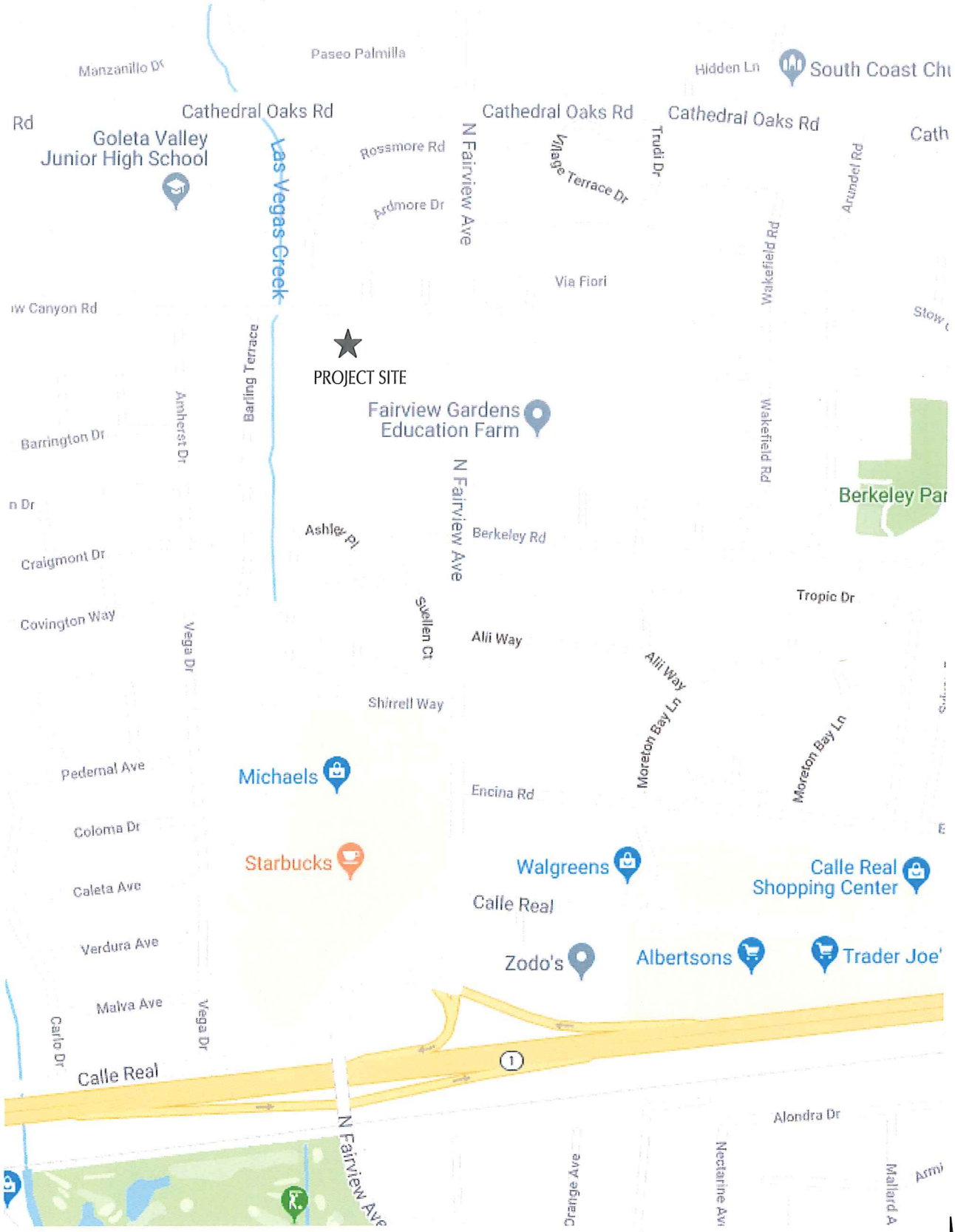
"*Maximum numbers of individuals in attendance at each facility*":

Synagogue: 50
School: 25
Daycare: 15

Associated Transportation Engineers
Trip Generation Worksheet - Monday Schedule

STOW CANYON SYNAGOGUE PROJECT (#18038)																
				ADT	AM PEAK HOUR						PM PEAK HOUR					
Land-Use	Size	AVO	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
Proposed Weekly Conditions																
Adult School (a)																
Students	20	1.00	2.00	40	0.00	0	50%	0	50%	0	0.00	0	50%	0	50%	0
Instructor	1	1.00	2.00	2	0.00	0	50%	0	50%	0	0.00	0	50%	0	50%	0
Pre-School (b)																
Students	10	1.50	4.00	27	2.00	13	50%	7	50%	6	0.00	0	50%	0	50%	0
Instructor	2	1.00	2.00	4	1.00	2	100%	2	0%	0	0.00	0	50%	0	50%	0
Sub-Total				*73*		*15*		*9*		*6*		*0*		*0*		*0*
Proposed Monthly Conditions																
Teen Event (c)																
Participants	15	1.50	4.00	40	0.00	0	50%	0	50%	0	0.00	0	50%	0	50%	0
Instuctor	1	1.00	2.00	2	0.00	0	50%	0	50%	0	0.00	0	50%	0	50%	0
Sub-Total				*42*		*0*		*0*		*0*		*0*		*0*		*0*
Total Trips				**115**		**15**		**9**		**6**		**0**		**0**		**0**

(a) Adult School: 8:00 PM - 9:00 PM
(b) Pre-School : 9:00 AM - 3:00 PM (Carpool dropoff assumes 1.5 AVO)
(c) Teen Event: 7:00-9:00 PM (Carpool dropoff assumes 1.5 AVO); occurs once a month



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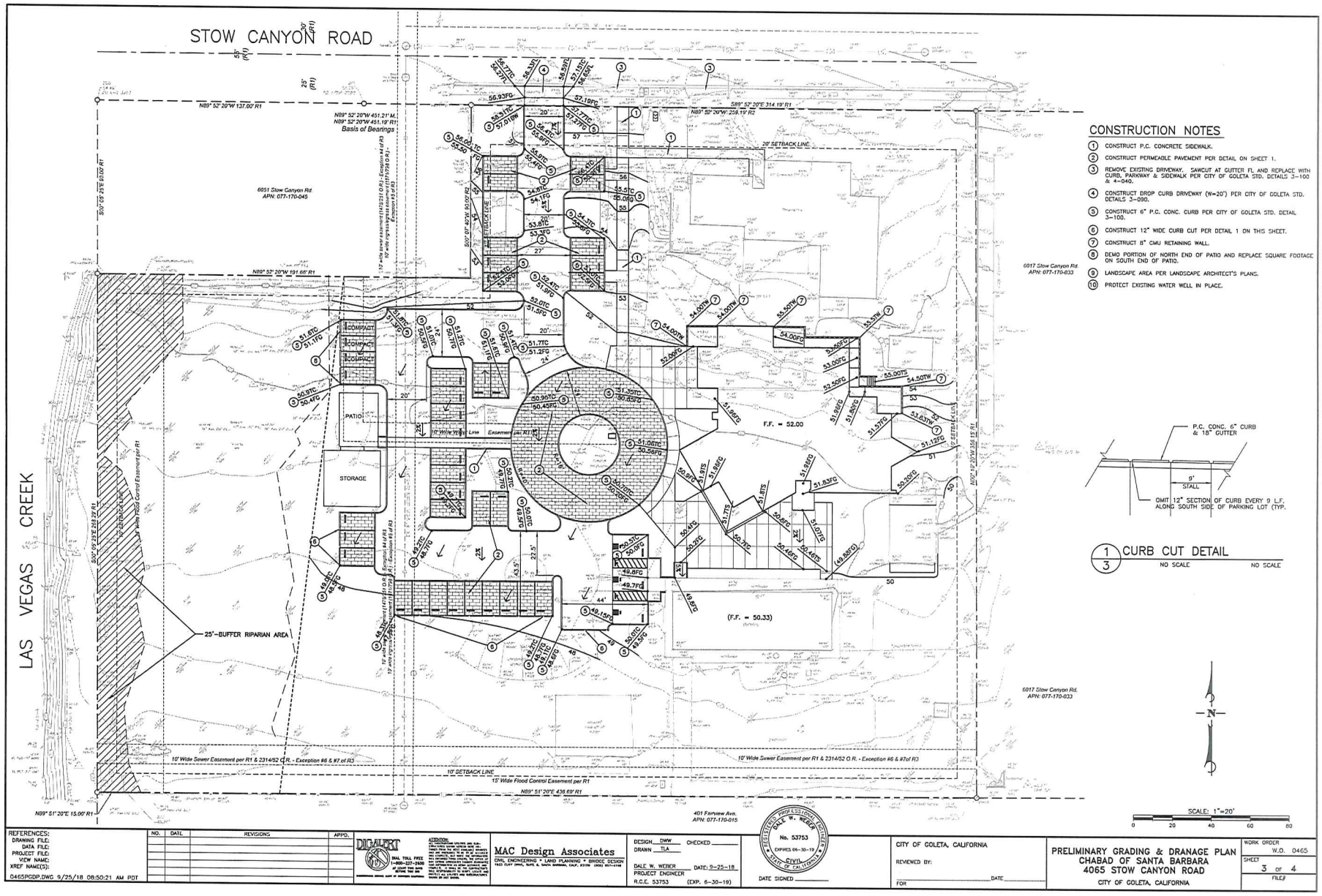
PROJECT SITE LOCATION AND EXISTING STREET NETWORK

FIGURE 1

EKM - ATE#18005



REFERENCES:	NO.	DATE	REVISIONS	APPD.
DRAWING FILE:				
DATA FILE:				
PROJECT FILE:				
VIEW NAME:				
XREF NAME(S):				
0465PGDP.DWG 9/25/18 08:50:21 AM PDT				

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DESIGN DWW CHECKED
DRAWN TLA
DALE W. WEBER DATE: 9-25-18
PROJECT ENGINEER
R.C.E. 53753 (EXP. 6-30-19)

REGISTERED PROFESSIONAL ENGINEER DALE W. WEBER No. 53753 EXPIRES 06-30-19 CIVIL STATE OF CALIFORNIA
DATE SIGNED

CITY OF GOLETA, CALIFORNIA
REVIEWED BY:
FOR DATE

PRELIMINARY GRADING & DRANAGE PLAN
CHABAD OF SANTA BARBARA
4065 STOW CANYON ROAD
CITY OF GOLETA, CALIFORNIA

WORK ORDER W.O. 0465
SHEET 3 OF 4
FILE#

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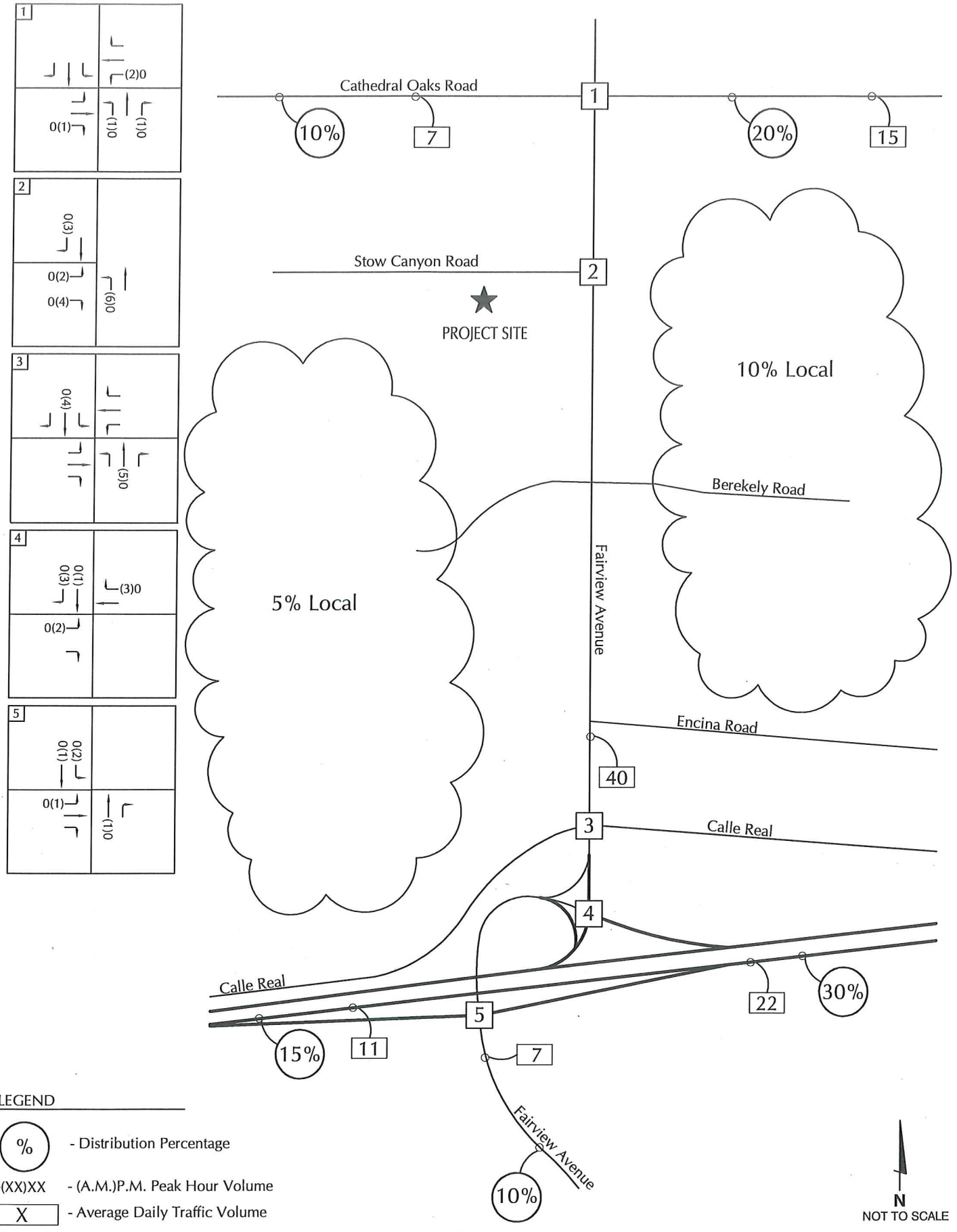
PROJECT SITE PLAN

FIGURE 2

EKM - ATE#18005



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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 3

EKM - ATE#18005