Stanislaus County
Striving to be the Best

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10th Street, Suite 3400, Modesto, CA 95354
Phone: 209.525.6330 Fax: 209.525.5911

Referral
Early Consultation

Date: **July 8, 2016**

To: **Distribution List (See Attachment A)**

From: **Miguel Galvez, Deputy Director, Planning and Community Development**

Subject: **USE PERMIT APPLICATION NO. PLN2015-0130 – THE FRUIT YARD AMPHITHEATER**

Respond By: **July 25, 2016**

****PLEASE REVIEW REFERRAL PROCESS POLICY****

The Stanislaus County Department of Planning and Community Development is soliciting comments from responsible agencies under the Early Consultation process to determine: a) whether or not the project is subject to CEQA and b) if specific conditions should be placed upon project approval.

Therefore, please contact this office by the response date if you have any comments pertaining to the proposal. Comments made identifying potential impacts should be as specific as possible and should be based on supporting data (e.g., traffic counts, expected pollutant levels, etc.). Your comments should emphasize potential impacts in areas which your agency has expertise and/or jurisdictional responsibilities.

These comments will assist our Department in preparing a staff report to present to the Planning Commission. Those reports will contain our recommendations for approval or denial. They will also contain recommended conditions to be required should the project be approved. Therefore, please list any conditions that you wish to have included for presentation to the Commission as well as any other comments you may have. Please return all comments and/or conditions as soon as possible or no later than the response date referenced above.

Thank you for your cooperation. Please call (209) 525-6330 if you have any questions.

Applicant: **Joe Traina**

Project Location: **7948 Yosemite Boulevard, Modesto, CA 95357**

APN: **009-027-004**

Williamson Act Contract: **N/A**

General Plan: **Planned Development (PD)**

Current Zoning: **Planned Development - P-D (317)**

Project Description: **Request to amend approved P-D (317), which authorized the development plan and schedule for The Fruit Yard project that includes the following: (1) development of a 9,000 square foot banquet facility; (2) relocation of the gas station and convenience market; (3) relocation of the existing "card lock" fueling facility; (4) construction of a 3,000 square foot retail shell building; (5) a 322-space vehicle/RV storage facility; (6) a 66-space travel trailer park for short terms stays; (7) a two (2)-acre site for retail truck sales; (8) a new facility for fruit packing**

and warehousing; and (9) occasional outdoor special events, from fund raising activities to private parties, all conducted within the 45+/- acre site.

On January 21, 2010, the Stanislaus County Planning Commission approved Vesting Tentative Parcel Map Application No. 2009-08 – the Fruit Yard, requesting to divide a 44+/- acre parcel to create 12 parcels ranging in size from 0.60+/- to 12.70 +/- acres. The proposed parcels would conform to the individual uses allowed under the Planned Development approved by the Board of Supervisors in 2008. On October 31, 2012, Parcel Map No. 056PM083 was recorded, dividing the property into nine parcels and one remainder parcel.

<u>For this Use Permit Application, the applicant proposes to amend Approved P-D (317) by requesting the following (refer to attached annotated site plan)</u>:

(1) establishment of an outdoor, fenced, 3,500 person capacity amphitheater event center;
(2) a 5,000 square foot amphitheater concrete stage with a 5,000 square foot roof structure;
(3) a 4,000 square foot storage building and parking lot adjacent and to the rear of the stage.

Use of amplified noise is requested for both small and large events. Use of the amphitheater would not include simultaneous use of future banquet facilities or use of the balance of the existing park area.

The existing businesses will continue to operate from 6:00 a.m. to 10:00 p.m. Special events and weddings both small and large are proposed to conclude by 12:00 Midnight. Amphitheater concerts with amplified noise are to end by 11:00 p.m.

On-site security will be utilized during amphitheater concerts, special events and weddings.

(4) An additional 1,302-space temporary parking area is proposed on the property, north and south of the amphitheater and east of the park.
(5) Vehicular access to the temporary parking lots will be provided by two additional paved access driveways off of Yosemite Boulevard (State Highway 132) and one additional driveway off of Geer Road. The on-site access driveways are proposed to be paved, lighted, and will provide on-site circulation access around the amphitheater. A traffic management plan is proposed to address ingress and egress to the site during special events.
(6) A covered seating area of approximately 4,800 square feet and a 1,600 square foot gazebo in the eastern half of the existing park area, east of the outdoor amphitheater.
(7) The project also includes replacement of the existing pylon identification freestanding pole sign to an electronic reader board sign.

An Environmental Noise Analysis, a Supplemental Traffic Impact Analysis, and a Traffic Management Plan have been prepared and submitted as part of the proposal.

All previously approved Development Standards associated with Time Extension Application No. PLN2015-0075 for General Plan Amendment No 2007-03, and Rezone Application No. 2007-04, not in conflict with any approved new conditions shall continue to apply.

Full document with attachments available for viewing at:
http://www.stancounty.com/planning/pl/act-projects.shtm

USE PERMIT APPLICATION NO. 2015-0130 – THE FRUIT YARD AMPHITHEATER

Attachment A

Distribution List

	CA DEPT OF CONSERVATION Land Resources / Mine Reclamation		STAN CO ALUC
X	CA DEPT OF FISH & WILDLIFE		STAN CO ANIMAL SERVICES
	CA DEPT OF FORESTRY (CAL FIRE)	X	STAN CO BUILDING PERMITS DIVISION
X	CA DEPT OF TRANSPORTATION DIST 10	X	STAN CO CEO
X	CA OPR STATE CLEARINGHOUSE		STAN CO CSA
X	CA RWQCB CENTRAL VALLEY REGION	X	STAN CO DER
X	CA STATE LANDS COMMISSION	X	STAN CO ERC
	CEMETERY DISTRICT	X	STAN CO FARM BUREAU
	CENTRAL VALLEY FLOOD PROTECTION	X	STAN CO HAZARDOUS MATERIALS
X	CITY OF: MODESTO AND WATERFORD	X	STAN CO PARKS & RECREATION
	COMMUNITY SERVICES/SANITARY DIST	X	STAN CO PUBLIC WORKS
X	COOPERATIVE EXTENSION		STAN CO RISK MANAGEMENT
	COUNTY OF:	X	STAN CO SHERIFF
X	FIRE PROTECTION DIST:CONSOLIDATED	X	STAN CO SUPERVISOR DIST #:1 O'BRIEN
	HOSPITAL DIST:	X	STAN COUNTY COUNSEL
X	IRRIGATION DIST: MODESTO	X	StanCOG
x	MOSQUITO DIST: EASTSIDE	X	STANISLAUS FIRE PREVENTION BUREAU
X	MOUNTIAN VALLEY EMERGENCY MEDICAL SERVICES	X	STANISLAUS LAFCO
	MUNICIPAL ADVISORY COUNCIL:		SURROUNDING LAND OWNERS (on file w/the Clerk to the Board of Supervisors)
X	PACIFIC GAS & ELECTRIC	X	TELEPHONE COMPANY: AT&T
	POSTMASTER:	X	TRIBAL CONTACTS (CA Government Code §65352.3)
	RAILROAD:	X	TUOLUMNE RIVER TRUST
X	SAN JOAQUIN VALLEY APCD	X	US ARMY CORPS OF ENGINEERS
X	SCHOOL DIST 1: EMPIRE	X	US FISH & WILDLIFE
X	SCHOOL DIST 2: MODESTO	X	US MILITARY (SB 1462) (7 agencies)
	STAN ALLIANCE	X	USDA NRCS
X	STAN CO AG COMMISSIONER	X	WATER DIST: MODESTO (DEL ESTE)

STANISLAUS COUNTY
CEQA REFERRAL RESPONSE FORM

TO: **Stanislaus County Planning & Community Development**
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

SUBJECT: **USE PERMIT APPLICATION NO. 2015-0130 – THE FRUIT YARD AMPHITHEATER.**

Based on this agencies particular field(s) of expertise, it is our position the above described project:

_____ Will not have a significant effect on the environment.
_____ May have a significant effect on the environment.
_____ No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheet if necessary)

1.
2.
3.
4.

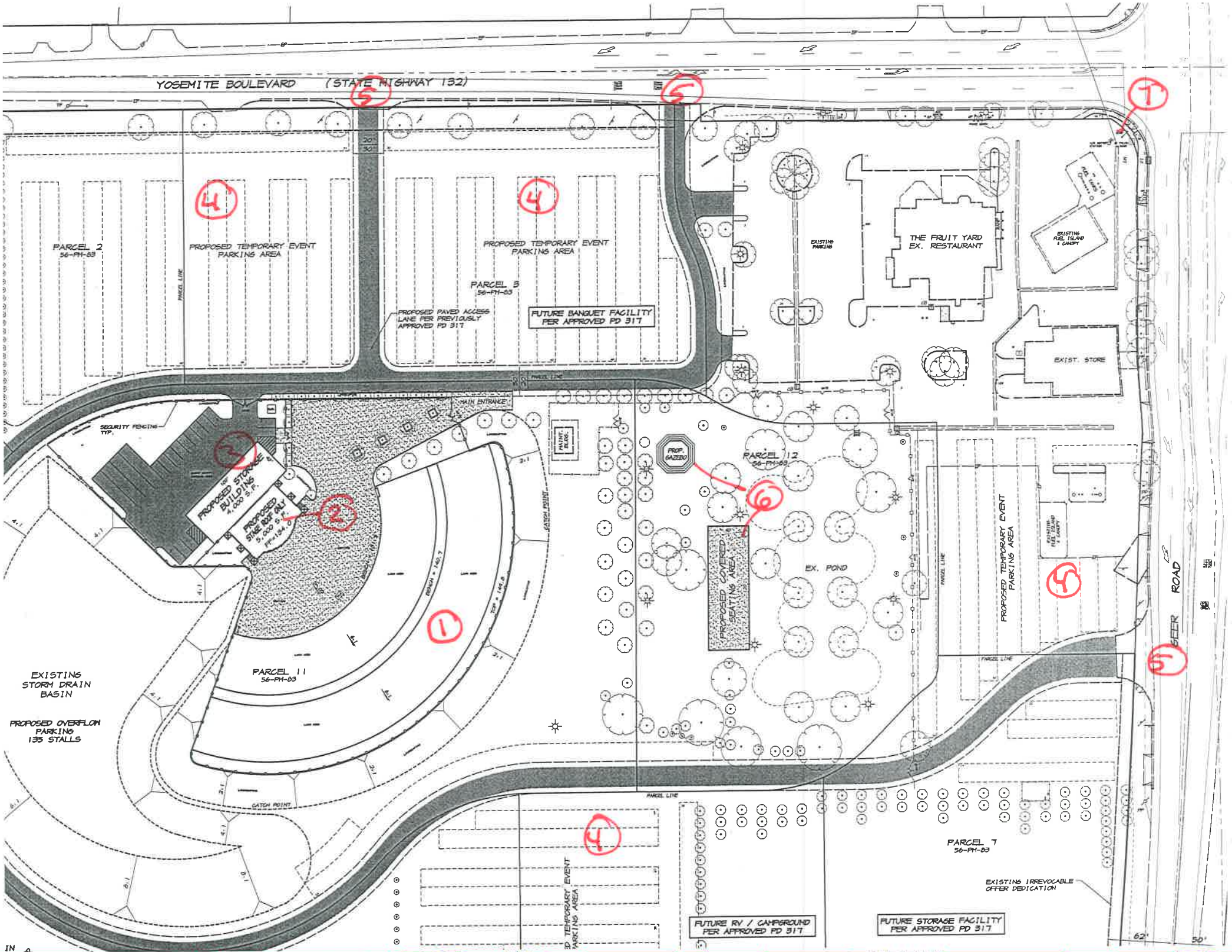
Listed below are possible mitigation measures for the above-listed impacts: *PLEASE BE SURE TO INCLUDE WHEN THE MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

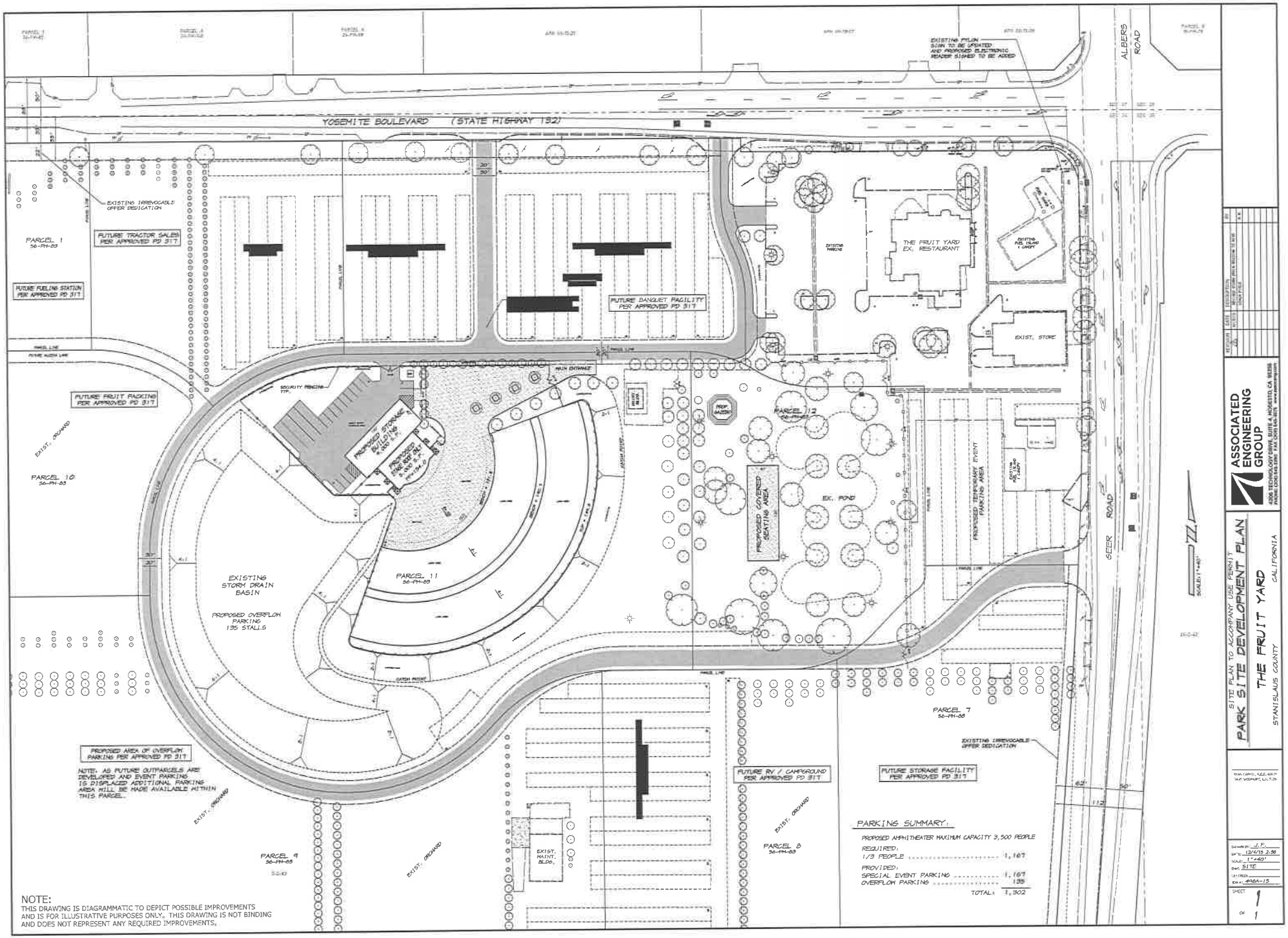
1.
2.
3.
4.

In addition, our agency has the following comments (attach additional sheets if necessary).

Response prepared by:

Name Title Date


YOSEMITE BOULEVARD (STATE HIGHWAY 132)
PARCEL 2
56-PM-83
PROPOSED TEMPORARY EVENT PARKING AREA
PARCEL 3
56-PM-83
PROPOSED TEMPORARY EVENT PARKING AREA
PROPOSED PAVED ACCESS LANE PER PREVIOUSLY APPROVED PD 317
FUTURE BANQUET FACILITY PER APPROVED PD 317
EXISTING PARKING
THE FRUIT YARD
EX. RESTAURANT
EXISTING FUEL ISLAND & CANOPY
EXIST. STORE
MAIN ENTRANCE
SECURITY FENCING TYP.
PROPOSED STORAGE BUILDING 4,000 S.F.
PROPOSED STAGE ROOF ALT 5,000 S.F.
PAINT. BLDG.
PROP. GAZEBO
PARCEL 12
56-PM-83
PROPOSED COVERED SEATING AREA
EX. POND
PROPOSED TEMPORARY EVENT PARKING AREA
EXISTING FUEL ISLAND & CANOPY
BEER ROAD
EXISTING STORM DRAIN BASIN
PROPOSED OVERFLOW PARKING 135 STALLS
PARCEL 11
56-PM-83
CATCH POINT
PARCEL LINE
PROPOSED TEMPORARY EVENT PARKING AREA
PARCEL 7
56-PM-83
EXISTING IRREVOCABLE OFFER DEDICATION
FUTURE RV / CAMPGROUND PER APPROVED PD 317
FUTURE STORAGE FACILITY PER APPROVED PD 317
62'
50'
1
2
3
4
5
6
7


YOSEMITE BOULEVARD (STATE HIGHWAY 132)
ALBERS ROAD
SEER ROAD
EXISTING PYLON SIGN TO BE UPDATED AND PROPOSED ELECTRONIC READER SIGNED TO BE ADDED
EXISTING IRREVOCABLE OFFER DEDICATION
PARCEL 1
56-PM-89
FUTURE TRACTOR SALES PER APPROVED PD 317
FUTURE FUELING STATION PER APPROVED PD 317
FUTURE DANQUET FACILITY PER APPROVED PD 317
THE FRUIT YARD EX. RESTAURANT
EXIST. STORE
EXISTING PARKING
EXISTING FUEL ISLAND & CANOPY
MAIN ENTRANCE
SECURITY FENCING TYP.
FUTURE FRUIT PACKING PER APPROVED PD 317
EXIST. ORCHARD
PARCEL 10
56-PM-89
PROPOSED STORAGE BUILDING 4,320 S.F.
PROPOSED ONE STORY RV 5,000 S.F.
PARCEL 12
56-PM-89
PROPOSED COVERED SEATING AREA
EX. POND
PROPOSED TEMPORARY EVENT PARKING AREA
EXISTING FUEL ISLAND & CANOPY
EXISTING STORM DRAIN BASIN
PROPOSED OVERFLOW PARKING 135 STALLS
PARCEL 11
56-PM-89
PROPOSED AREA OF OVERFLOW PARKING PER APPROVED PD 317
NOTE: AS FUTURE OUTPARCELS ARE DEVELOPED AND EVENT PARKING IS DISPLACED ADDITIONAL PARKING AREA WILL BE MADE AVAILABLE WITHIN THIS PARCEL.
PARCEL 7
56-PM-89
EXISTING IRREVOCABLE OFFER DEDICATION
FUTURE RV / CAMPGROUND PER APPROVED PD 317
FUTURE STORAGE FACILITY PER APPROVED PD 317
EXIST. MAINT. BLDG.
PARCEL 9
56-PM-89
PARCEL 8
56-PM-89
EXIST. ORCHARD
PARKING SUMMARY:
PROPOSED AMPHITHEATER MAXIMUM CAPACITY 3,500 PEOPLE
REQUIRED:
1/3 PEOPLE 1,167
PROVIDED:
SPECIAL EVENT PARKING 1,167
OVERFLOW PARKING 135
TOTAL= 1,302
NOTE:
THIS DRAWING IS DIAGRAMMATIC TO DEPICT POSSIBLE IMPROVEMENTS AND IS FOR ILLUSTRATIVE PURPOSES ONLY. THIS DRAWING IS NOT BINDING AND DOES NOT REPRESENT ANY REQUIRED IMPROVEMENTS.
ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE A MODESTO, CA 95356
PHONE (209) 543-0380 FAX (209) 543-0276 www.aegmodesto.com
SITE PLAN TO ACCOMPANY USE PERMIT
PARK SITE DEVELOPMENT PLAN
THE FRUIT YARD
STANISLAUS COUNTY CALIFORNIA
DRAWN BY: J.F.
DATE: 12/4/15 2:36
SCALE: 1"=40'
DWG: SITE
JOB NO: 4406A-15
SHEET 1 OF 1

56 PM 83

PARCEL MAP

BEING A DIVISION OF A PORTION OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN STANISLAUS COUNTY, CALIFORNIA

PREPARED FOR: THE FRUITYARD
OCTOBER, 2012

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE: (209) 545-3390 FAX: (209) 545-3875 www.assoceng.com

OWNER'S STATEMENT:

WE, THE UNDERSIGNED OWNER(S), HEREBY CERTIFY THAT WE ARE THE OWNER(S) OF, OR HAVE SOME RIGHT, TITLE OR INTEREST OF RECORD IN THE LAND SHOWN ON THIS PARCEL MAP, AND WE CONSENT TO THE MAKING AND FILING OF THIS MAP IN THE OFFICE OF THE COUNTY RECORDER.

WE HEREBY OFFER FOR DEDICATION TO THE PUBLIC, FOR PUBLIC USE, THE PUBLIC UTILITY EASEMENTS AS SHOWN ON THIS MAP.

WE ALSO HEREBY OFFER FOR DEDICATION FOR THE MUTUAL BENEFIT OF THE PARCELS SHOWN HEREON, THE 30.00 FOOT WIDE PRIVATE INGRESS AND EGRESS EASEMENT AS SHOWN ON THIS MAP.

OWNER: FRUITYARD PROPERTY, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BY: Joseph Traina — 10/8/12
JOSEPH TRAINA, MEMBER — DATE

BY: William Traina — 10/8/12
WILLIAM TRAINA, MEMBER — DATE

BENEFICIARY: WELLS FARGO BANK, NATIONAL ASSOCIATION
BY DOCUMENT RECORDED JUNE 25 2008 AS DOCUMENT. NO. 2008-0068530, S.C.R.

Donny L Rocha — 10/25/12
DATE

Donny L. Rocha, Vice President
PRINT NAME & TITLE

ACKNOWLEDGMENT:

STATE OF CALIFORNIA:
COUNTY OF Stanislaus:
ON 10/8/12 BEFORE ME, Rachel Correia, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED, Joseph Traina & William Traina

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND.
Rachel Correia, NOTARY PUBLIC
PRINT NAME: Rachel Correia
COMMISSION NUMBER: 1951769
COMMISSION EXPIRES: Oct. 8, 2015
PRINCIPAL OFFICE LOCATION (COUNTY): Stanislaus

ACKNOWLEDGMENT:

STATE OF CALIFORNIA:
COUNTY OF STANISLAUS:
ON 10-25-12 BEFORE ME, ANNA FILIPPI, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED, Donny L. Rocha

WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND.
Anna Filippi, NOTARY PUBLIC
PRINT NAME: ANNA FILIPPI
COMMISSION NUMBER: 1848157
COMMISSION EXPIRES: MAY 8, 2013
PRINCIPAL OFFICE LOCATION (COUNTY): STANISLAUS

NOTE:

"ALL PERSONS PURCHASING LOTS WITHIN THE BOUNDARIES OF THIS APPROVED MAP SHOULD BE PREPARED TO ACCEPT THE INCONVENIENCES ASSOCIATED WITH THE AGRICULTURAL OPERATIONS, SUCH AS NOISE, ODORS, FLIES, DUST OR FUMES. STANISLAUS COUNTY HAS DETERMINED THAT SUCH INCONVENIENCES SHALL NOT BE CONSIDERED TO BE A NUISANCE IF AGRICULTURAL OPERATIONS ARE CONSISTENT WITH ACCEPTED CUSTOMS AND STANDARDS."

CLERK OF THE BOARD OF SUPERVISOR'S CERTIFICATE:

THIS IS TO CERTIFY THAT THE OWNERS OF THE PROPERTY SHOWN ON THE ACCOMPANYING MAP HAVE FILED WITH THE BOARD OF SUPERVISORS: (CHECK ONE)

☐ A. A BOND OR DEPOSIT APPROVED BY SAID BOARD TO SECURE THE PAYMENT OF TAXES AND SPECIAL ASSESSMENTS COLLECTED AS TAXES, WHICH ARE AT THE TIME OF FILING THIS MAP, A LIEN AGAINST SAID PROPERTY OR ANY PART THEREOF.

☒ B. RECEIPTED TAX BILL OR BILLS OR SUCH OTHER EVIDENCE AS MAY BE REQUIRED BY SAID BOARD SHOWING FULL PAYMENT OF ALL APPLICABLE TAXES.

DATED THIS 23 DAY OF October 2012.

CHRISTINE FERRARO TALLMAN
CLERK OF THE BOARD OF SUPERVISORS.

BY: Pam Villarreal, DEPUTY
Pam Villarreal
PRINT NAME

TAX COLLECTOR'S CERTIFICATE:

THIS IS TO CERTIFY THAT THERE ARE NO LIENS FOR ANY UNPAID STATE, COUNTY, SCHOOLS, MUNICIPAL, OR SPECIAL ASSESSMENTS, EXCEPT SPECIAL ASSESSMENTS OR TAXES NOT YET PAYABLE AGAINST THE LAND SHOWN ON THIS MAP.

ASSESSOR'S PARCEL NO. 009-027-004.

DATED THIS 23rd DAY OF October 2012.

GORDON B. FORD
COUNTY TAX COLLECTOR.

BY: Regina Nunn, DEPUTY
JEGAN L. RAJA
PRINT NAME

OMITTED SIGNATURE:

PURSUANT TO SECTION 66436 OF THE SUBDIVISION MAP ACT, THE SIGNATURES OF THE FOLLOWING EASEMENT HOLDER'S OF RECORD HAVE BEEN OMITTED:

MODESTO IRRIGATION DISTRICT, CANAL AND INCIDENTAL PRUPOSES, RECORDED MAR. 13, 1925, IN BK. 105 OF OFFICIAL RECORDS, PG. 331, S.C.R.

MODESTO IRRIGATION DISTRICT, PUBLIC UTILITY PRUPOSES, RECORDED JUNE 6, 2007, AS DOCUMENT NO. 2007-0075715, S.C.R.

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF JOE TRAINA ON OCTOBER 1, 2012. I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY. ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED AND ARE SUFFICIENT TO ENABLE THIS SURVEY TO BE RETRACED.

DATED THIS 8th DAY OF OCTOBER 2012.

DAVE L. SKIDMORE, L.S. 7126

LICENSED LAND SURVEYOR — D.L. SKIDMORE — No. 7126 — STATE OF CALIFORNIA

COUNTY SURVEYOR'S STATEMENT:

THIS IS TO CERTIFY THAT THE ACCOMPANYING MAP HAS BEEN EXAMINED AND THAT IT SUBSTANTIALLY CONFORMS TO THE TENTATIVE MAP AND ANY APPROVED ALTERATIONS THEREOF. ALSO, CHAPTER 2, AND TITLE 20, OF THE STANISLAUS COUNTY SUBDIVISION CODE HAVE BEEN COMPLIED WITH AND THE MAP IS TECHNICALLY CORRECT.

I HEREBY ACCEPT ON BEHALF OF THE PUBLIC FOR PUBLIC USE, THE OFFER OF DEDICATION OF THE PUBLIC UTILITY EASEMENTS AS SHOWN ON THIS MAP.

DATED THIS 29th DAY OF OCTOBER 2012.

WAYNE G. SUTTON
COUNTY SURVEYOR

Wayne G. Sutton
L.S. 3863

LICENSED LAND SURVEYOR — WAYNE G. SUTTON — No. 3863 — STATE OF CALIFORNIA

RECORDER'S CERTIFICATE:

FILED THIS 31th DAY OF October, 2012 AT 15:04:23 O'CLOCK P.M.
IN BOOK 56 OF PARCEL MAPS, AT PAGE 83, STANISLAUS COUNTY RECORDS, AT THE REQUEST OF ASSOCIATED ENGINEERING GROUP, INC.

INSTRUMENT NO. 2012-97688

FEE $15.00 PAID

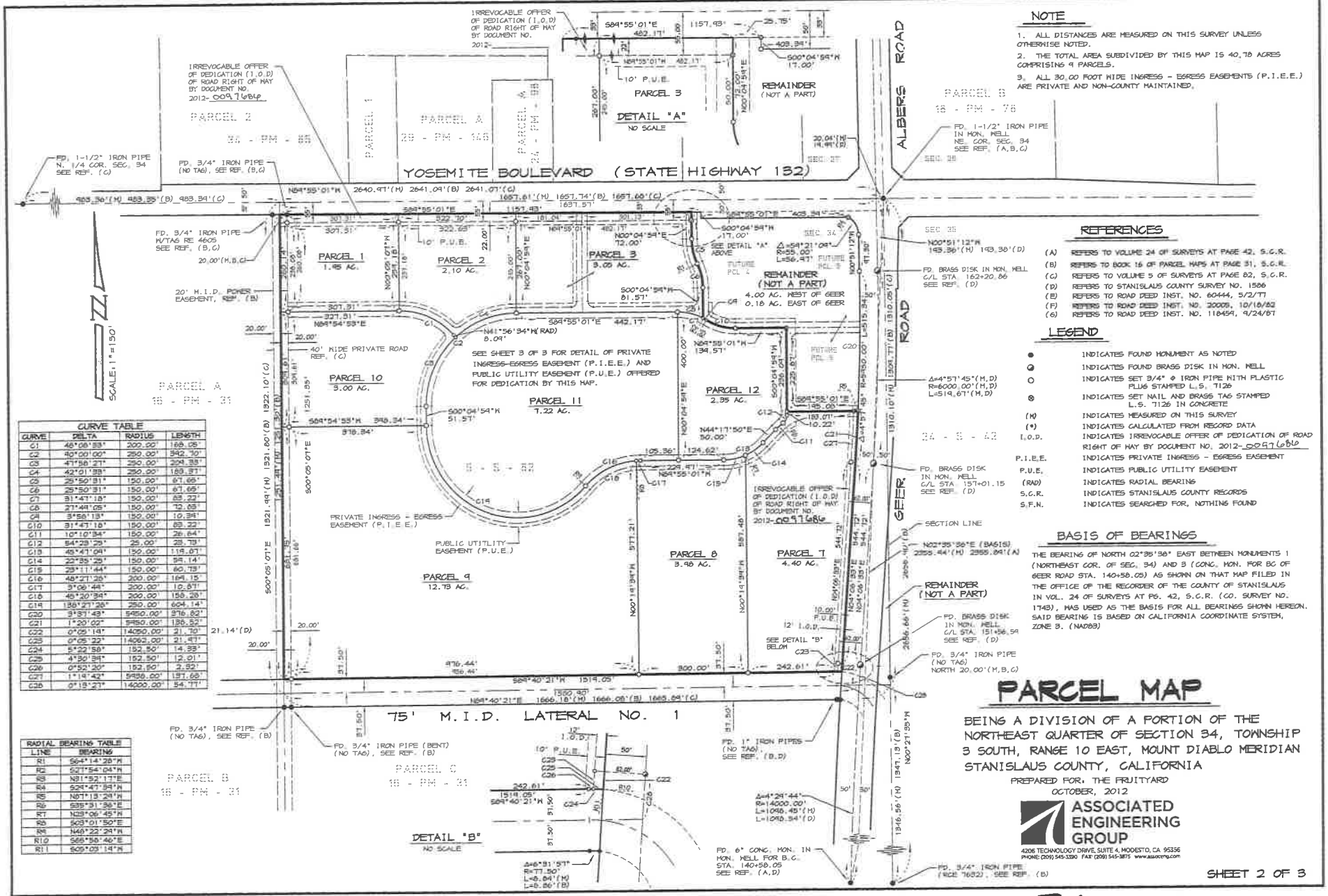
LEE LUNDRIGAN
CLERK-RECORDER

BY: Maryit Kahlon, DEPUTY
Maryit Kahlon
PRINT NAME

STANISLAUS COUNTY PM APP. NO. 2009-08
ASSOCIATED ENGINEERING JOB NO. 496C-12

56 PM 83

56 PM83



NOTE

1. ALL DISTANCES ARE MEASURED ON THIS SURVEY UNLESS OTHERWISE NOTED.
2. THE TOTAL AREA SUBDIVIDED BY THIS MAP IS 40.78 ACRES COMPRISING 9 PARCELS.
3. ALL 30.00 FOOT WIDE INGRESS - EGRESS EASEMENTS (P.I.E.E.) ARE PRIVATE AND NON-COUNTY MAINTAINED.

REFERENCES

(A) REFERS TO VOLUME 24 OF SURVEYS AT PAGE 42, S.C.R.
(B) REFERS TO BOOK 18 OF PARCEL MAPS AT PAGE 31, S.C.R.
(C) REFERS TO VOLUME 5 OF SURVEYS AT PAGE 82, S.C.R.
(D) REFERS TO STANISLAUS COUNTY SURVEY NO. 1586
(E) REFERS TO ROAD DEED INST. NO. 60444, 5/2/77
(F) REFERS TO ROAD DEED INST. NO. 20009, 10/18/82
(G) REFERS TO ROAD DEED INST. NO. 118454, 9/24/87

LEGEND

●	INDICATES FOUND MONUMENT AS NOTED
◒	INDICATES FOUND BRASS DISK IN MON. WELL
○	INDICATES SET 3/4" ⌀ IRON PIPE WITH PLASTIC PLUG STAMPED L.S. 7126
⊗	INDICATES SET NAIL AND BRASS TAG STAMPED L.S. 7126 IN CONCRETE
(M)	INDICATES MEASURED ON THIS SURVEY
(•)	INDICATES CALCULATED FROM RECORD DATA
I.O.D.	INDICATES IRREVOCABLE OFFER OF DEDICATION OF ROAD RIGHT OF WAY BY DOCUMENT NO. 2012-009768
P.I.E.E.	INDICATES PRIVATE INGRESS - EGRESS EASEMENT
P.U.E.	INDICATES PUBLIC UTILITY EASEMENT
(RAD)	INDICATES RADIAL BEARING
S.C.R.	INDICATES STANISLAUS COUNTY RECORDS
S.F.N.	INDICATES SEARCHED FOR, NOTHING FOUND

BASIS OF BEARINGS

THE BEARING OF NORTH 02°35'56" EAST BETWEEN MONUMENTS 1 (NORTHEAST COR. OF SEC. 34) AND 3 (CONC. MON. FOR BC OF GEER ROAD STA. 140+58.05) AS SHOWN ON THAT MAP FILED IN THE OFFICE OF THE RECORDER OF THE COUNTY OF STANISLAUS IN VOL. 24 OF SURVEYS AT PG. 42, S.C.R. (CO. SURVEY NO. 1743), WAS USED AS THE BASIS FOR ALL BEARINGS SHOWN HEREON. SAID BEARING IS BASED ON CALIFORNIA COORDINATE SYSTEM, ZONE 3. (NAD83)

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	46°08'33"	200.00'	160.05'
C2	40°00'00"	250.00'	242.30'
C3	41°58'21"	250.00'	204.38'
C4	42°01'39"	250.00'	183.37'
C5	25°50'31"	150.00'	67.65'
C6	25°50'31"	150.00'	67.65'
C7	31°47'18"	150.00'	83.22'
C8	27°48'05"	150.00'	72.65'
C9	3°58'13"	150.00'	10.39'
C10	31°47'18"	150.00'	83.22'
C11	10°10'34"	150.00'	26.64'
C12	54°29'29"	25.00'	23.73'
C13	45°47'09"	150.00'	119.87'
C14	22°35'25"	150.00'	59.14'
C15	23°11'44"	150.00'	60.71'
C16	48°27'26"	200.00'	169.15'
C17	3°06'44"	200.00'	10.87'
C18	48°20'38"	200.00'	168.78'
C19	138°27'28"	250.00'	604.14'
C20	3°37'43"	5950.00'	376.82'
C21	1°20'02"	5950.00'	138.52'
C22	0°05'14"	14050.00'	21.70'
C23	0°05'22"	14062.00'	21.47'
C24	5°22'58"	152.50'	14.33'
C25	4°30'34"	152.50'	12.01'
C26	0°52'30"	152.50'	2.33'
C27	1°18'42"	5950.00'	137.66'
C28	0°13'21"	14000.00'	54.77'

RADIAL BEARING TABLE	
LINE	BEARING
R1	S64°14'28"W
R2	S21°54'04"W
R3	N81°52'17"E
R4	S24°47'34"W
R5	N61°13'24"W
R6	S35°31'36"E
R7	N29°06'45"W
R8	S03°01'52"E
R9	N48°22'24"W
R10	S65°56'46"E
R11	S05°05'14"W

PARCEL MAP

BEING A DIVISION OF A PORTION OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN STANISLAUS COUNTY, CALIFORNIA

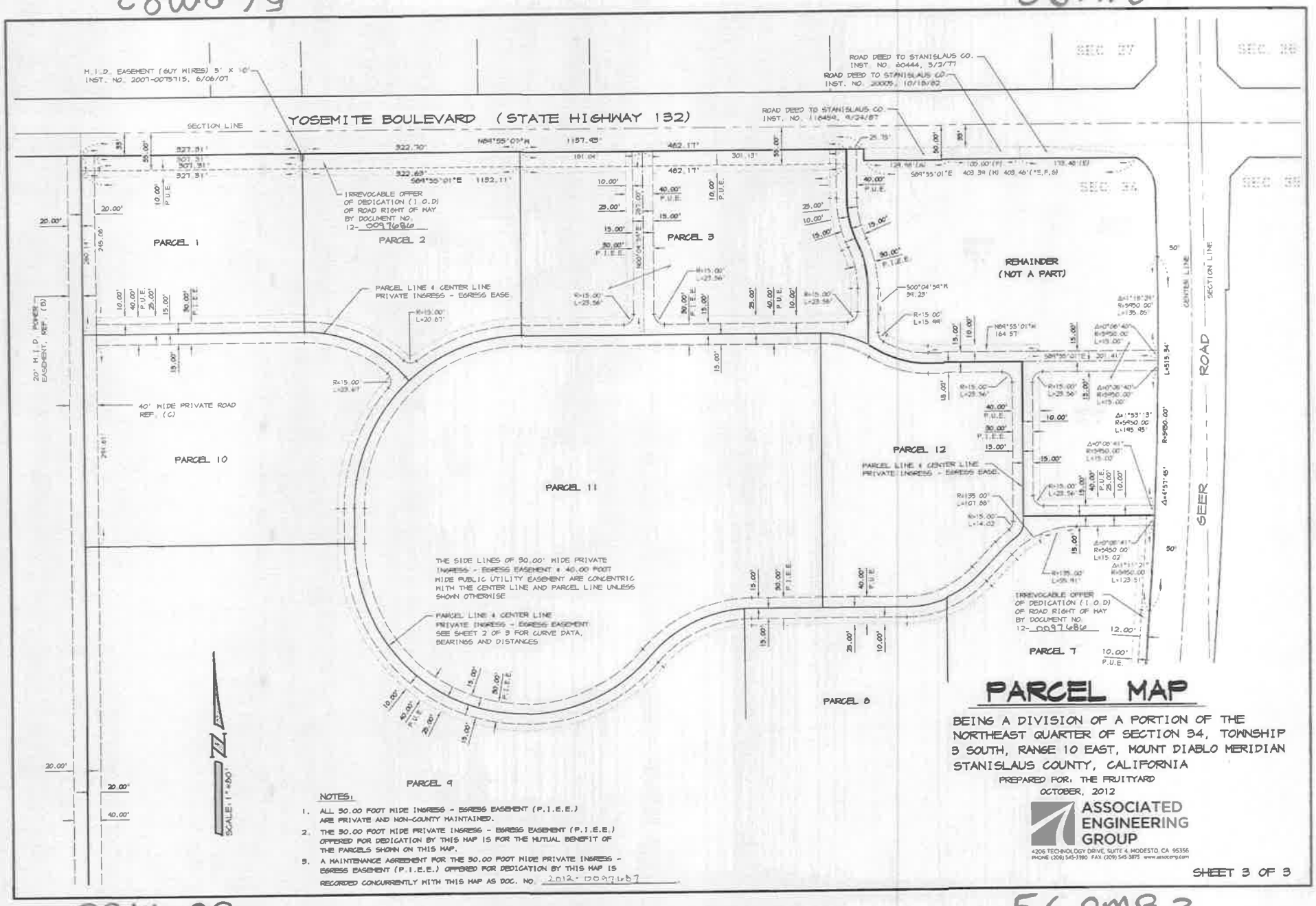
PREPARED FOR: THE FRUITYARD
OCTOBER, 2012

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE: (209) 545-3390 FAX: (209) 545-3875 www.assocengr.com

56 PM 83

56 PM83

56 PM 83



PARCEL MAP

BEING A DIVISION OF A PORTION OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 3 SOUTH, RANGE 10 EAST, MOUNT DIABLO MERIDIAN STANISLAUS COUNTY, CALIFORNIA

PREPARED FOR: THE FRUITYARD

OCTOBER, 2012

NOTES:

1. ALL 30.00 FOOT WIDE INGRESS - EGRESS EASEMENT (P.I.E.E.) ARE PRIVATE AND NON-COUNTY MAINTAINED.
2. THE 30.00 FOOT WIDE PRIVATE INGRESS - EGRESS EASEMENT (P.I.E.E.) OFFERED FOR DEDICATION BY THIS MAP IS FOR THE MUTUAL BENEFIT OF THE PARCELS SHOWN ON THIS MAP.
3. A MAINTENANCE AGREEMENT FOR THE 30.00 FOOT WIDE PRIVATE INGRESS - EGRESS EASEMENT (P.I.E.E.) OFFERED FOR DEDICATION BY THIS MAP IS RECORDED CONCURRENTLY WITH THIS MAP AS DOC. NO. 2012-0097687

ASSOCIATED ENGINEERING GROUP
4206 TECHNOLOGY DRIVE, SUITE 4, MODESTO, CA 95356
PHONE (209) 545-3980 FAX (209) 545-3875 www.aseceng.com

SHEET 3 OF 3

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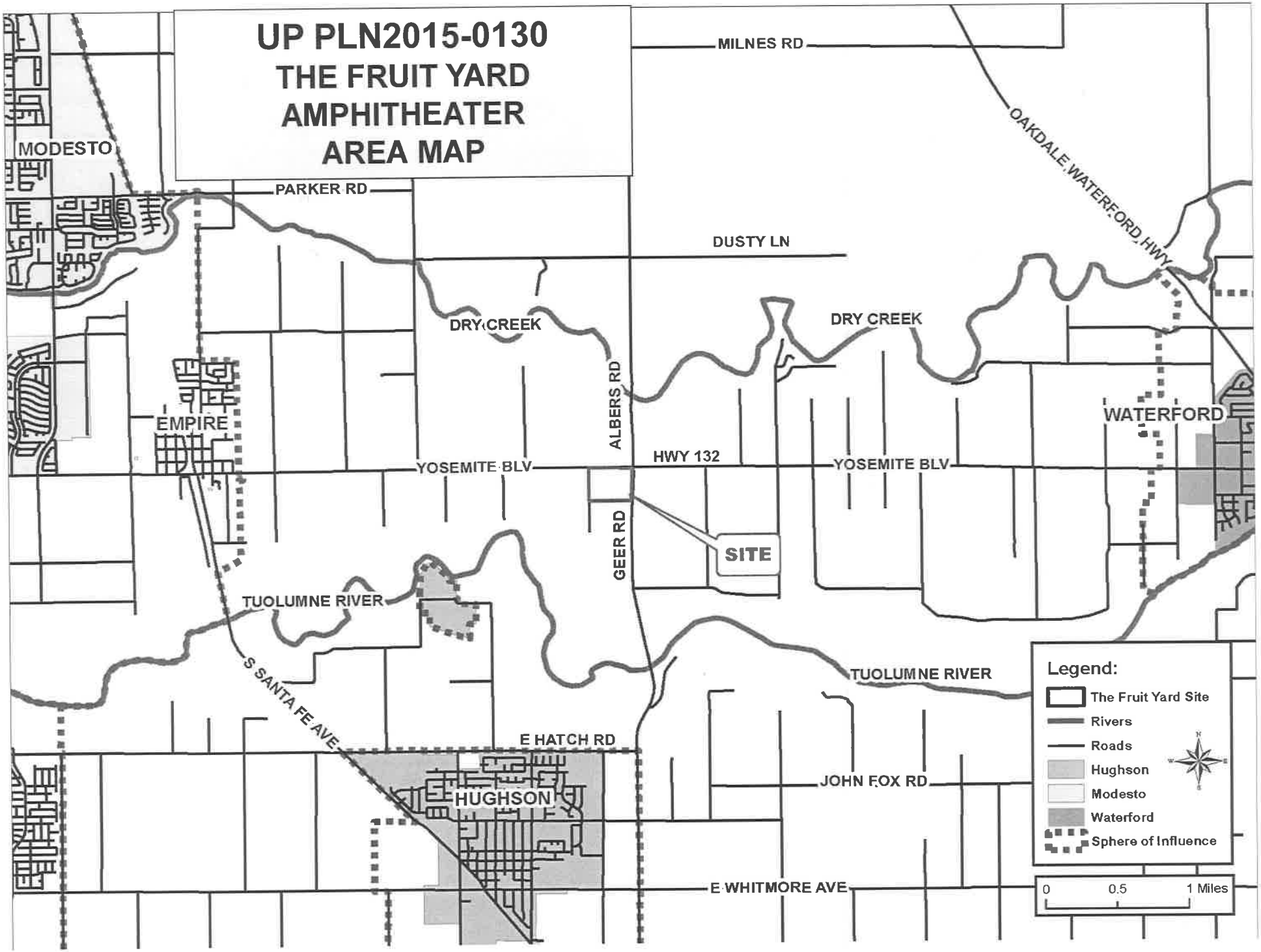
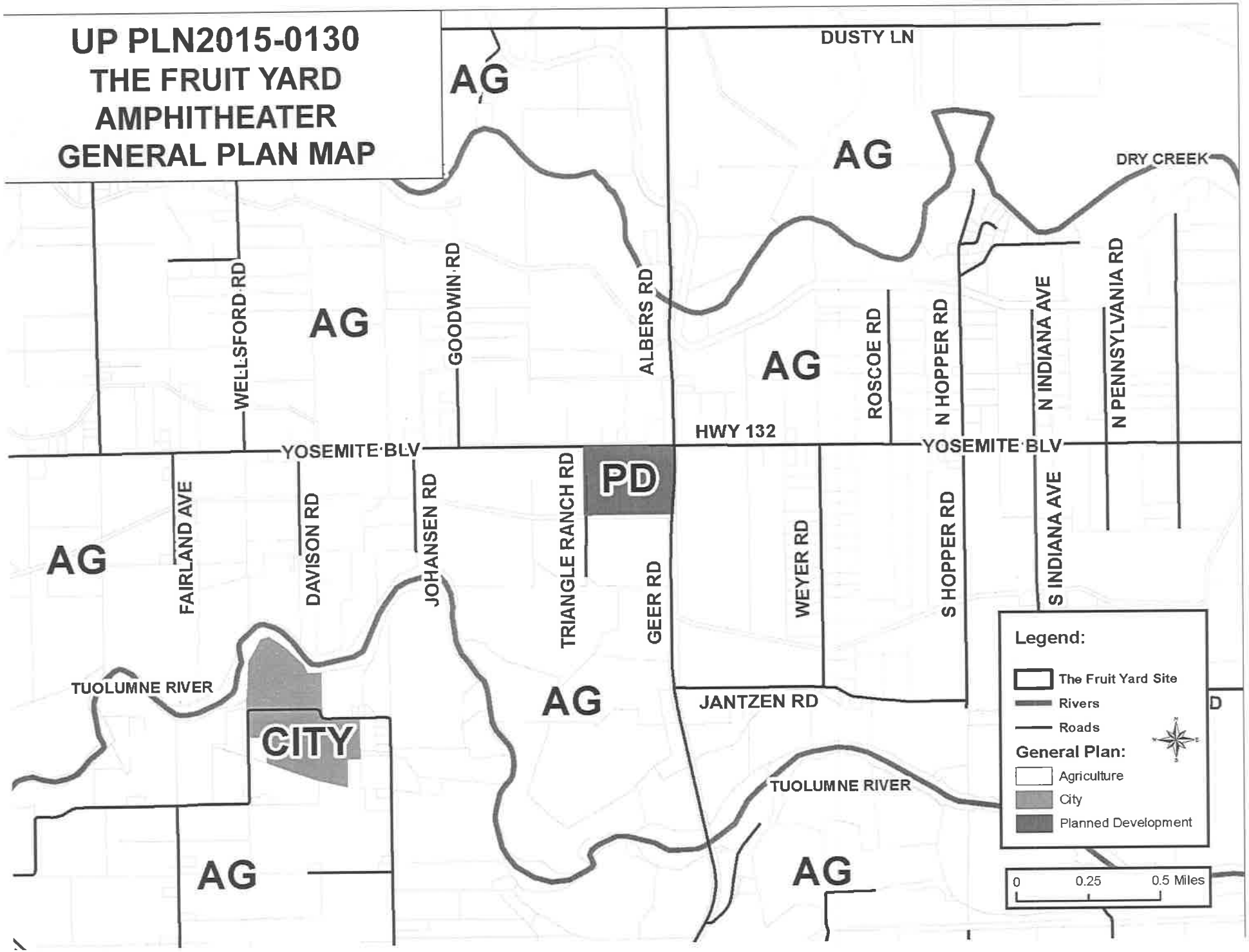
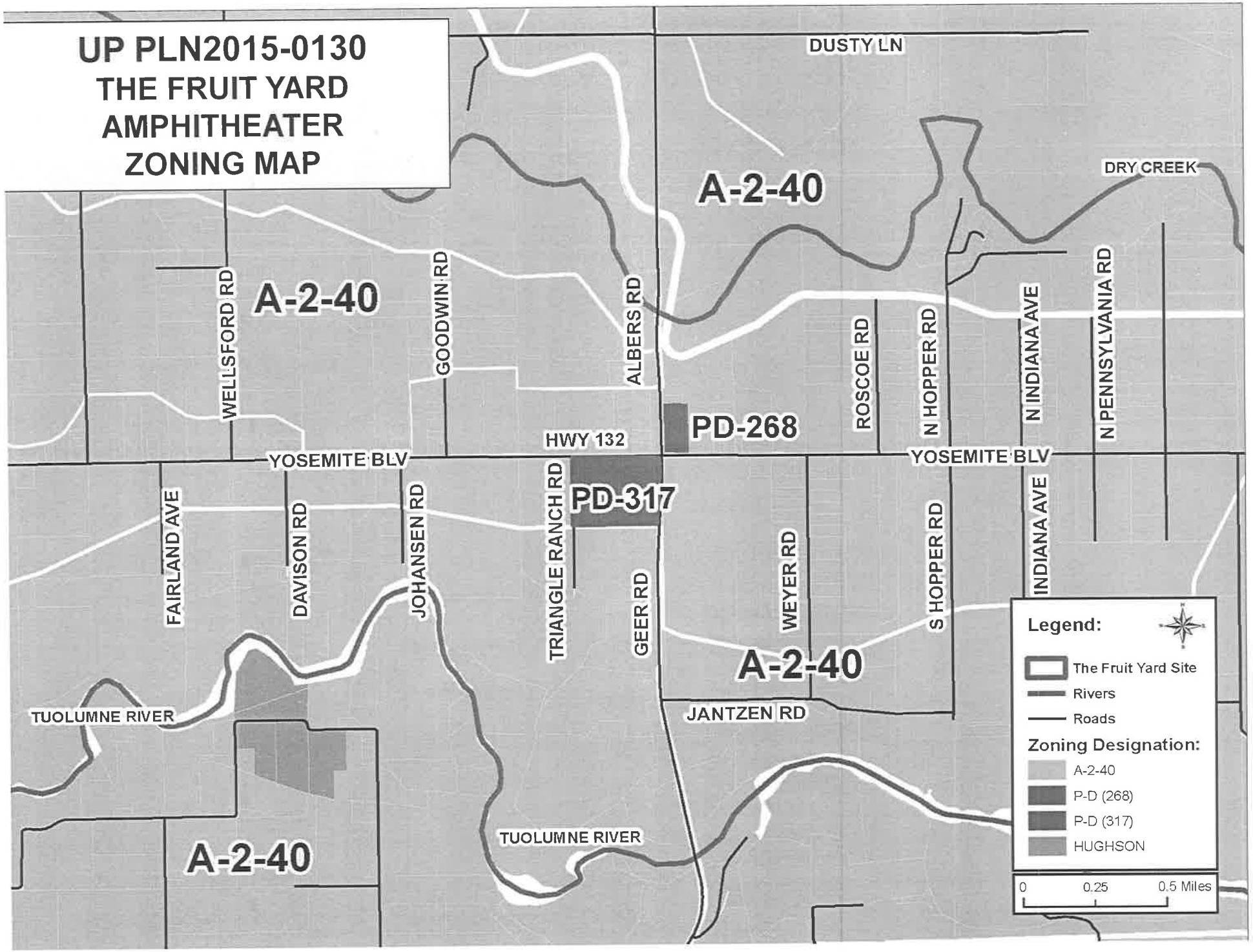
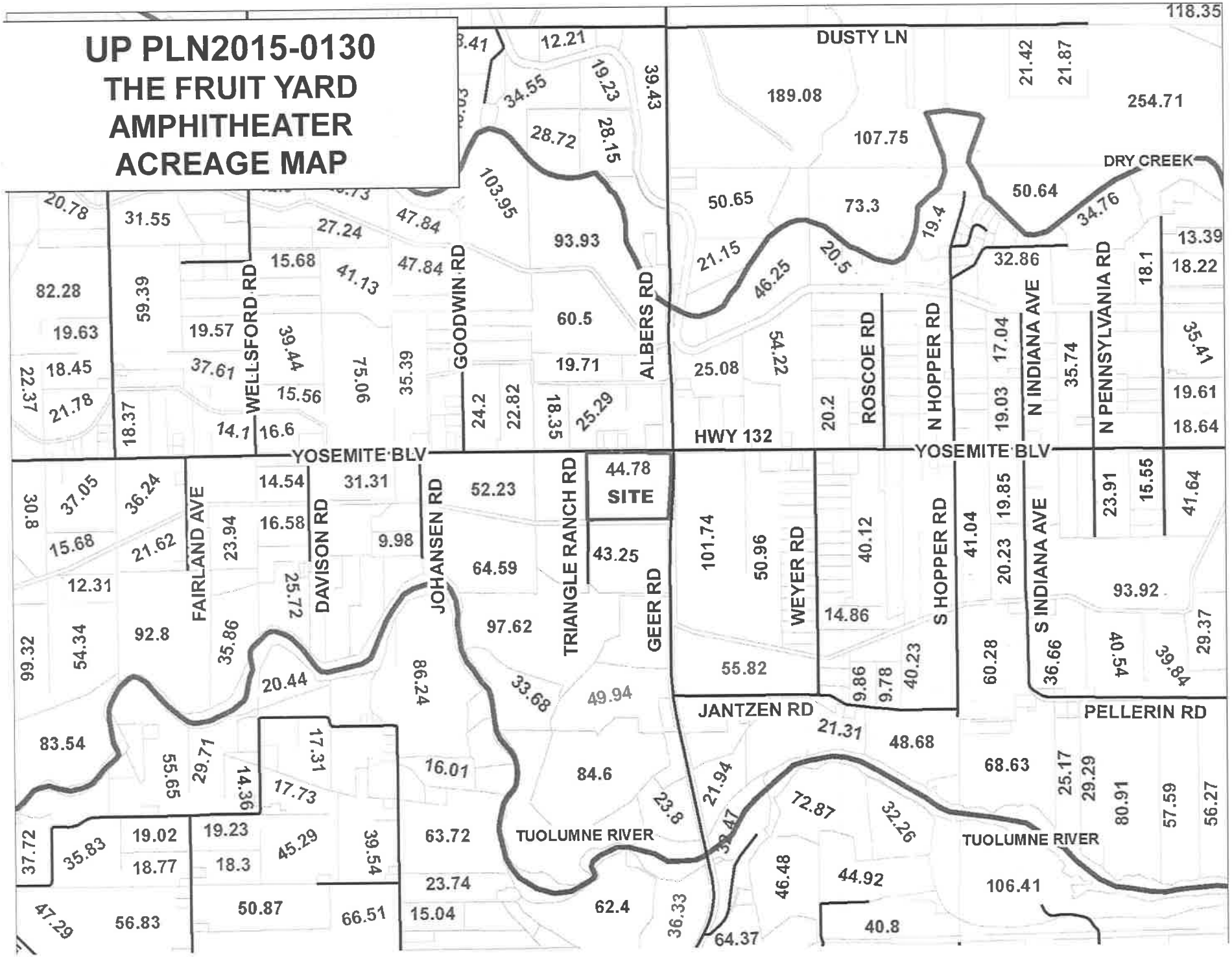
56 PM 83


UP PLN2015-0130
THE FRUIT YARD
AMPHITHEATER
AREA MAP
MILNES RD
OAKDALE WATERFORD HWY
MODESTO
PARKER RD
DUSTY LN
DRY CREEK
DRY CREEK
ALBERS RD
EMPIRE
WATERFORD
YOSEMITE BLV
HWY 132
YOSEMITE BLV
GEER RD
SITE
TUOLUMNE RIVER
TUOLUMNE RIVER
S SANTA FE AVE
E HATCH RD
HUGHSON
JOHN FOX RD
E WHITMORE AVE
Legend:
The Fruit Yard Site
Rivers
Roads
Hughson
Modesto
Waterford
Sphere of Influence
0
0.5
1 Miles

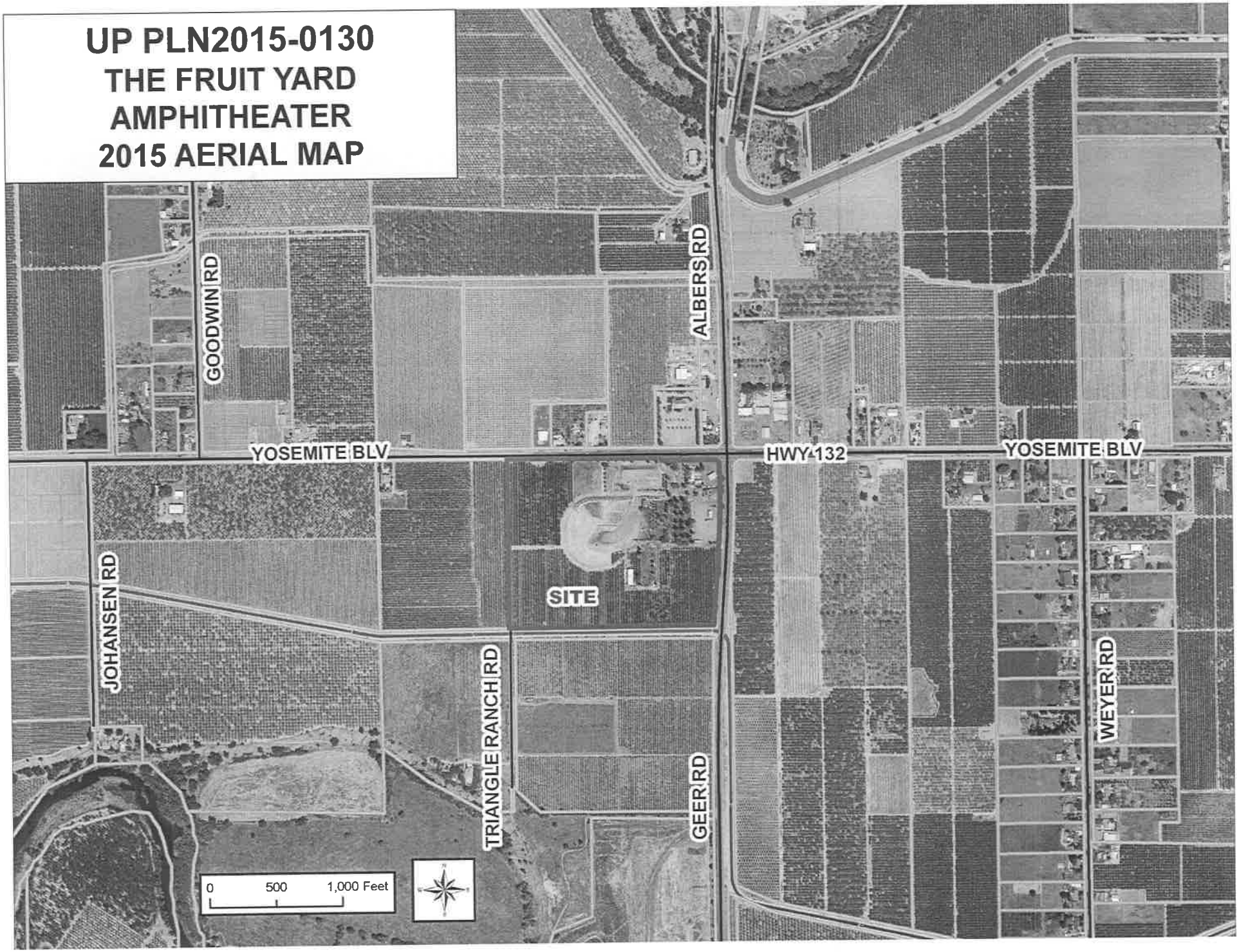

UP PLN2015-0130
THE FRUIT YARD
AMPHITHEATER
GENERAL PLAN MAP
DUSTY LN
AG
AG
DRY CREEK
WELLSFORD RD
AG
GOODWIN RD
ALBERS RD
AG
ROSCOE RD
N HOPPER RD
N INDIANA AVE
N PENNSYLVANIA RD
HWY 132
YOSEMITE BLV
YOSEMITE BLV
PD
AG
FAIRLAND AVE
DAVISON RD
JOHANSEN RD
TRIANGLE RANCH RD
GEER RD
WEYER RD
S HOPPER RD
S INDIANA AVE
TUOLUMNE RIVER
CITY
AG
JANTZEN RD
TUOLUMNE RIVER
AG
AG
Legend:
The Fruit Yard Site
Rivers
Roads
General Plan:
Agriculture
City
Planned Development
0
0.25
0.5 Miles


UP PLN2015-0130
THE FRUIT YARD
AMPHITHEATER
ZONING MAP
DUSTY LN
DRY CREEK
A-2-40
A-2-40
A-2-40
A-2-40
WELLSFORD RD
GOODWIN RD
ALBERS RD
ROSCOE RD
N HOPPER RD
N INDIANA AVE
N PENNSYLVANIA RD
PD-268
HWY 132
YOSEMITE BLV
YOSEMITE BLV
PD-317
FAIRLAND AVE
DAVISON RD
JOHANSEN RD
TRIANGLE RANCH RD
GEER RD
WEYER RD
S HOPPER RD
INDIANA AVE
JANTZEN RD
TUOLUMNE RIVER
TUOLUMNE RIVER
Legend:
The Fruit Yard Site
Rivers
Roads
Zoning Designation:
A-2-40
P-D (268)
P-D (317)
HUGHSON
0
0.25
0.5 Miles

UP PLN2015-0130
THE FRUIT YARD AMPHITHEATER ACREAGE MAP



UP PLN2015-0130
THE FRUIT YARD AMPHITHEATER
2015 AERIAL MAP



UP PLN2015-0130
THE FRUIT YARD AMPHITHEATER
2015 AERIAL MAP

APPLICATION QUESTIONNAIRE

Please Check all applicable boxes

APPLICATION FOR:

Staff is available to assist you with determining which applications are necessary

- ☐ General Plan Amendment
- ☐ Rezone
- ☑ Use Permit
- ☐ Variance
- ☐ Historic Site Permit
- ☐ Subdivision Map
- ☐ Parcel Map
- ☐ Exception
- ☐ Williamson Act Cancellation
- ☐ Other _____

PLANNING STAFF USE ONLY:

Application No(s): PLN 2015 0130
Date: 11/23/15
S 34 T 3 R 10
GP Designation: PD
Zoning: PD 317
Fee: $ 2,632.00
Receipt No. 529902
Received By: JR
Notes: _____

In order for your application to be considered COMPLETE, please answer all applicable questions on the following pages, and provide all applicable information listed on the checklist on pages i – v. Under State law, upon receipt of this application, staff has 30 days to determine if the application is complete. We typically do not take the full 30 days. It may be necessary for you to provide additional information and/or meet with staff to discuss the application. Pre-application meetings are not required, but are highly recommended. An incomplete application will be placed on hold until all the necessary information is provided to the satisfaction of the requesting agency. An application will not be accepted without all the information identified on the checklist.

Please contact staff at (209) 525-6330 to discuss any questions you may have. Staff will attempt to help you in any way we can.

PROJECT INFORMATION

PROJECT DESCRIPTION: (Describe the project in detail, including physical features of the site, proposed improvements, proposed uses or business, operating hours, number of employees, anticipated customers, etc. – Attach additional sheets as necessary)

****Please note: A detailed project description is essential to the reviewing process of this request. In order to approve a project, the Planning Commission or the Board of Supervisors must decide whether there is enough information available to be able to make very specific statements about the project. These statements are called "Findings". It is your responsibility as an applicant to provide enough information about the proposed project, so that staff can recommend that the Commission or the Board make the required Findings. Specific project Findings are shown on pages 17 – 19 and can be used as a guide for preparing your project description. (If you are applying for a Variance or Exception, please contact staff to discuss special requirements).***

See attached.

PROJECT SITE INFORMATION

Complete and accurate information saves time and is vital to project review and assessment. Please complete each section entirely. If a question is not applicable to your project, please indicated this to show that each question has been carefully considered. Contact the Planning & Community Development Department Staff, 1010 10th Street – 3rd Floor, (209) 525-6330, if you have any questions. Pre-application meetings are highly recommended.

ASSESSOR'S PARCEL NUMBER(S): **Book** 009 **Page** 027 **Parcel** 004

Additional parcel numbers: _____

Project Site Address or Physical Location: 7948 Yosemite Blvd.

Modesto, CA 95357

Property Area: Acres: 43.86+/- or Square feet: _____

Current and Previous Land Use: (Explain existing and previous land use(s) of site for the last ten years)

Restaurant, Service Station, Produce Market, Cardlock Facility, Banquet/Meeting Facility, and Amphitheater.

List any known previous projects approved for this site, such as a Use Permit, Parcel Map, etc.: (Please identify project name, type of project, and date of approval)

Use Permits for existing facilities

Existing General Plan & Zoning: Agriculture (Ag)

Proposed General Plan & Zoning: Planned Developments (PD)
(if applicable)

ADJACENT LAND USE: (Describe adjacent land uses within 1,320 feet (1/4 mile) and/or two parcels in each direction of the project site)

East: AG

West: AG

North: AG, Church, Urban Development

South: AG, old Landfill

WILLIAMSON ACT CONTRACT:

Yes ☐ **No** ☒

Is the property currently under a Williamson Act Contract?
Contract Number: _____

If yes, has a Notice of Non-Renewal been filed?

Date Filed: _____

Yes ☐ No ☒ Do you propose to cancel any portion of the Contract?

Yes ☐ No ☒ Are there any agriculture, conservation, open space or similar easements affecting the use of the project site. (Such easements do not include Williamson Act Contracts)

If yes, please list and provide a recorded copy: _____

_____

SITE CHARACTERISTICS: (Check one or more) Flat ☒ Rolling ☐ Steep ☐

VEGETATION: What kind of plants are growing on your property? (Check one or more)

Field crops ☐ Orchard ☒ Pasture/Grassland ☐ Scattered trees ☐

Shrubs ☐ Woodland ☐ River/Riparian ☐ Other ☐

Explain Other: _____

Yes ☐ No ☒ Do you plan to remove any trees? (If yes, please show location of trees planned for removal on plot plan and provide information regarding transplanting or replanting.)

GRADING:

Yes ☒ No ☐ Do you plan to do any grading? (If yes, please indicate how many cubic yards and acres to be disturbed. Please show areas to be graded on plot plan.) _____

Minimal amount, site is flat.

STREAMS, LAKES, & PONDS:

Yes ☒ No ☐ Are there any streams, lakes, ponds or other watercourses on the property? (If yes, please show on plot plan)

Yes ☐ No ☒ Will the project change any drainage patterns? (If yes, please explain – provide additional sheet if needed) _____

_____

Yes ☐ No ☒ Are there any gullies or areas of soil erosion? (If yes, please show on plot plan)

Yes ☐ No ☒ Do you plan to grade, disturb, or in any way change swales, drainages, ditches, gullies, ponds, low lying areas, seeps, springs, streams, creeks, river banks, or other area on the site that carries or holds water for any amount of time during the year? (If yes, please show areas to be graded on plot plan)

Please note: If the answer above is yes, you may be required to obtain authorization from other agencies such as the Corps of Engineers or California Department of Fish and Game.

STRUCTURES:

Yes ☒ **No** ☐ Are there structures on the site? (If yes, please show on plot plan. Show a relationship to property lines and other features of the site.

Yes ☐ **No** ☒ Will structures be moved or demolished? (If yes, indicate on plot plan.)

Yes ☐ **No** ☐ Do you plan to build new structures? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Are there buildings of possible Historical significance? (If yes, please explain and show location and size on plot plan.) _____

_____

PROJECT SITE COVERAGE:

Existing Building Coverage: _____Sq. Ft.

Proposed Building Coverage: _____Sq. Ft.

Landscaped Area: _____Sq. Ft.

Paved Surface Area: _____Sq. Ft.

BUILDING CHARACTERISTICS:

Size of new structure(s) or building addition(s) in gross sq. ft.: (Provide additional sheets if necessary)_____

See attached plans.

Number of floors for each building: _____

Building height in feet (measured from ground to highest point): (Provide additional sheets if necessary) 35 feet.

Height of other appurtenances, excluding buildings, measured from ground to highest point (i.e., antennas, mechanical equipment, light poles, etc.): (Provide additional sheets if necessary)_____

Existing Charter Communication Tower near the southwest corner of the site is approximately 100 feet high.

Proposed surface material for parking area: (Provide information addressing dust control measures if non-asphalt/concrete material to be used) _____

Pavement

UTILITIES AND IRRIGATION FACILITIES:

Yes ☒ **No** ☐ Are there existing public or private utilities on the site? Includes telephone, power, water, etc. (If yes, show location and size on plot plan)

Who provides, or will provide the following services to the property?

Electrical: MID

Sewer*: Septic

Telephone: AT&T

Gas/Propane: PG&E

Water**: On-Site

Irrigation: MID

***Please Note: A "will serve" letter is required if the sewer service will be provided by City, Sanitary District, Community Services District, etc.**

****Please Note: A "will serve" letter is required if the water source is a City, Irrigation District, Water District, etc., and the water purveyor may be required to provide verification through an Urban Water Management Plan that an adequate water supply exists to service your proposed development.**

Will any special or unique sewage wastes be generated by this development other than that normally associated with resident or employee restrooms? Industrial, chemical, manufacturing, animal wastes? (Please describe:)

_____

_____

_____

Please Note: Should any waste be generated by the proposed project other than that normally associated with a single family residence, it is likely that Waste Discharge Requirements will be required by the Regional Water Quality Control Board. Detailed descriptions of quantities, quality, treatment, and disposal may be required.

Yes ☐ **No** ☒ Are there existing irrigation, telephone, or power company easements on the property? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Do the existing utilities, including irrigation facilities, need to be moved? (If yes, show location and size on plot plan.)

Yes ☐ **No** ☒ Does the project require extension of utilities? (If yes, show location and size on plot plan.)

AFFORDABLE HOUSING/SENIOR:

Yes ☐ **No** ☒ Will the project include affordable or senior housing provisions? (If yes, please explain)

RESIDENTIAL PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Total No. Lots:_____ Total Dwelling Units:_____ Total Acreage:_____

Net Density per Acre: _____ Gross Density per Acre: _____

(complete if applicable)	Single Family	Two Family Duplex	Multi-Family Apartments	Multi-Family Condominium/ Townhouse
Number of Units:	_____	_____	_____	_____
Acreage:	_____	_____	_____	_____

COMMERCIAL, INDUSTRIAL, MANUFACTURING, RETAIL, USE PERMIT, OR OTHER PROJECTS: (Please complete if applicable – Attach additional sheets if necessary)

Square footage of each existing or proposed building(s): See attached Site Plan.

_____

Type of use(s): Restaurant, Retail, Produce Market, Service Station and Card Lock Facility, Storage and RV Park,

Tractor sales, and Amphitheater.

Days and hours of operation: 6a.m. to 10 p.m. typical.

Up to Midnight for Special Events and Weddings.

Seasonal operation (i.e., packing shed, huller, etc.) months and hours of operation: N/A

Occupancy/capacity of building: In addition to PD-317 Amphitheater use would propose maximum 3,500 people.

Stage structure roof only 5,000 sq/ ft., Stage storage building 4,000 sq. ft., and park covered seating area 4,800 sq. ft.

Number of employees: (Maximum Shift): Fruit Yard(30-40) Banquet (10-30); Market(5) (Minimum Shift):

Estimated number of daily customers/visitors on site at peak time: Fruit Yard(500 total per day/300 at peak)

Other occupants: Banquet (500 at peak); Market(20).

Estimated number of truck deliveries/loadings per day: Fruit Yard 3-5 per day, 3 days per week Banquet 4 per week total

Estimated hours of truck deliveries/loadings per day: 6a.m. to 6p.m.

Estimated percentage of traffic to be generated by trucks: Less than 5%

Estimated number of railroad deliveries/loadings per day: N/A

Square footage of:

Office area: Warehouse area:

Sales area: Storage area:

Loading area: Manufacturing area:

Other: (explain type of area)

Yes ☐ **No** ☒ Will the proposed use involve toxic or hazardous materials or waste? (Please explain)

ROAD AND ACCESS INFORMATION:

What County road(s) will provide the project's main access? (Please show all existing and proposed driveways on the plot plan)

Yosemite Blvd./ Geer Road

Yes ☒ No ☐ Are there private or public road or access easements on the property now? (If yes, show location and size on plot plan)

Yes ☐ No ☒ Do you require a private road or easement to access the property? (If yes, show location and size on plot plan)

Yes ☐ No ☒ Do you require security gates and fencing on the access? (If yes, show location and size on plot plan)

Please Note: Parcels that do not front on a County-maintained road or require special access may require approval of an Exception to the Subdivision Ordinance. Please contact staff to determine if an exception is needed and to discuss the necessary Findings.

STORM DRAINAGE:

How will your project handle storm water runoff? (Check one) ☒ Drainage Basin ☐ Direct Discharge ☐ Overland

☐ Other: (please explain) Existing Storm Drainage Basin

If direct discharge is proposed, what specific waterway are you proposing to discharge to? _____

Please Note: If direct discharge is proposed, you will be required to obtain a NPDES permit from the Regional Water Quality Control Board, and must provide evidence that you have contacted them regarding this proposal with your application.

EROSION CONTROL:

If you plan on grading any portion of the site, please provide a description of erosion control measures you propose to implement.

Exisitng Active SWPPP

Please note: You may be required to obtain an NPDES Storm Water Permit from the Regional Water Quality Control Board and prepare a Storm Water Pollution Prevention Plan.

ADDITIONAL INFORMATION:

Please use this space to provide any other information you feel is appropriate for the County to consider during review of your application. (Attach extra sheets if necessary)

None provided.

Fruit Yard Project Description

The Fruit Yard facility exists at the southwest corner of Geer Road and Yosemite Blvd. (State Hwy. 132). It started as an Old Foamy Drive-In in the late 1950s, and has expanded through the years. The Trainas, the current owner, purchased the property in 1977 (over 38 years ago). Over the last 38 years, the site has grown from an Old Foamy to what exists today, The Fruit Yard Restaurant, a service station with six (6) pumps, a produce market, a cardlock fueling facility with six (6) pumps, a mesquite barbeque business, and a large park and lake. The site has paved parking associated with the existing uses, as well as overflow parking used on an intermittent basis over larger portions of the property. The existing lake and park is used by The Fruit Yard customers and guests, including for weddings and special events. The current developed area covers approximately fourteen (14) acres, with the remaining approximately twenty-nine (29) acres of the property in open land and fruit trees including apricots, peaches, nectarines and cherries.

The Fruit Yard Restaurant provides banqueting facilities and meeting rooms for a number of different clubs and groups. Over the years, hundreds of weddings and events have been held at The Fruit Yard to meet the needs of local residents.

Most regular events are accommodated on-site and involve attendance at a small scale, such as 1,000 persons or less, and might include weddings, fundraisers, or small group events. All parking is accommodated on-site and amplification is used if the event includes an auctioneer, DJ or band. These events always end prior to midnight, and a typical year could have about fifty (50) such events, with about half of them occurring during daylight hours, and maybe a quarter extending past 10:00 p.m., but not past midnight.

Over the years, the site has also hosted numerous large public gatherings including events such as the Passport to Paradise fundraiser for the American Cancer Society, Graffiti Night events, car shows and small to large musical events. Most of these events have occurred over the last fourteen (14) plus years, and large scale events (such as concerts with attendance over 2,000) obtain public assembly permits from the Stanislaus County Sheriff's Department.

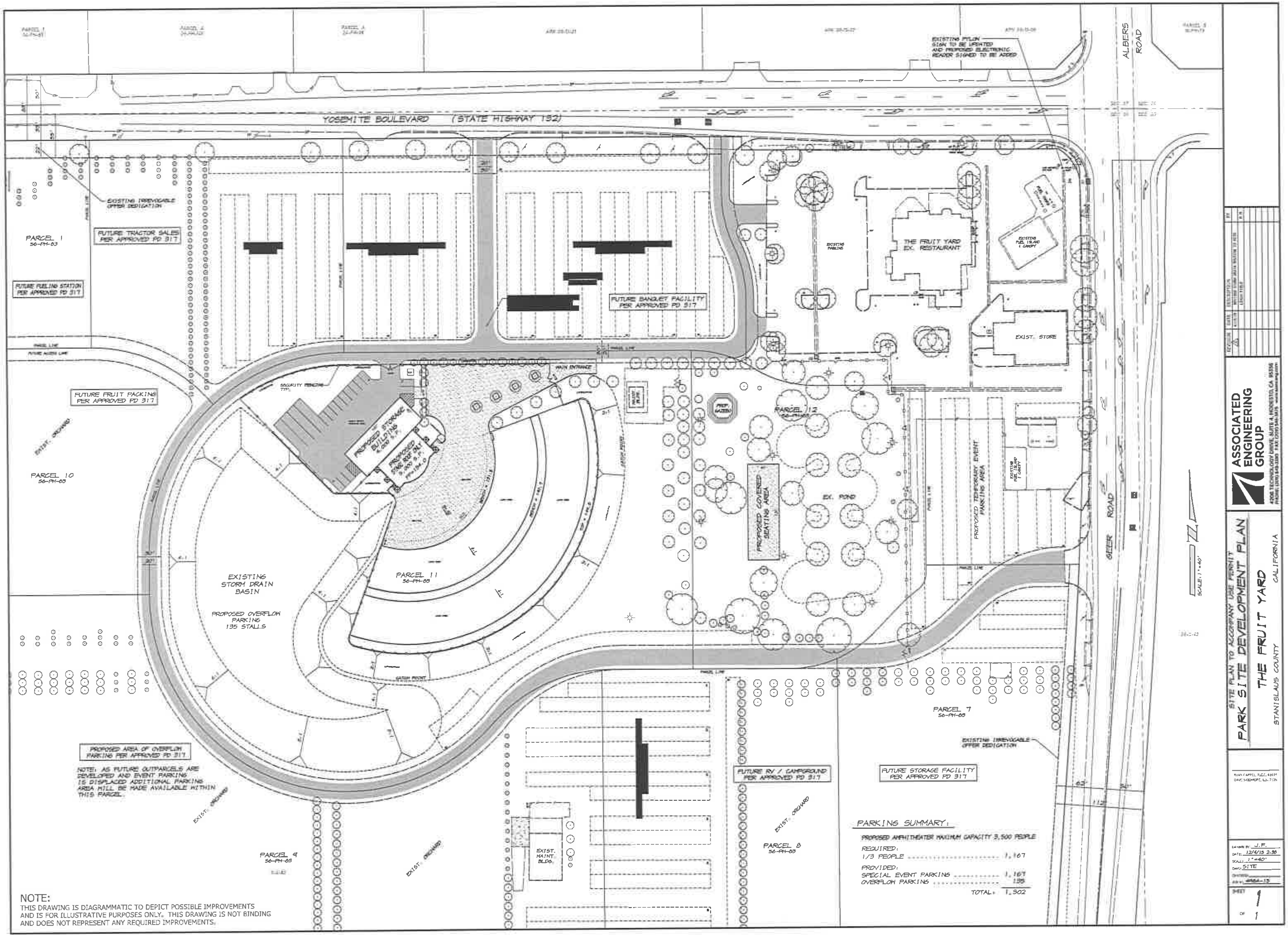
Large scale events have occurred less regularly than the smaller regular events. Examples are large Graffiti type events or major concerts. Over the last 14 years, major concerts showcasing about forty (40) of the top 200 bands of the 50s and 60s have occurred at the site, including such groups as The Supremes, The Beach Boys, Little Richard, and The Isley Brothers. The attendance at these events is typically over 2,000 people, but some have had attendance on the order of 4,000 to 5,000, with the largest event being The Supremes which attracted around 8,000 concertgoers. To put on such an event, a public assembly permit is obtained from the Sheriff's office. A large stage and fencing must be rented, and a ticket booth is installed to take tickets. Portable generators are brought in to run portable lights, and portable toilet facilities are provided. Security is hired, and parking lot attendants are hired to direct and control parking on-site, but for the largest of events, off-site parking has occurred.

When these major concert events occur, they are held at the western end of the park currently under construction as part of the existing Planned Development zone on the property. That is, west of the existing lake and park. These concerts easily cover up at least four (4) to five (5) acres of flat land for the concert stage, fencing, and attendees. Parking is provided around the property as needed to accommodate the attendees.

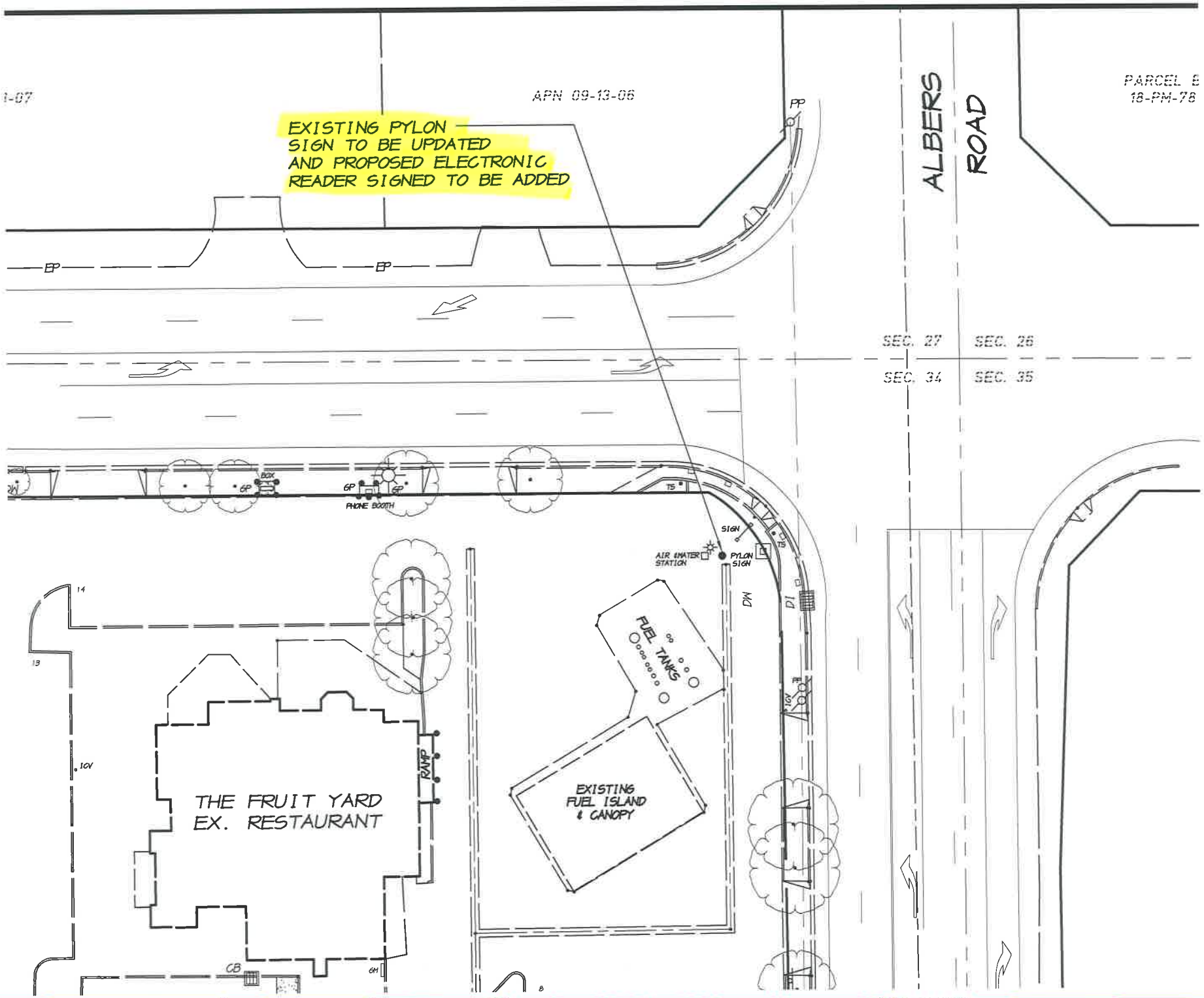
With construction of an amphitheater, a couple of things would occur. First, a stage, fencing and ticket booth would not need to be rented for each major event. Attendance would be limited to the capacity of the amphitheater (about 3,500). In addition, the attendance area would be reduced to just the amphitheater site (about two (2) to three (3) total acres), rather than the larger area needed when events were held on flat ground. As the attendance is limited, The Fruit Yard is able to provide adequate parking on-site.

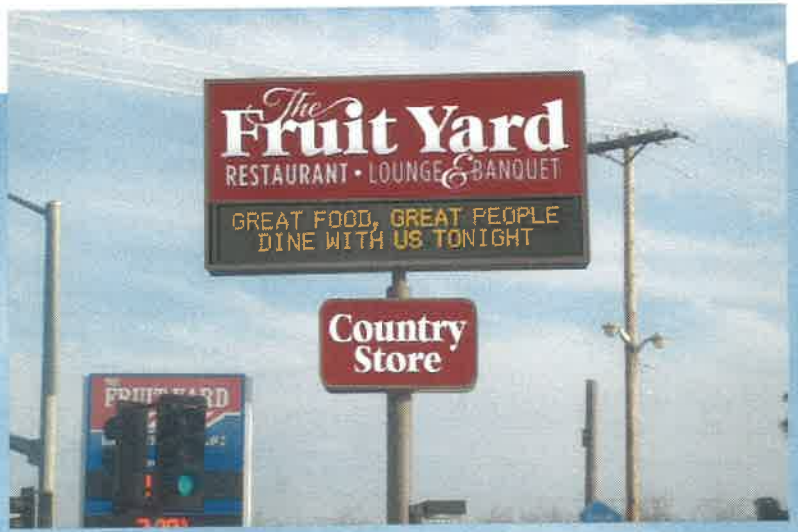
In the busiest times, The Fruit Yard has acquired public assembly permits, holding up to six (6) of these major events in a year. The historical average has been about three or four events per year. Major events have attendance expected at over 2,000 persons. Regular events, such as weddings, fundraisers and small group meetings occur regularly, but are much smaller in size and are not subject to Sheriff's public assembly permits.

The existing businesses at the site operate from 6 a.m. in the morning until about 10 p.m. in the evening, with the cardlock facility and service station being open 24 hours a day. Special events and Weddings may occur until midnight.



EXISTING PYLON SIGN TO BE UPDATED AND PROPOSED ELECTRONIC READER SIGNED TO BE ADDED
ALBERS ROAD
YOSEMITE BOULEVARD (STATE HIGHWAY 132)
EXISTING IRREVOCABLE OFFER DEDICATION
PARCEL 1 56-PM-63
FUTURE TRACTOR SALES PER APPROVED PD 317
FUTURE FUELING STATION PER APPROVED PD 317
FUTURE BANQUET FACILITY PER APPROVED PD 317
EXISTING PARKING
THE FRUIT YARD EX. RESTAURANT
EXISTING FUEL ISLAND & CANOPY
EXIST. STORE
MAIN ENTRANCE
SECURITY FENCING TYP.
FUTURE FRUIT PACKING PER APPROVED PD 317
PROPOSED STORAGE BUILDING
PROPOSED STAGE ROOF ONLY
PROP. GAZEBO
PARCEL 12 56-PM-63
PROPOSED COVERED SEATING AREA
EX. POND
PROPOSED TEMPORARY EVENT PARKING AREA
EXIST. ORCHARD
PARCEL 10 56-PM-63
EXISTING STORM DRAIN BASIN
PROPOSED OVERFLOW PARKING 135 STALLS
PARCEL 11 56-PM-63
CATCH POINT
GEER ROAD
SCALE: 1"=40'
PARCEL 7 56-PM-63
EXISTING IRREVOCABLE OFFER DEDICATION
PROPOSED AREA OF OVERFLOW PARKING PER APPROVED PD 317
NOTE: AS FUTURE OUTPARCELS ARE DEVELOPED AND EVENT PARKING IS DISPLACED ADDITIONAL PARKING AREA WILL BE MADE AVAILABLE WITHIN THIS PARCEL.
FUTURE RV / CAMPGROUND PER APPROVED PD 317
FUTURE STORAGE FACILITY PER APPROVED PD 317
EXIST. MAINT. BLDG.
PARCEL 9 56-PM-63
PARCEL 8 56-PM-63
PARKING SUMMARY:
PROPOSED AMPHITHEATER MAXIMUM CAPACITY 3,500 PEOPLE
REQUIRED:
1/3 PEOPLE 1,167
PROVIDED:
SPECIAL EVENT PARKING 1,167
OVERFLOW PARKING 135
TOTAL: 1,302
NOTE:
THIS DRAWING IS DIAGRAMMATIC TO DEPICT POSSIBLE IMPROVEMENTS AND IS FOR ILLUSTRATIVE PURPOSES ONLY. THIS DRAWING IS NOT BINDING AND DOES NOT REPRESENT ANY REQUIRED IMPROVEMENTS.
ASSOCIATED ENGINEERING GROUP
SITE PLAN TO ACCOMPANY USE PERMIT
PARK SITE DEVELOPMENT PLAN
THE FRUIT YARD
STANISLAUS COUNTY CALIFORNIA
DRAWN BY: J.F.
DATE: 12/4/15
SCALE: 1"=40'
SHEET 1 OF 1


EXISTING PYLON SIGN TO BE UPDATED AND PROPOSED ELECTRONIC READER SIGNED TO BE ADDED
APN 09-13-06
PARCEL B
18-PM-78
ALBERS ROAD
SEC. 27
SEC. 26
SEC. 34
SEC. 35
PHONE BOOTH
SIGN
AIR WATER STATION
PYLON SIGN
FUEL TANKS
EXISTING FUEL ISLAND & CANOPY
THE FRUIT YARD
EX. RESTAURANT
RAMP
CB



OPTION #3

NOT FOR PRODUCTION

SIGN DESIGNS

39434 R1 / 4 OF 5

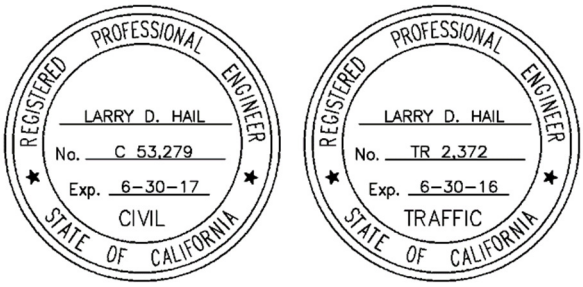
THE FRUIT YARD PROJECT

- Stanislaus County -

- Supplemental - Traffic Impact Analysis

Prepared for:

ASSOCIATED ENGINEERING GROUP, INC.
4206 Technology Drive, Suite 4
Modesto, CA 95356



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- Summary of Traffic Count Data
- New Traffic Count Data
- Level of Service (LOS) Descriptions
- Level of Service (LOS) to Vehicle Delays Relationship Data
- Level of Service (LOS) Worksheets

1.0 INTRODUCTION

The Supplemental Traffic Impact Analysis (TIA) presents an evaluation of the potential impacts associated with the proposed modification (by Use Permit) to the previously approved General Plan Amendment (No. 2007-03) and Rezoning Application (No. 2007-03). The existing project site is located in the unincorporated area about 4 miles east of the City of Modesto (7948 Yosemite Boulevard). The site is comprised of approximately 45 acres and includes various commercial related uses (i.e. restaurant and lounge, produce market, service station facilities, park site, etc). Project access is currently provided via multiple driveways on the south side of Yosemite Boulevard (State Route 132) and west side of Geer Road. The general location of the project site is shown on Figure 1.

The General Plan Amendment and Rezoning Application were approved in 2008 (Mitigated Negative Declaration). The Project Development Plan approved in 2008 included a new banquet center, a recreational vehicle (RV) / boat storage facility, a RV park, a fruit packing / warehouse facility, a site for retail tractor sales, and additional retail space. In addition, the plan included relocating the existing service station facilities to accommodate the new development components. Hosting outdoor events at the existing park site was also approved. An evaluation of the potential impacts associated with the General Plan Amendment and Rezoning Application project was presented in the TIA prepared by KD Anderson & Associates (Dec. 6, 2007).

The proposed modification to the approved development plan includes the addition of an outside amphitheater within the existing park site. The amphitheater will host events or concerts and have a capacity to accommodate a maximum of 3,500 guests. The majority of events will occur on a weekend or Holiday. All parking associated with the amphitheater operations will be accommodated on-site. On-site circulation will be provided via a paved road, with access to Yosemite Boulevard (State Route 132) and Geer Road provided via existing and/or future driveway connections.

The scope of the Supplemental TIA was based on a review of the project material and subsequent discussions with the project team. The analysis presents an evaluation of the potential impacts associated with a capacity size event at the amphitheater (3,500 guests). An evaluation of traffic operations at the Yosemite Boulevard (State Route 132) / Geer Road intersection is presented for the following study periods:

- Average Weekday Afternoon (PM) Peak Commuter Period (4:00-6:00 PM)
- Average Weekday Evening Period (10:00-11:00 PM)
- Friday Afternoon (PM) Peak Commuter Period (4:00-6:00 PM)
- Friday Evening Period (10:00-11:00 PM)
- Saturday Mid-Day (MD) Peak Period (1:00-3:00 PM)
- Saturday Evening Period (10:00-11:00 PM)

LEGEND

= Project Site

NORTH

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FIGURE 1
PROJECT
LOCATION MAP

The evaluation of potential project impacts on near-term traffic operations focuses on the analysis of the following scenarios:

- Existing Traffic Conditions
- Existing Plus Approved Project Site Uses Traffic Conditions
- Existing Plus Approved Project Site Uses Plus Amphitheater Event Traffic Conditions

The Supplemental TIA also presents a review of project access and addresses concerns raised by residences regarding additional traffic on Weyer Road. Information in the following reference documents was reviewed during the course of conducting the supplemental analysis:

- Stanislaus County Regional Transportation Plan (RTP) - StanCOG (2014)
- Stanislaus County Recommended Final Capital Improvement Plan (2013)
- Stanislaus County Congestion Management Plan (CMP) - StanCOG (2009)
- The Fruit Yard Traffic Impact Analysis- KD Anderson & Associates (2007)
- Stanislaus County General Plan Circulation Element (2006)
- Stanislaus County General Plan Circulation Support Documentation

2.0 EXISTING CONDITIONS

The roadway network serving the project site includes Yosemite Boulevard (State Route 132), Geer Road and Albers Road. The following is a brief description of the network and an evaluation of existing traffic operations.

Network Description

Yosemite Boulevard (State Route 132) is a principal east-west route extending east from the City of Modesto and passing through Empire, Waterford and La Grange. State Route (SR) 132 also serves as a principal east-west route between I-580 and SR 99 in the City of Modesto. Yosemite Boulevard (SR 132) between Modesto and Waterford is classified as a Class C Expressway. The majority of Yosemite Boulevard (SR 132) east of Modesto has a single lane in each direction, with a 55 miles per hour (mph) speed limit. The Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection is signalized. The sections (+/-500') of Yosemite Boulevard (SR 132) east and west of Geer Road - Albers Road have been improved, and have 2 lanes in each direction with left turn lane channelization. Two-to-one lane transition tapers are provided for east and westbound traffic adjacent to the project site.

Geer Road and Albers Road is a principal north-south route between the City of Turlock and City of Oakdale. Geer Road and Albers Road are both classified as a Class C Expressway. The majority of Geer Road and Albers Road between Turlock and Oakdale have a single lane in each direction, with a 55 mph speed limit. The sections (+/-400') of Geer Road and Albers Road north and south of Yosemite Boulevard (SR 132) have been improved, and have 2 lanes in each direction with left turn lane channelization. Two-to-one lane transition tapers are provided for north and southbound traffic adjacent to the project site.

Traffic Volumes

To document existing conditions at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection, new turning movement traffic count data was collected for the six (6) study periods. Daily traffic volume data was referenced from the Caltrans website and obtained from Stanislaus County. At the request of the project applicant, new 24-hour traffic count data was also collected for a 7-day period on Weyer Road south of Yosemite Boulevard (SR 132). The existing traffic volumes are illustrated on Figure 2. A summary of the new traffic count data and a comparison of the hourly volumes (PM peak hour vs. 10:00-11:00 PM) is provided in the Appendix. Copies of the new traffic count data are also included in the Appendix.

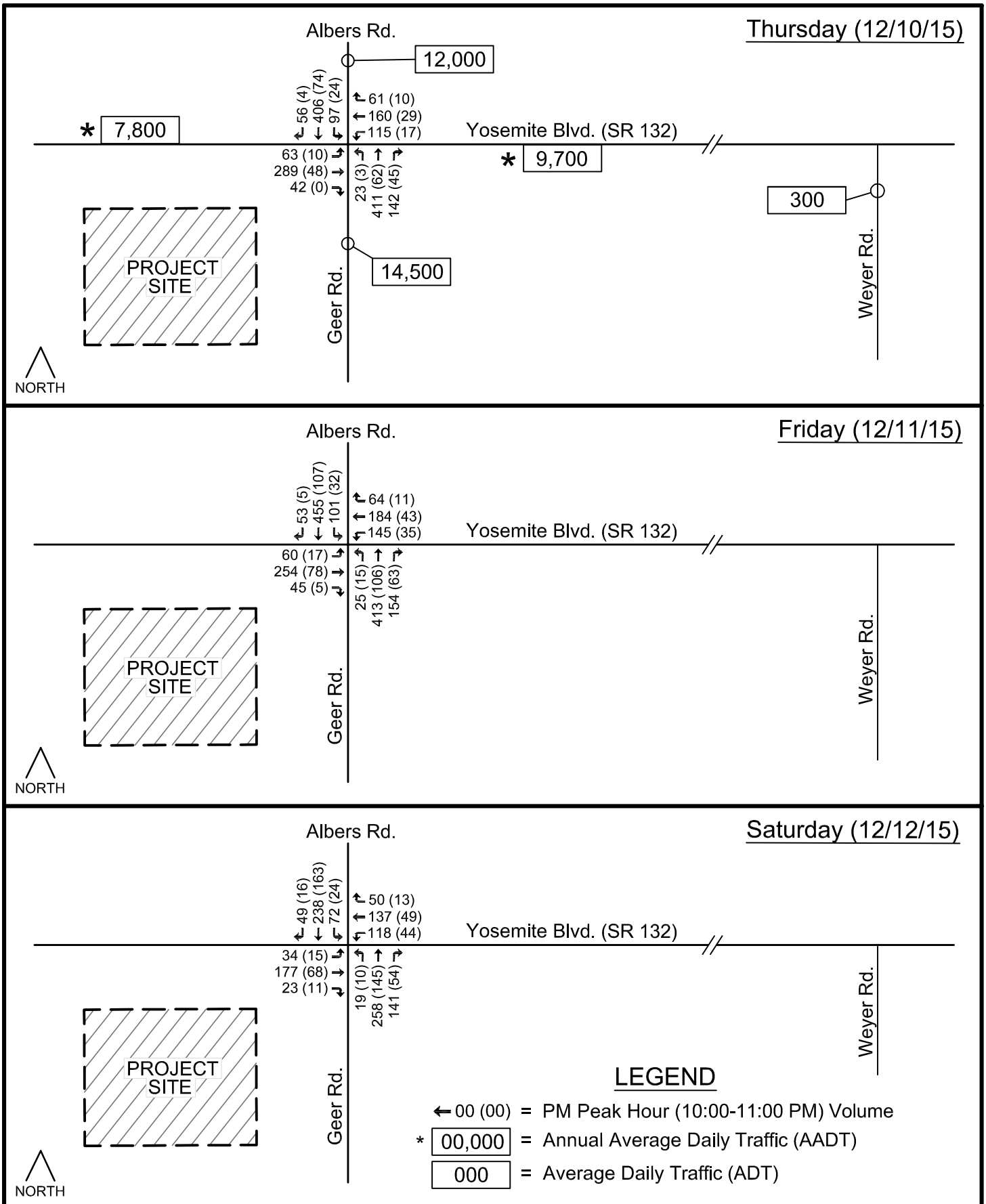

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FIGURE 2
EXISTING
TRAFFIC VOLUMES

Level of Service Operational Analysis

Various "level of service" (LOS) methodologies are used to evaluate traffic operations. Operating conditions range from LOS "A" (free-flowing) to LOS "F" (forced-flow). Overall daily operations and LOS values for roadway segments can be estimated by comparing average daily traffic (ADT) volume data with standard or accepted twenty-four (24) hour ADT threshold criteria. Stanislaus County has established the LOS C threshold as the lower limit for acceptable traffic operations. The Caltrans traffic study guidelines (Guide for the Preparation of Traffic Impact Studies, Dec. 2002) state, Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities. A brief description of the LOS values is included in the Appendix.

The analysis presented in the 2007 TIA for the project site (KD Anderson & Associates) indicated that existing daily volumes on Yosemite Boulevard (adjacent to the project) were in LOS C range, while daily volumes on Geer Road (adjacent to the project site) were in the LOS E range. Daily traffic volumes on Yosemite Boulevard (SR 132) and Geer Road have remained relatively stable since 2007. The traffic analysis prepared for the County's General Plan Circulation Element utilized a "vehicle per lane per hour" (vplph) capacity to evaluate roadway segment LOS (1,000 vplph). The volume-to-capacity (V/C) ratios were then equated to LOS. The peak hour data on Figure 2 (average weekday) was used to estimate the roadway segment LOS adjacent to the project site. The existing roadway segment analysis is presented in Table 1.

Table 1 - Existing Roadway Segment Analysis (Average Weekday)

Roadway Segment	Direction	Volume	V/C Ratio	LOS (a)
Yosemite Blvd. (SR 132) w/o Geer Rd. - Albers Rd.	EB WB	394 239	0.39 0.24	D (B) C (A)
Yosemite Blvd. (SR 132) e/o Geer Rd. - Albers Rd.	EB WB	528 336	0.53 0.34	D (C) C (B)
Geer Rd. s/o Yosemite Blvd (SR 132)	NB SB	576 563	0.58 0.56	D (C) D (C)
Albers Rd. n/o Yosemite Blvd (SR 132)	NB SB	535 559	0.54 0.56	D (C) D (C)

(a) LOS for a 2-lane major roadway (LOS for 4-lane major roadway in parenthesis)

The roadway segment analysis indicates that existing segment volumes on Yosemite Boulevard (SR 132) are within acceptable limits as defined by Caltrans (LOS D or better). However, hourly directional volumes on the 2-lane segments of Geer Road and Albers Road exceed the County's defined threshold (LOS C or better). It is noted that the hourly volumes on the 4-lane segments of Geer Road (adjacent to the project site) and Albers Road (north of Yosemite Boulevard) are within the County's LOS C standard. It should also be noted that average daily traffic volumes on Weyer Road south of Yosemite Boulevard (300 ADT) are well within acceptable limits.

The LOS values for intersection operations are evaluated using estimated vehicle "control" delay (number of seconds per vehicle). Vehicle delays and LOS are reported for the overall intersection operations as an "average." During peak commuter periods, operations can be constrained at local intersections. Therefore, an analysis of peak hour operations is a good method for evaluating existing and/or future conditions, and the potential impact associated with a specific project. A copy of the vehicle delay-to-LOS relationship data is included with the Appendix Material.

The Synchro 8 software was used to evaluate the peak hour operations at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. Methodologies in the 2010 Highway Capacity Manual (HCM) were used for the peak hour intersection LOS analysis. It is noted that since the amphitheater will have some events or concerts that will end after 10:00 PM the analysis of existing conditions includes an evaluation of the 10:00 to 11:00 PM period. The results of the existing intersection LOS analysis are presented in Table 2. Copies of the LOS worksheets are included in the Appendix Material.

Table 2 - Existing Intersection LOS Analysis

Study Period	Average Delay - LOS Value
Thursday:	
PM Peak Hour -	21.9 - C
10:00 to 11:00 PM -	16.6 - B
Friday:	
PM Peak Hour -	21.7 - C
10:00 to 11:00 PM -	18.2 - B
Saturday:	
Mid-Day Peak Hour -	19.4 - B
10:00 to 11:00 PM -	15.3 - B

The data in Table 2 indicates that average vehicle delays during the six (6) study periods are within acceptable limits as defined by the County (LOS C or better) and Caltrans (LOS C/D).

Vehicle Speeds

A sampling of vehicle speeds was recorded on Yosemite Boulevard (SR 132) and Geer Road adjacent to the project site. Eastbound speeds on Yosemite Boulevard (SR 132) and northbound speeds on Geer Road were approximately 56-58 mph. Westbound speeds on Yosemite Boulevard (SR 132) and southbound speeds on Geer Road were slightly less since vehicles were coming from the signalized Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection.

3.0 PROJECT CONDITIONS

The following is a description of the project and proposed modification, an estimate of the project site trip generation quantities for the approved uses and amphitheater component, an assignment of the project site trips to the adjacent street system, and an evaluation of the potential project (amphitheater) impacts on existing operations. The analysis of potential project (amphitheater) impacts assumes the development of all approved uses on the project site.

Description

As previously stated, a General Plan Amendment and Rezoning Application were approved in 2008. The approved development plan included a relocation of the existing service and card-lock service station facilities and the construction of various new commercial related uses (i.e. new banquet center, a RV / boat storage facility, a RV park, a fruit packing / warehouse facility, a site for retail tractor sales, and additional retail space). A summary of the existing and approved project site uses is presented in Table 3. It is noted that the floor areas for the retail tractor sales site and fruit packing / warehouse facility are based on the square footages analyzed in the 2007 TIA (KD Anderson & Associates). A copy of the 2008 Project Development Plan is provided on Figure 3A.

Table 3 - Existing and Approved Project Site Uses

Existing Uses		Approved Uses	
Restaurant (a)	8,000 SF	Banquet Center	9,000 SF
Produce / Fruit Market (a)	5,000 SF	New Retail Space	3,000 SF
Service Station (b)	4 Pumps	RV / Boat Storage	322 Spaces
	(8 Fueling Pos.)	RV Camping Park	66 Sites
Card-Lock Service Station (c)	3 Pumps	Retail Tractor Sales	10,000 SF
	(6 Fueling Pos.)	Fruit Packing / Warehouse	35,000 SF

(a) Existing project site use to remain
(b) Existing service sta. to be relocated (new site will have 6 pumps with 12 fueling positions)
(c) Exist. card-lock station to be relocated (new site will have 3 pumps & conv. market)

The proposed project site modification includes the addition of an outside amphitheater within the existing park site (west of the pond). The amphitheater will host events or concerts and have a capacity to accommodate a maximum of 3,500 guests. The majority of events will occur on a weekend or Holiday, between May and September (especially capacity size events or concerts). Events on weekdays (Monday-Friday) will begin after 7:00 PM and end by 10:30 PM. Parking for amphitheater guests will be accommodated on-site in various surface lots. On-site parking will be provided for 1,167 vehicles (plus 135 overflow spaces). On-site circulation will be provided via a paved road (covered under previous approval), with initial access provided via two (2) driveways on Yosemite Boulevard ("A" Drive and "B" Drive) and one (1) driveway on Geer Road ("D" Drive). Future access may also be provided via Triangle Ranch Road and "F" Way. A copy of the Park Site Development Plan (Amphitheater) is provided on Figure 3B.

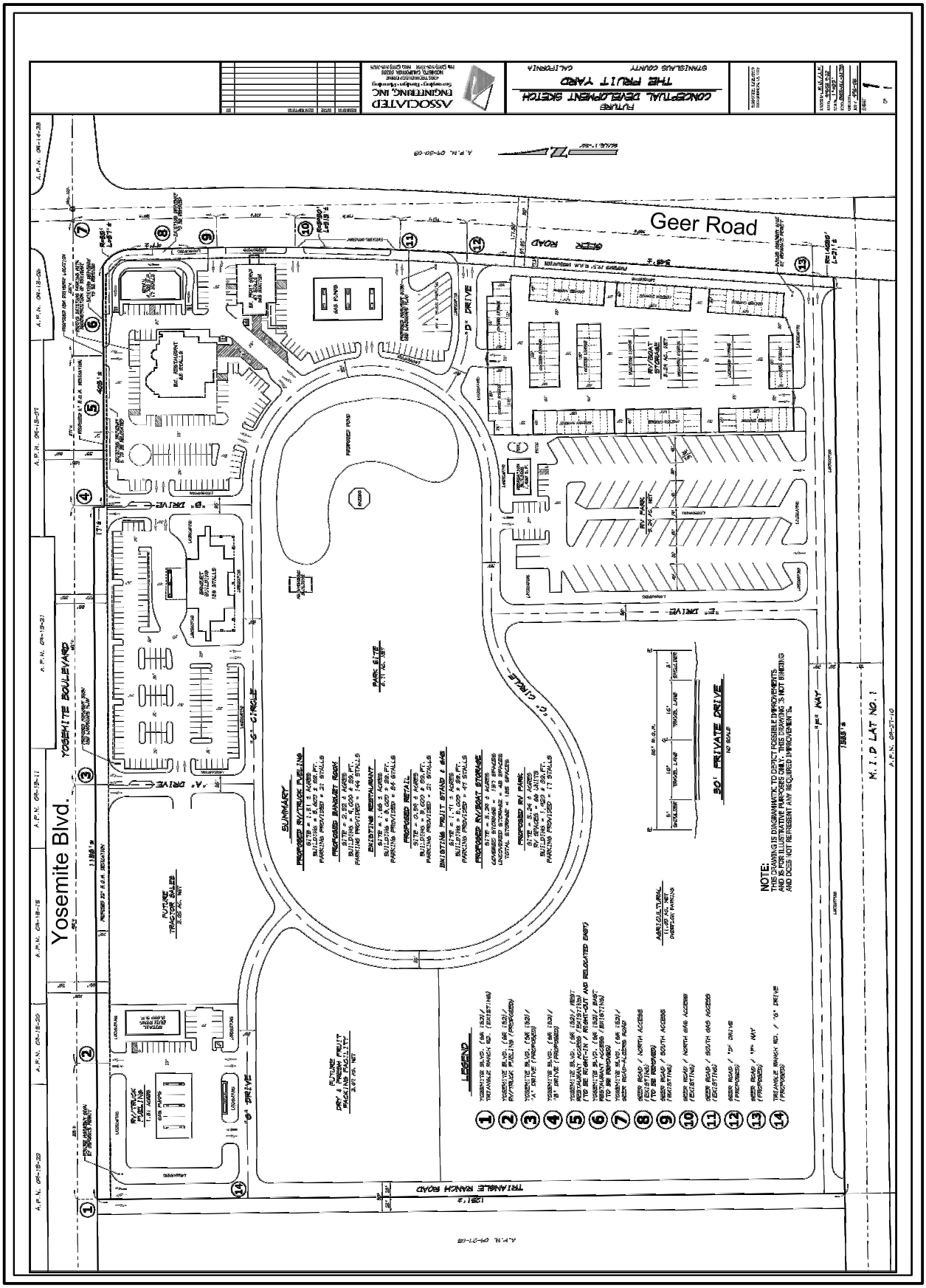

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FIGURE 3A
APPROVED
DEVELOPMENT PLAN

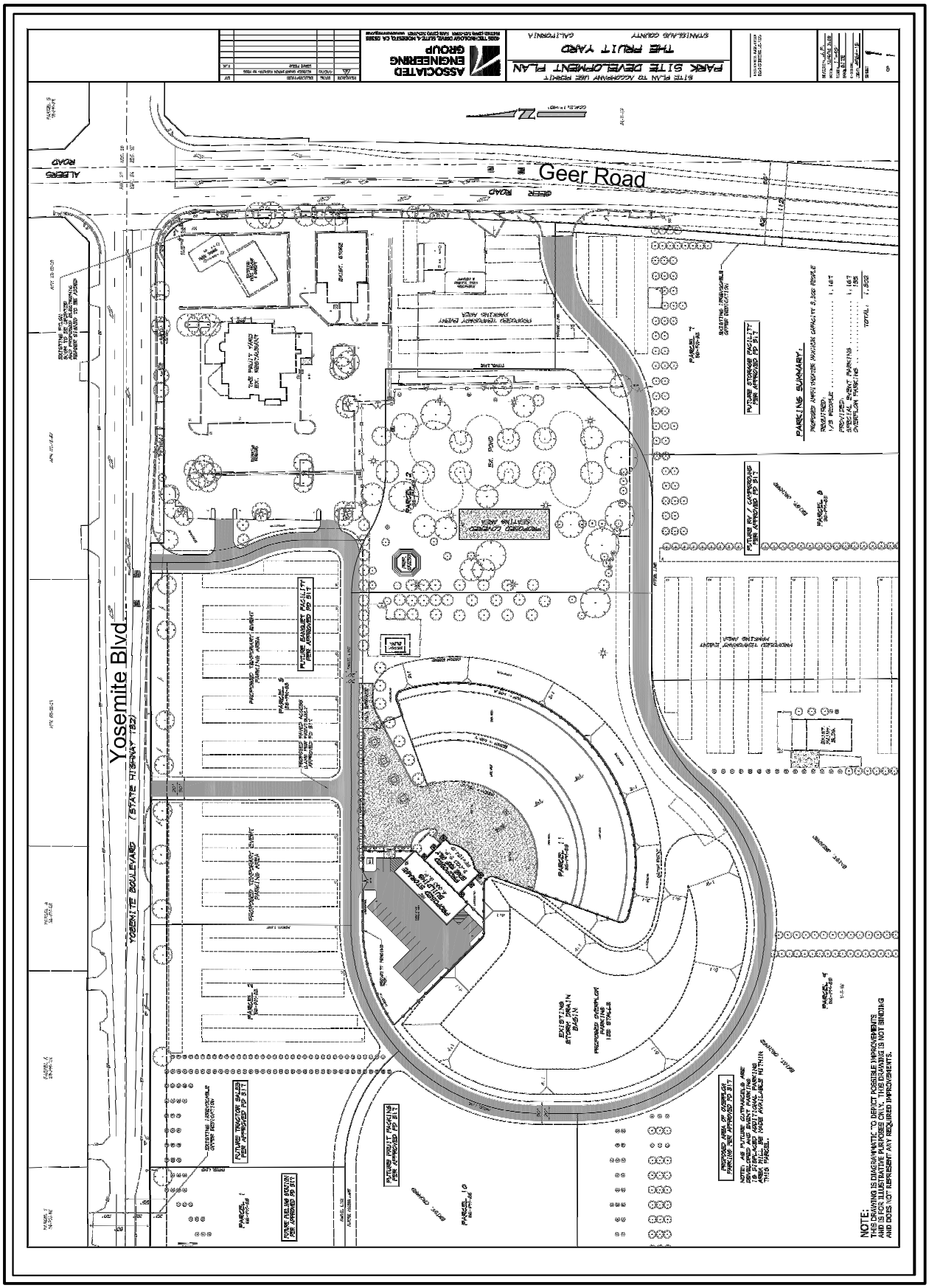

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FIGURE 3B
PARK SITE DEVELOPMENT PLAN

Project Site Trip Generation Estimates

Trip generation rate data in the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition) and a Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (San Diego Association of Governments, SANDAG) was used to estimate the number of vehicle trips associated with the existing and approved project site uses. The applicable trip generation rates are presented in Table 4.

Table 4 - Applicable ITE Trip Generation Rates

Land Use Category	Trip Generation Rate					
	Weekday			Weekend Day		
	PM Peak Hour		Daily	Mid-Day Peak Hour		Daily
	In	Out		In	Out	
ITE #150 - Warehousing (a)	0.08	0.24	3.56	0.08	0.05	1.23
ITE #151 - Mini Warehouse Storage (b)	0.01	0.01	0.25	0.02	0.02	0.22
ITE #416 - Campground / RV Park (c & e)	0.18	0.09	4.00	0.27	0.14	6.00
ITE #826 - Specialty Retail Uses (a & f)	1.19	1.52	44.32	1.36	1.36	42.04
ITE #841 - Automobile Sales (a)	1.05	1.57	32.30	2.01	2.01	29.74
ITE #931 - Quality Restaurant (a)	5.02	2.47	89.95	6.38	4.44	94.36
ITE #944 - Service Station (d & g)	6.94	6.93	168.56	6.94	6.93	168.56
ITE #945 - Serv. Sta. w/ Conv. Market (d & g)	6.76	6.75	162.78	6.76	6.75	162.78

(a) Number of vehicle trips per 1,000 SF
(b) Number of vehicle trips per storage unit / space
(c) Number of vehicle trips per camping (RV) site - weekday daily rate based on SANDAG rates
(d) Number of vehicle trips per fueling position (2 fueling positions per pump)
(e) Weekend day rates assumed to be 1.5 times weekday rates
(f) Weekend mid-day peak rate assumed to be same as weekday PM peak rate (50% in / 50% out)
(g) Weekend day rates assumed to be same as weekday rates (daily and peak hour)

To the quantify the trips associated with the project site, the trip generation estimates were derived for both the existing and approved project site uses (to represent base-line existing conditions). The "specialty retail" category (ITE #826) rates were used to estimate the number of trips associated with the existing produce market / fruit stand. It is noted that the trip rates associated with the "service station with convenience market" category (ITE #945) are slightly lower than the standard "service station" (ITE #944) rates. Therefore, the standard service station rates were used to estimate the trip generation associated with the existing card-lock service station (relocated facility will also have a convenience market). As previously noted, the floor areas associated with the retail tractor sales site and fruit packing / warehouse facility are based on the square footages analyzed in the 2007 TIA. In a similar manner, the trip generation estimates associated with the banquet center are also based on the estimates analyzed in the 2007 TIA (number of trips based on number of parking spaces). It was assumed that an event at the banquet center could start around

6:00 PM on an average weekday, and therefore, guests would arrive during the PM peak hour. Guests attending a banquet would then exit the project site between 10:00 PM and 12:00 Midnight.

Information in the ITE Trip Generation Handbook demonstrates that a significant portion of the retail related trips will be pass-by and/or diverted link type trips coming from traffic already on the adjacent street system. The Caltrans traffic study methodologies allow a 15% trip reduction for pass-by traffic and a 5% reduction for captured trips (typically internal trips between uses). The trip generation estimates associated with the existing and approved project site uses are presented in Table 5.

Table 5 - Project Site Uses Trip Generation Estimates

Project Site Component	Number of Vehicle Trips					
	Weekday			Weekend Day		
	PM Peak Hour		Daily	Mid-Day Peak Hour		Daily
	In	Out		In	Out	
Existing Project Site Uses:						
Restaurant - 8,000 SF	40	20	720	51	36	754
Produce Market / Fruit Stand - 5,000 SF	6	8	222	7	7	210
Service Station - 8 Fueling Positions	56	55	1,348	56	55	1,348
Card-Lock Service Sta. - 6 Fueling Pos. (a)	42	42	1,012	42	42	1,012
Existing Uses Sub-Totals:	144	125	3,302	156	140	3,324
(-20% Pass-by & Internal Trip Reduction)	(-21)	(-21)	(-516)	(-21)	(-21)	(-514)
Approved Project Site Uses:						
Banquet Facility - 9,000 SF (b)	144	0	288	72	72	144
New Retail Space - 3,000 SF	4	5	134	4	4	126
RV / Boat Storage - 322 Spaces	3	3	80	6	6	70
RV Camping Park - 66 Site / Spaces	12	6	264	18	9	396
Retail Tractor Sales - 10,000 SF	11	16	324	20	20	298
Fruit Packing / Warehouse - 35,000 SF	3	8	124	3	2	44
Relocated Service Sta. (c)	28	28	674	28	28	674
Approved Uses Sub-Totals:	205	66	1,888	151	141	1,752
(20% Pass-by & Internal Trip Reduction)	(-6)	(-7)	(-162)	(-6)	(-6)	(-160)
Total Project Site Trip Generation:	349	191	5,190	307	281	5,076
External Traffic Demands:	322	163	4,512	280	254	4,402

(a) Relocated card-lock service station will have same number of pump (fueling positions), with a convenience market
(b) Trip generation based on number of parking stalls (referenced from 2007 TIA)
(c) Relocated service station will have 2 additional pumps, with 4 new fueling positions

The data in Table 5 indicates that the existing site uses generate a total of approximately 3,300 vehicle trips on an average weekday and weekend day (two-way trip ends). Development of the approved site will increase the total daily trip generation to approximately 5,100-5,200 ADT. On an average weekday the existing and approved uses are estimated to generate approximately 540 trips during the PM peak hour (349 inbound and 191 outbound). On a typical weekend day, the project site uses (exiting and approved) are estimated to generate 588 trips during the mid-day (MD) peak hour (307 inbound and 281 outbound). It is noted that the mid-day peak hour trip generation estimates for a weekend day represent the "peak hour of generation," which may not be the same period for each project site use. Therefore, the project site trip generation estimates presented in Table 5 may slightly overestimate the actual trip generation.

Information in the Urban Land Institute (ULI) Shared Parking publication indicates that parking demands associated with typical retail uses are about 30% of the peak demand (100%) during the 10:00-11:00 PM period. Therefore, to derive the trip generation estimates for the 10:00-11:00 PM period the peak period demands for the retail uses (restaurant and services station) were multiplied by 0.30 (weekday and weekend day). Though it is not anticipated that the RV / boat storage, RV park or fruit packing / warehouse uses will generate much traffic during the 10:00-11:00 PM period, the peak period demands in Table 5 were also multiplied by 0.30 to present a conservative analysis for the 10:00-11:00 PM period. As previously stated, it was assumed that traffic associated with the banquet center could be exiting the site between 10:00 PM and Midnight. Therefore, on a typical weekday 144 trips could be exiting the site during the 10:00-11:00 PM period (72 trips exiting the site on a weekend day). It is estimated that on an average weekday the existing and approved uses generate approximately 264 trips during the 10:00-11:00 PM period (62 inbound and 202 outbound). On a typical weekend day, the existing and approved project site uses are estimated to generate 207 trips during the 10:00-11:00 PM period (71 inbound and 136 outbound).

The "Approved Project Site Uses" trip generation estimates in Table 5 were based on the 2008 Project Development Plan. The trip generation estimates for the "Approved Project Site Uses" are slightly higher than the trip generation estimates analyzed in the 2007 TIA. Several differences were identified, which included that the 2007 trip generation estimates did not account for the additional fuel pumps associated with one of the relocated service stations.

Existing and Approved Site Uses Traffic Volumes

The trip generation estimates for the existing and approved site uses were assigned to the local street system based a review of existing travel patterns and the distribution percentages used in the 2007 TIA. The distribution of trips associated with the existing uses "to be relocated" (i.e. service station facilities) was performed based on the new locations (refer to the Approved Development Plan - Figure 3A). The trips for each use were assigned to the appropriate driveway(s). The driveways immediately adjacent to the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection were combined with the appropriate left turn restrictions. Approximately 50% of the project site trips were assigned to Yosemite Boulevard (25% west and east of the project site), 30%

were assigned to Geer Road (south of project site) and 20% were assigned to Albers Road (north of Yosemite Boulevard). The project site traffic volumes associated with the existing and approved uses are illustrated on Figures 4A (Weekday) and 4B (Weekend Day). It again is noted that the trips associated with the existing uses to be relocated were assigned to the street system based on the new locations as shown on the approved Project Development Plan.

Existing Traffic Volumes Plus Project Site (Existing and Approved Uses) Traffic Volumes

The project site traffic volumes associated with the existing and approved uses were combined with the existing traffic volumes on Figure 2. The existing traffic volumes on Figure 2 were first adjusted the reflect the relocation of the existing site uses "to be relocated" (existing volumes minus the existing service station uses), since the relocated service station and card-lock service station volumes are included in the volumes on Figures 4A and 4B. The existing traffic volumes plus the project site traffic volumes (existing and approved uses) are illustrated on Figure 5.

Amphitheater Trip Generation and Traffic Volumes

As previously described, the proposed project site modification includes the addition of an outside amphitheater with a maximum seating capacity for 3,500 guests. The amphitheater will host events or concerts, with the majority occurring on a weekend or Holiday. Event parking for the amphitheater will be provided on-site for 1,167 vehicles; which is a vehicle occupancy of 3 guest per vehicle (3,500/3). For study purposes, it was assumed that a capacity size event (or concert) at the amphitheater will generate approximately 1,170 vehicles (inbound and outbound). A total of 2,340 vehicle trips (two-way trip ends) will be generated by a capacity size event at the amphitheater. The distribution of trips associated with a capacity size event were assigned to the adjacent street system based on the populations of local communities (Modesto, Empire, Waterford, La Grange, Turlock and Oakdale). Approximately 55% of the amphitheater event trips were assigned to Yosemite Boulevard (40% west of the project site and 15% east of the project site), 25% were assigned to Geer Road (south of project site) and 20% were assigned to Albers Road (north of Yosemite Boulevard). As previously stated, initial access will be provided via "A" Drive and "B" Drive (driveways on Yosemite Boulevard) and "D" Drive (driveway on Geer Road). Future access may also eventually be provided via Triangle Ranch Road and "F" Way. The total amphitheater event traffic volumes are illustrated on Figure 6. It is noted that all inbound trips will occur prior to (before) an event and all outbound trips will occur after an event has concluded, and therefore, inbound and outbound trips will not occur within the same 2-3 hour period.

It is anticipated that 90-95% of all guests will be on-site within 15-30 minutes prior to the start of an event. Transportation Demand Management (TDM) strategies will be used in the scheduling of events as required to avoid generating any guest traffic during typical weekday (between 4:00-6:00 PM) and weekend day (between 1:00-3:00 PM) peak periods. In addition, no activities will occur at the new banquet center on the same day as an event at the amphitheater.

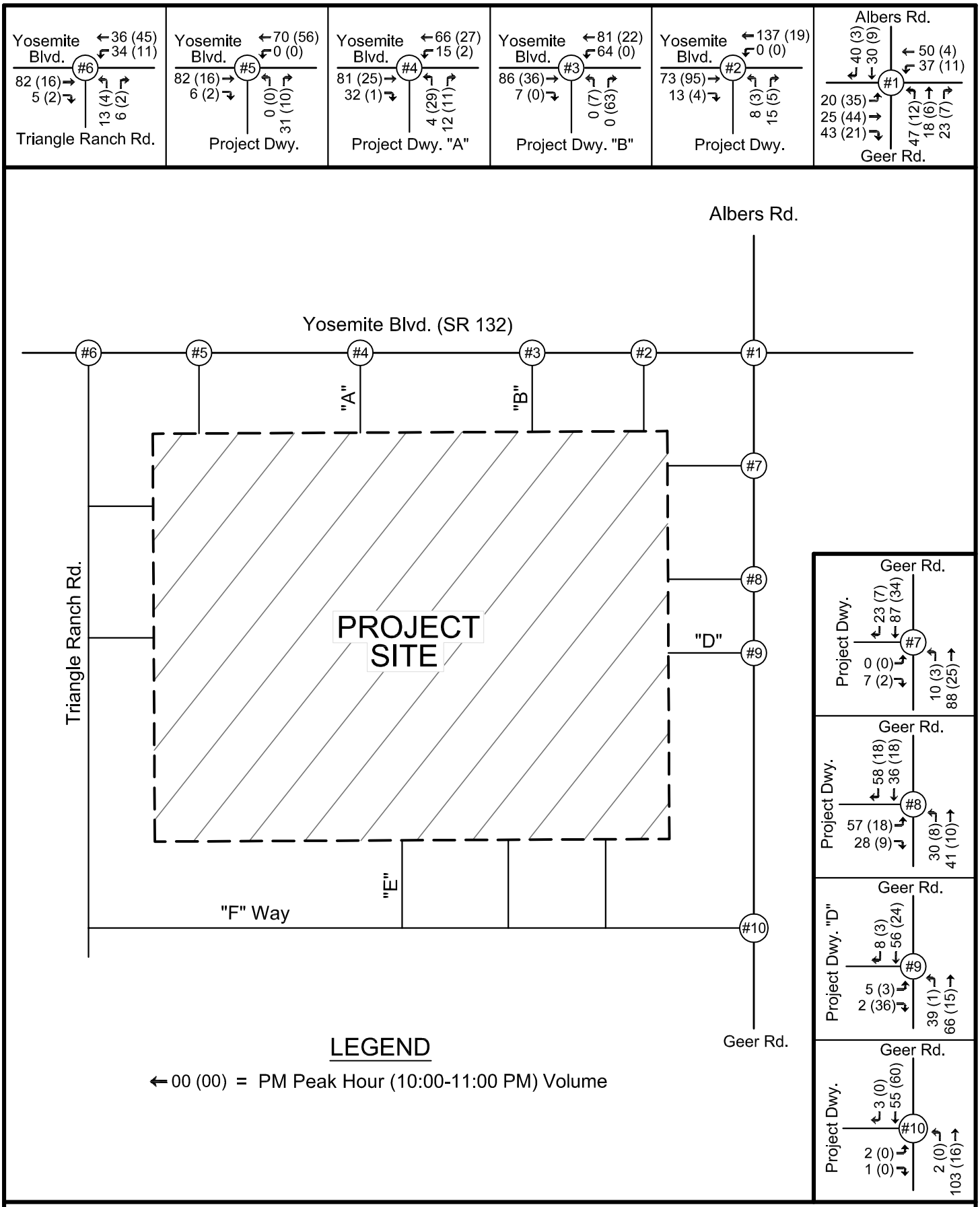

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FIGURE 4A
EXISTING AND APPROVED USES WEEKDAY VOLUMES

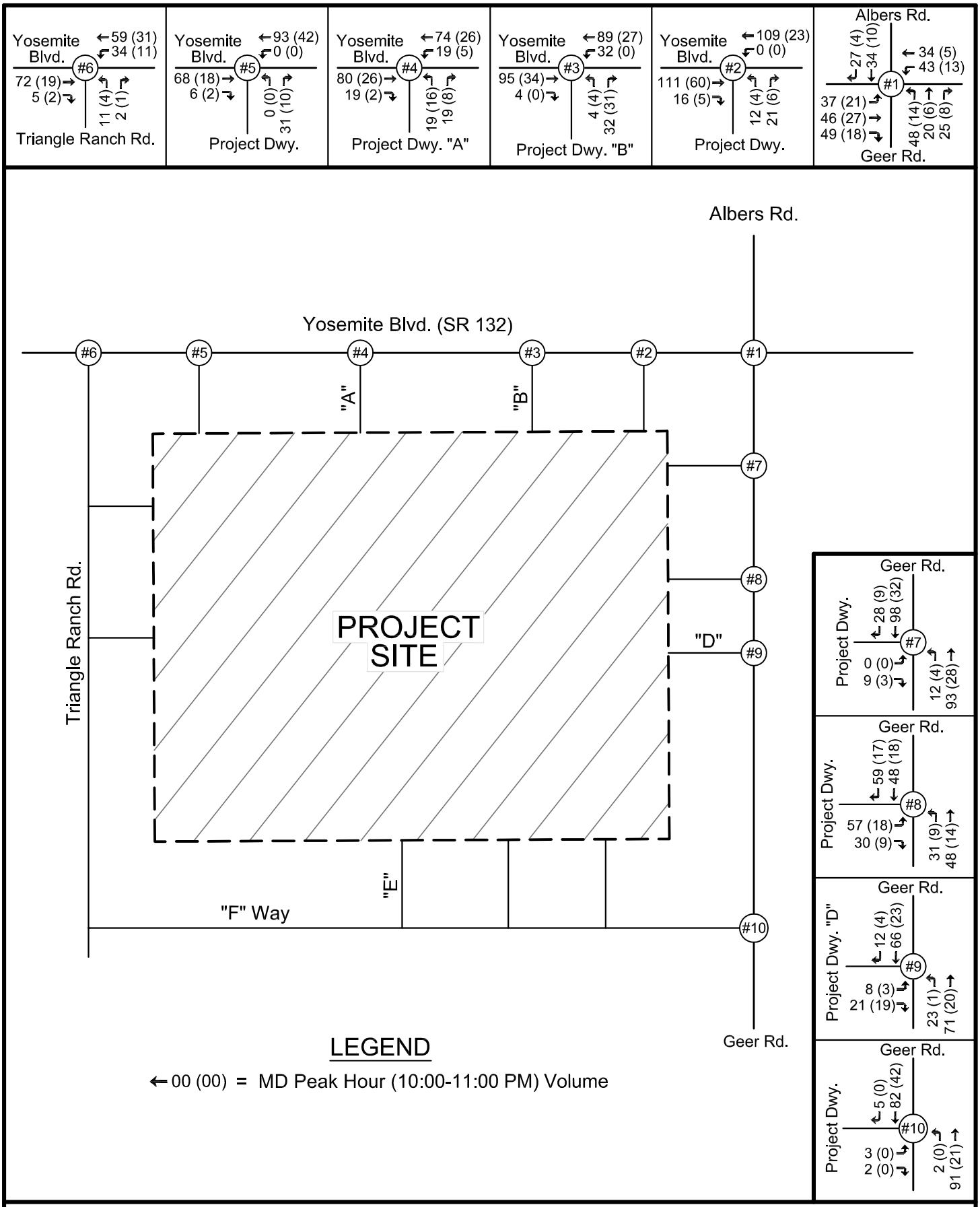

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FIGURE 4B
EXISTING AND APPROVED USES
WEEKEND DAY VOLUMES

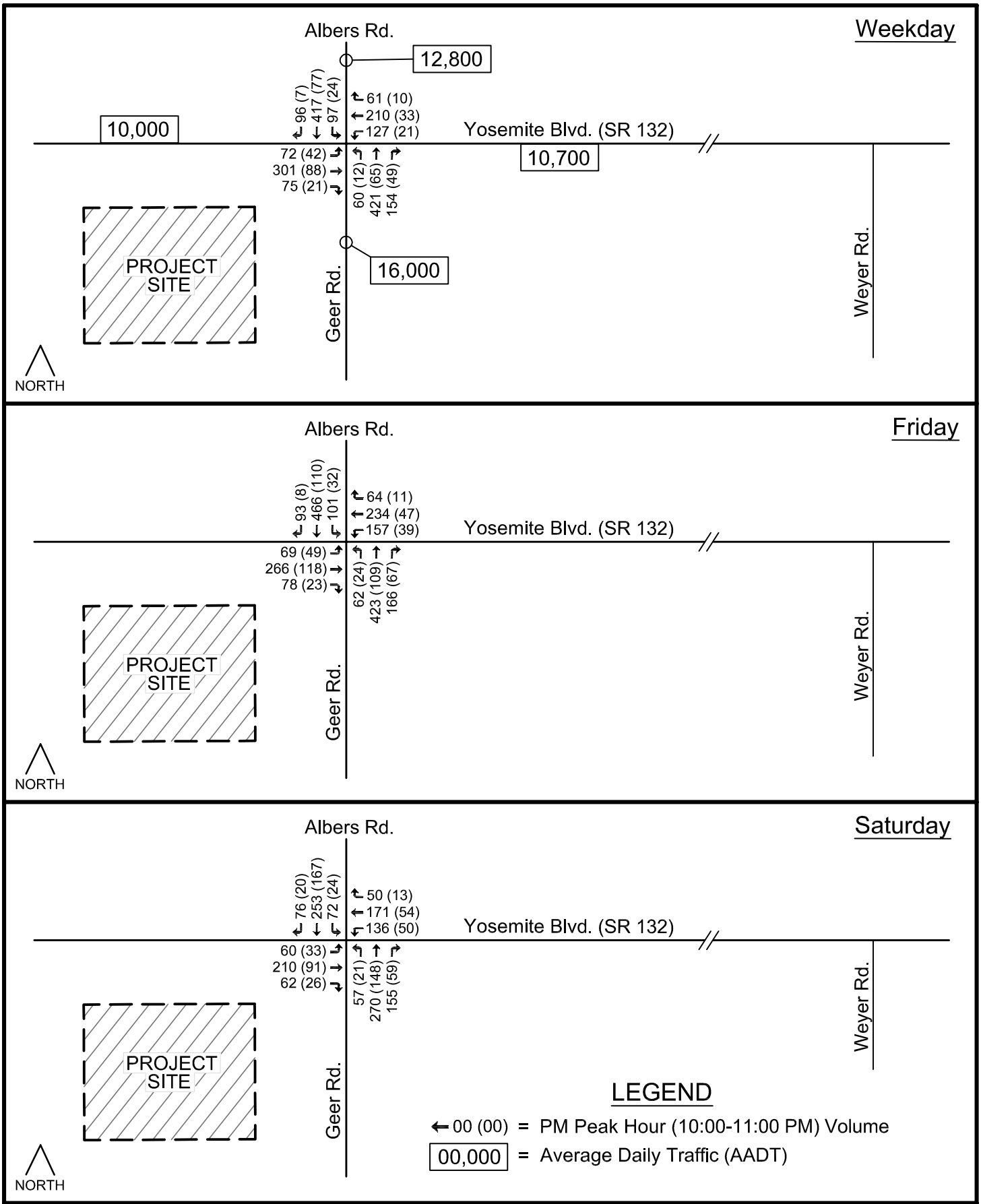

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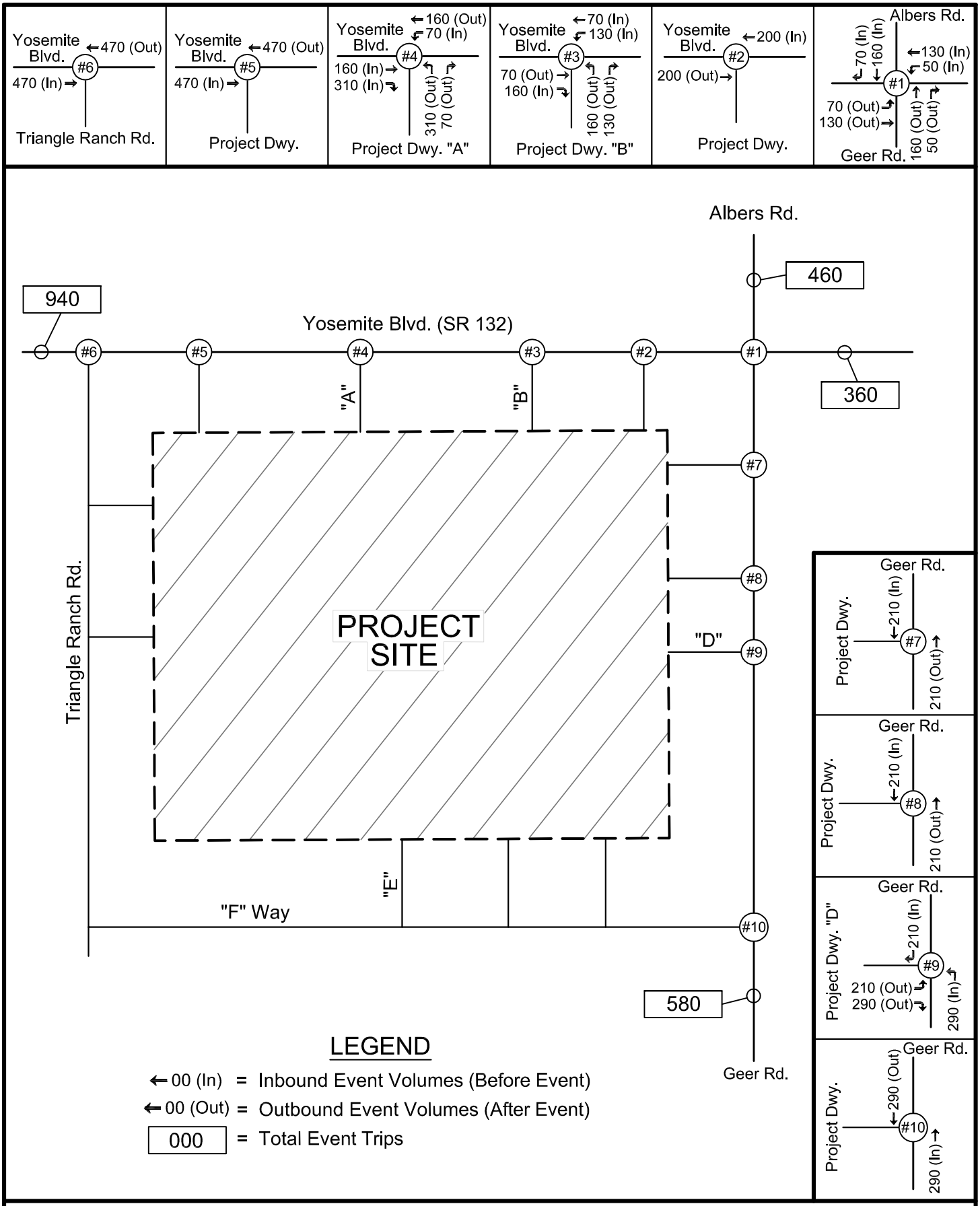
FIGURE 5
EXISTING VOLUMES PLUS PROJECT SITE USES TRAFFIC VOLUMES



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The Fruit Yard
- Supplemental TIA -

FIGURE 6
TOTAL AMPHITHEATER TRAFFIC VOLUMES

Existing Volumes Plus Project Site Volumes Plus Amphitheater Traffic Volumes

The amphitheater event traffic volumes on Figure 6 were combined with the existing volumes on Figure 2 (adjusted to reflect new service station and card-lock service station locations) and the project site volumes (existing and approved uses) on Figures 4A and 4B. The project site volumes were first adjusted to reflect no activity at the banquet center, since the TDM measures require that no activity occur on the same day as an event at the amphitheater. Though the amphitheater TDM measures are designed to avoid generating any guest traffic during typical weekday or weekend day peak periods, it was deemed appropriate to analyze a "worst case" scenario for study purposes. Therefore, the "worst case" scenario assumes that traffic arriving at an amphitheater event could coincide with the peak hour period on the adjacent street system (between 5:00-6:00 PM on a weekday and 1:00-3:00 PM on a weekend day). All event exiting traffic would occur during the 10:00-11:00 PM period (on weekdays and weekend days). The existing traffic volumes (adjusted) plus the project site traffic volumes (existing and approved uses with no banquet center activity) plus the amphitheater traffic volumes (worst case) are illustrated on Figure 7.

Level of Service Operational Analysis

Similar to the existing conditions analysis, the existing traffic volumes plus the project site traffic volumes (existing and approved uses) on Figure 5 were compared to the ADT thresholds used in the 2007 TIA. The comparison indicated that daily volumes on Yosemite Boulevard (SR 132) will be in the LOS D range, while the daily volumes on the 2-lane segments of Geer Road south of the project site will be in the LOS E-F range. However, it is noted that daily traffic volumes on the 4-lane segments of Geer Road (adjacent to the project site) and Albers Road (north of Yosemite Boulevard) will be within the County's LOS C standard (<20,100 ADT). The peak hour data on Figure 5 (average weekday) was again used to evaluate the roadway segment LOS associated with the existing volumes plus the project site volumes (existing and approved uses) scenario. The existing plus project site uses segment analysis is presented in Table 6.

Table 6 - Existing Plus Project Site Uses Roadway Segment Analysis (Average Weekday)

Roadway Segment	Direction	Volume	V/C Ratio	LOS (a)
Yosemite Blvd. (SR 132) w/o Geer Rd. - Albers Rd.	EB WB	448 366	0.45 0.37	D (B) D (B)
Yosemite Blvd. (SR 132) e/o Geer Rd. - Albers Rd.	EB WB	552 398	0.55 0.40	D (C) D (B)
Geer Rd. s/o Yosemite Blvd (SR 132)	NB SB	635 619	0.64 0.62	E (C) E (C)
Albers Rd. n/o Yosemite Blvd (SR 132)	NB SB	554 610	0.55 0.61	D (C) E (C)

(a) LOS report for a 2-lane major roadway (4-lane major roadway LOS in parenthesis)

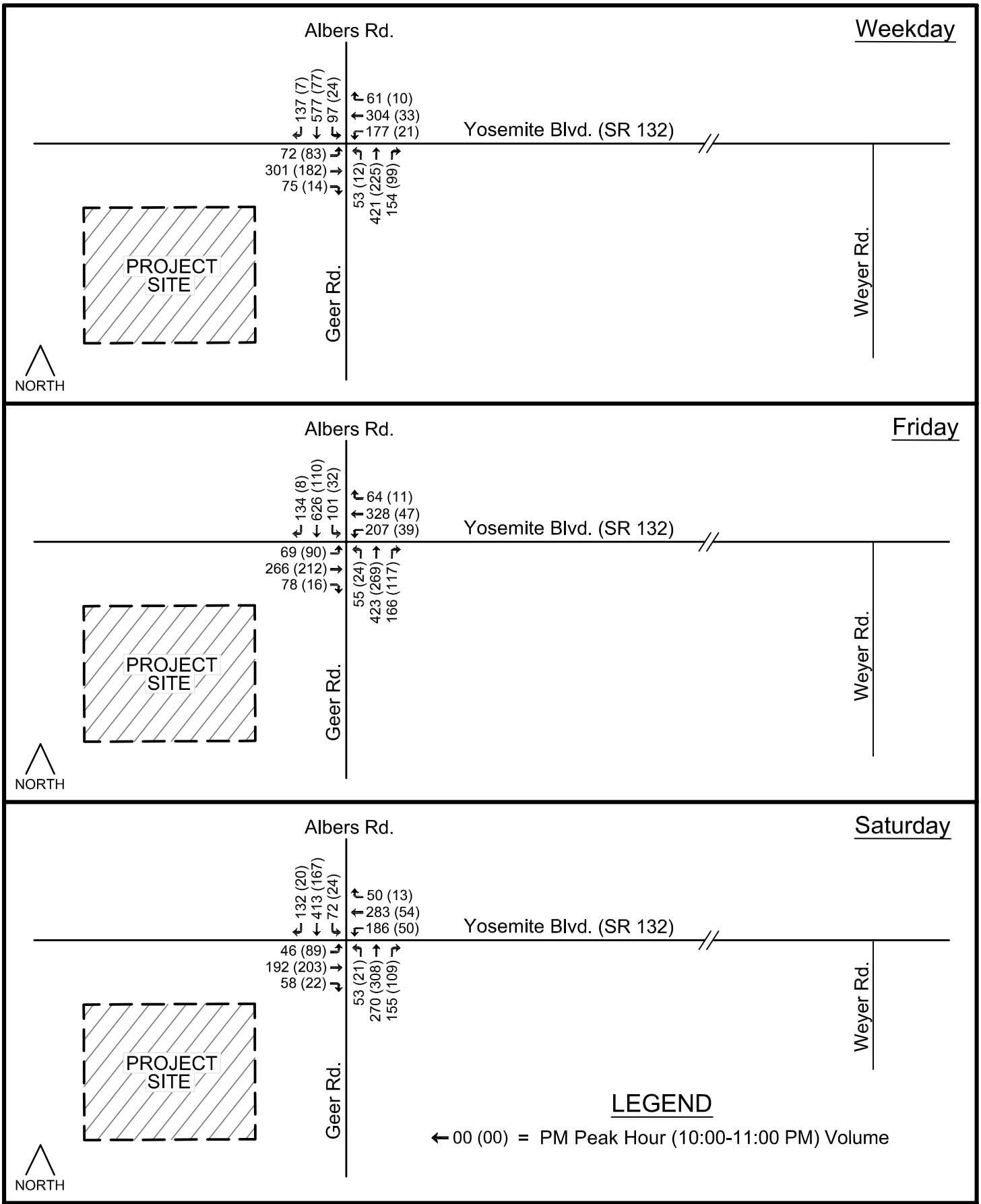

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FIGURE 7
EXISTING VOLUMES PLUS PROJECT SITE USES PLUS AMPHITHEATER VOLUMES

The roadway segment analysis indicates that the existing plus project site (existing and approved uses) hourly segment volumes on Yosemite Boulevard (SR 132) will remain within acceptable limits as defined by Caltrans (LOS D or better). However, hourly directional volumes on the 2-lane segments of Geer Road and Albers Road will continue to exceed the County's LOS C standard. It is noted that the hourly volumes on the 4-lane segments of Geer Road (adjacent to the project site) and Albers Road (north of Yosemite Boulevard) will remain within the County's LOS C standard.

Information in the County's General Plan Circulation Element and StanCOG's RTP has identified the future need to widen both Yosemite Boulevard (4-lane) and Geer Road - Albers Road (6-lane) to expressway standards. The future widening improvements have been incorporated into the RTP and will be partially funded by developer contributions to the County's Regional Transportation Impact Fee (RTIF) program. The analysis presented in the 2007 TIA identified the potential impacts to existing facilities that would be associated with the approved Project Development Plan. The project's contribution to the RTIF program served as mitigation to reduce the potential impacts to a level of "less than significant." As previously stated, the 2008 General Plan Amendment and Rezoning Application were approved with a Mitigated Negative Declaration.

The proposed amphitheater will host events or concerts, with a majority of the events occurring on a weekend or holiday (only 5-6 events will be held on a weekday). However, traffic associated with the amphitheater operations will increase traffic demands on Yosemite Boulevard and Geer Road - Albers Road on selected weekdays. Therefore, it is concluded that the amphitheater project will potentially impact operations on the local street system. Similar to the mitigation measure recommended for the approved 2008 Project Development Plan, the project shall contribute it's fair-share towards the cost of future regional circulation system improvements. Contribution to the RTIF program shall serve as mitigation to reduce the potential impact to a level of "less than significant." The proposed mitigation is consistent with the mitigations approved for the 2008 Project Development Plan (analyzed in the 2007 TIA).

At the applicant's request, new 24-hour traffic count data was collected on Weyer Road. The existing conditions analysis documented that average daily traffic volumes on Weyer Road south of Yosemite Boulevard (300 ADT) are well within the acceptable capacity for a rural roadway (<1,200 ADT). A review of the local roadway system was conducted to address concerns raised by local residences regarding the use of Weyer Road for access to and/or from the amphitheater site. Weyer Road is a narrow rural 2-lane rural roadway with no shoulders or lighting. There are 15 mph curve advisory signs posted on Weyer Road (for southbound traffic) and Jantzen Road (for eastbound traffic). Due to the populations of Waterford, Hickman and La Grange, it is anticipated that only 15-20% of the amphitheater traffic would have an origin or destination east of Geer Road - Albers Road. A review of the potential alternative route between Yosemite Boulevard and the amphitheater site indicates that using Weyer Road and Jantzen Road would be at least 3 times the distance as compared to using Yosemite Boulevard west of Weyer Road and Geer Road south of Yosemite Boulevard (3,200' vs. 10,500'). In addition, since the traffic signal

at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection operates well within acceptable limits it is concluded that little-to-no traffic would use Weyer Road and Jantzen Road route for access to and/or from the amphitheater site. Therefore, the amphitheater traffic will not impact operations along Weyer Road.

The Synchro 8 software was again used to evaluate the peak hour traffic operations at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. The analysis was concluded for the "existing traffic plus the project site traffic (existing and approved uses)" and the "existing traffic plus the project site traffic (existing and approved uses) plus the amphitheater traffic" scenarios. The "existing traffic plus the project site traffic (existing and approved uses)" scenario represents the base-line conditions for the analysis of potential impacts associated with the amphitheater project. The results of the intersection LOS analysis are presented in Table 7. Copies of the LOS worksheets are included in the Appendix Material.

Table 7 - Existing Plus Project Site Uses Plus Amphitheater
Intersection LOS Analysis

Study Scenario	Average Vehicle Delay - LOS Value		
	Existing Conditions	Existing Plus Approved Uses Conditions	Existing Plus Approved Uses Plus Amphitheater Conditions
Thursday:			
PM Peak Hour -	21.9 - C	24.2 - C	24.8 - C
10:00-11:00 PM -	16.6 - B	20.2 - C	17.9 - B
Friday:			
PM Peak Hour -	21.7 - C	23.2 - C	25.4 - C
10:00-11:00 PM -	18.2 - B	19.7 - B	18.1 - B
Saturday:			
Mid-Day Peak Hour -	19.4 - B	21.1 - C	22.3 - C
10:00-11:00 PM -	15.3 - B	17.0 - B	17.8 - B

The data in Table 7 indicates that average vehicle delays during the six (6) study periods will remain within acceptable limits as defined by Stanislaus County (LOS C or better) and Caltrans (LOS C/D). Therefore, it is concluded that the amphitheater project will not significantly impact peak period operations at the Yosemite Boulevard (SR 132) / Geer Road intersection.

Amphitheater Site Access

As previously described, initial access for the amphitheater traffic will be provided via two (2) driveways on Yosemite Boulevard ("A" Drive and "B" Drive) and one (1) driveway on Geer Road ("D" Drive). The total event traffic volumes on Figure 6 illustrate the turning movements at each driveway. It is again noted that the inbound and outbound trips will not occur within the same 2-3 hour period. The evaluation of site access includes a review of sight distance along Yosemite

Boulevard (SR 132) and Geer Road. In addition, a micro-simulation model was developed using the Synchro / SimTraffic 8 software to identify any potential access issues.

A review of sight distance was conducted using criteria in the Caltrans Highway Design Manual (HDM, Chapters 200 and 400). Stopping sight distance is the minimum distance required by a driver to bring a vehicle to a complete stop after an object has become visible on the roadway. Corner sight distance is the minimum time required for a waiting vehicle to either cross all lanes of through traffic, or cross the near lanes and turn left or right, without requiring through traffic to radically alter their speed. Caltrans uses a minimum time of 7.5 seconds to evaluate the adequacy of corner sight distance for highway and public road intersections (Table 405.1A). The Caltrans HDM states that at private road intersections and rural driveways the minimum corner sight distance shall be equal to the stopping sight distance (Topic 405.1-2c).

Yosemite Boulevard (SR 132) and Geer Road have a relative straight horizontal and level vertical alignment adjacent to the project site. Stopping sight distance for traffic on both roadways was measured by placing a portable delineator near the shoulder line stripe. The delineator was visible from at least 750' in both directions on Yosemite Boulevard (SR 132) and Geer Road. As documented under existing conditions, eastbound speeds on Yosemite Boulevard (SR 132) and northbound speeds on Geer Road were approximately 56-58 mph. Westbound speeds on Yosemite Boulevard (SR 132) and southbound speeds on Geer Road were slightly less since vehicles were coming from the signalized Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. Therefore, it is concluded that there is adequate stopping sight distance for vehicles traveling on Yosemite Boulevard (SR 132) and Geer Road approaching the project site driveway locations.

Corner sight distance at the project driveways was measured using a +/-15' setback from the shoulder line striping on both Yosemite Boulevard (SR 132) and Geer Road. A sampling of corner sight distance at each driveway location indicated that there was at least twice the minimum as required by Caltrans looking in both directions. Therefore, it is concluded that there is adequate corner sight distance for vehicles exiting the project site driveway locations.

The Synchro / SimTraffic 8 software is an industry standard that can be used to simulate peak period operations. SimTraffic uses the Synchro 8 output data to produce a micro-simulation model, which is based on the actual volumes, signal phasing and timing. The SimTraffic model can demonstrate how an intersection or network operates. Though the SimTraffic software may have some limitations, it is a good tool for presenting visual data to decision makers. The SimTraffic model was developed for the local roadway network using the volume data on Figure 7 (Friday PM peak hour). Again, this period represents a worst case scenario assuming that traffic arriving for an amphitheater event could coincide with the peak hour period on the adjacent street system (between 5:00-6:00 PM). It should be noted that the amphitheater TDM measures are designed to avoid generating any guest traffic during typical weekday or weekend day peak periods.

The network developed for the SimTraffic model was based on aerial photography (Google Earth), which represents that the actual spacing of intersections and driveways. The actual turn lane and transition taper lengths at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection were input in the SimTraffic Model. As described under the existing conditions, there are two-to-one lane transition tapers for westbound traffic on Yosemite Boulevard (SR 132) and northbound traffic on Geer Road. Near the project driveways the pavement widths on Yosemite Boulevard (westbound) and Geer Road (northbound) exceed 24'. Therefore, short turn lanes were modeled for the left turn movements from both roadways. Though exclusive left turn lanes are not striped at the driveway locations the roadway widths (+24') will function as there are approach 2 lanes.

The SimTraffic models were developed for the Friday PM peak hour and 10:00-11:00 PM periods. Videos of the peak period operations were recorded using a faster play back setting (8x) to enable viewing of the entire hour in a relatively short period (7-8 minutes). A copy of the SimTraffic model video files is provided on a DVD included with the Attachment Material. The SimTraffic model video files can also be downloaded from the following Dropbox link (The Fruit Yard folder):

https://www.dropbox.com/home/The%20Fruit%20Yard

The SimTraffic model videos demonstrate that the peak period operations associated with an amphitheater event will not significantly impact operations on Yosemite Boulevard (SR 132) or Geer Road, or at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. During arrival periods westbound vehicle queues at the Yosemite Boulevard (SR 132) driveways were not observed backing up to the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. In addition, no significant queuing was observed on either Yosemite Boulevard (SR 132) or Geer Road. A review of the video for the 10:00-11:00 PM period indicated that vehicles could exit the site at a rate of approximately 20-25 vehicles per minute. This would require at least 45 minutes for all vehicles to exit the site. It should be noted that the SimTraffic model assumes that vehicles will be able to enter and exit the site in an efficient manner. Therefore, it will be imperative that on-site parking operations be conducted effectively in order to avoid impacting operations on Yosemite Boulevard (SR 132) and Geer Road. In addition, the appropriate TDM measures should be implemented to avoid generating any guests traffic during peak periods on the adjacent street system (between 5:00-6:00 PM on a weekday and 1:00-3:00 PM on a weekend day).

4.0 SUMMARY

A General Plan Amendment and Rezoning Application were approved for the project site in 2008. The approved development plan included a relocation of existing facilities and the construction of various new commercial related uses. The proposed project site modification includes the addition of an outside amphitheater within the existing park site. The amphitheater will host events or concerts, and have a capacity to accommodate a maximum of 3,500 guests. The majority of events will occur on weekend or Holidays, between May and September. Events on weekdays will begin after 7:00 PM and end by 10:30 PM. Parking for amphitheater guests will be accommodated on-site. Initial access will be provided via two (2) driveways on Yosemite Boulevard ("A" Drive and "B" Drive) and one (1) driveway on Geer Road ("D" Drive).

The trip generation estimates for the existing and approved project site uses was based on data published in the ITE Trip Generation Manual and a Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region. The existing site uses (existing and approved) will generate a total of approximately 5,100-5,200 vehicle trips on an average weekday and weekend day. The existing and approved uses are estimated to generate approximately 540 trips during an average weekday PM peak hour and 588 trips during a typical Saturday mid-day peak hour. During the 10:00-11:00 PM peak period, the existing and approved site uses are estimated to generate 264 trips on a weekday and 207 trips on a weekend day. The project site trip generation estimates for the "Approved Project Site Uses" are slightly higher than the trip generation estimates analyzed in the 2007 TIA.

A capacity size event (or concert) at the amphitheater is estimated to generate approximately 2,340 vehicle trips (approximately 1,170 inbound and 1,170 outbound vehicles). Inbound trips will occur prior to (before) an event and outbound trips will occur after an event has concluded. Inbound and outbound vehicle trips will not occur within the same 2-3 hour period. Transportation Demand Management (TDM) strategies will be used in the scheduling of events as required to avoid generating any guest traffic during typical weekday and weekend day peak periods. In addition, no activities will occur at the new banquet center on the same day as an event at the amphitheater.

An evaluation of existing conditions was based on new traffic count data, and data obtained from the Caltrans and Stanislaus County. New traffic count data was also collected on Weyer Road. The 2007 Traffic Impact Analysis (TIA) prepared for the approved 2008 Project Development Plan indicated that existing daily volumes on Yosemite Boulevard (adjacent to the project site) were in "level of service" (LOS) C range, while daily volumes on Geer Road were in the LOS E range. An analysis of roadway segment LOS was also conducted using the new hourly volumes and the current methodology used in the County's General Plan Circulation Element. The analysis concluded that existing segment volumes on Yosemite Boulevard (SR 132) are within acceptable limits as defined by Caltrans (LOS D or better). However, hourly volumes on the 2-lane segments of Geer Road and Albers Road exceed the County's defined threshold (LOS C or better). It is noted that the hourly volumes on the 4-lane segments of Geer Road and Albers Road are within

the County's LOS C standard. Existing average daily traffic volumes on Weyer Road south of Yosemite Boulevard (300 ADT) are well within acceptable limits for a rural residential roadway.

An evaluation of existing peak period operations at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection was conducted using the methodologies outlined in the 2010 Highway Capacity Manual (HCM). Since an event at the amphitheater would typically end after 10:00 PM the analysis of existing conditions also includes an evaluation of the 10:00-11:00 PM period. The intersection LOS analysis indicates that average vehicle delays during the six (6) study periods are within acceptable limits as defined by the County (LOS C or better) and Caltrans (LOS C/D). The existing conditions analysis is consistent with the analysis presented in the 2007 TIA.

Similar to the existing conditions analysis, the roadway segment and intersection LOS analysis was concluded for the "existing traffic plus project site traffic (existing and approved uses)" and "existing traffic plus project site traffic (existing and approved uses) plus amphitheater traffic" scenarios. The roadway segment analysis concluded that daily and hourly traffic volumes on the 2-lane segments of Geer Road and Albers Road will continue to exceed the County's minimum acceptable threshold (LOS C or better). However, daily and directional hourly volumes on Yosemite Boulevard (SR 132) will remain within acceptable limits as defined by Caltrans. The analysis is consistent with the analysis presented in the 2007 TIA.

Information in the County's General Plan Circulation Element and StanCOG's RTP has identified the future need to widen both Yosemite Boulevard (4-lane) and Geer Road - Albers Road (6-lane) to expressway standards. The future widening improvements have been incorporated into the RTP and will be partially funded by developer contributions to the County's Regional Transportation Impact Fee (RTIF) program. The analysis in the 2007 TIA identified the potential impacts to existing facilities that would be associated with the Project Development Plan. The project's contribution to the RTIF program served as mitigation to reduce the potential impacts to a level of "less than significant."

The proposed amphitheater will host events or concerts, with a maximum seating capacity for 3,500 guests. The majority of events will occur on a weekend or Holiday. The amphitheater operations will increase traffic demands on Yosemite Boulevard (SR 132), Geer Road and Albers Road on selected weekdays. Therefore, the amphitheater will potentially impact operations on the local street system. Similar to the 2008 Project Development Plan mitigation, the project shall contribute it's fair-share towards the cost of future regional circulation system improvements. Contribution to the County's RTIF program shall serve as mitigation to reduce the potential impact to a level of "less than significant." The proposed mitigation is consistent with the mitigations approved for the 2008 Project Development Plan (analyzed in the 2007 TIA).

A review of the local roadway system was conducted to address concerns raised by local residences regarding the use of Weyer Road for access to and/or from the amphitheater site. Weyer Road is a narrow rural 2-lane rural roadway with no shoulders or lighting. There are 15 mph curve advisory

signs posted on Weyer Road (for southbound traffic) and Jantzen Road (for eastbound traffic). It is anticipated that only 15-20% of the amphitheater traffic would have an origin or destination east of Geer Road - Albers Road. A review of the potential alternative route between Yosemite Boulevard and the amphitheater site indicates that using Weyer Road and Jantzen Road would be at least 3 times the distance as compared to using Yosemite Boulevard west of Weyer Road and Geer Road south of Yosemite Boulevard. In addition, since the traffic signal at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection operates well within acceptable limits it is concluded that little-to-no traffic would use Weyer Road and Jantzen Road route for access to and/or from the amphitheater site. Therefore, the amphitheater traffic will not impact operations along Weyer Road.

The intersection LOS analysis was also concluded for the "existing traffic plus project site traffic (existing and approved uses)" and "existing traffic plus project site traffic (existing and approved uses) plus amphitheater traffic" scenarios. The analysis concluded that average vehicle delays during the six (6) study periods will remain within acceptable limits as defined by Stanislaus County (LOS C or better) and Caltrans (LOS C/D). Therefore, it is concluded that the amphitheater project will not significantly impact peak period operations at the Yosemite Boulevard (SR 132) / Geer Road intersection.

The evaluation of site access includes a review of sight distance along Yosemite Boulevard (SR 132) and Geer Road. A micro-simulation model was also developed using the Synchro / SimTraffic 8 software to identify any potential access issues. The evaluation of sight distance concluded that there is adequate stopping sight distance for vehicles traveling on Yosemite Boulevard (SR 132) and Geer Road approaching the project site driveway locations. In addition, the analysis concluded that there is also adequate corner sight distance for vehicles exiting the project site driveway locations.

The SimTraffic micro-simulation models were developed for the Friday PM peak hour and 10:00-11:00 PM periods. The SimTraffic models demonstrate that the peak period operations associated with an amphitheater event will not significantly impact operations on Yosemite Boulevard (SR 132) or Geer Road, or at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. During arrival periods westbound vehicle queues at the Yosemite Boulevard (SR 132) driveways were not observed backing up to the Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. No significant queuing was observed on either Yosemite Boulevard (SR 132) or Geer Road. It should be noted that the SimTraffic model assumes that vehicles will be able to enter and exit the site in an efficient manner. Therefore, it will be imperative that on-site parking operations be conducted effectively in order to avoid impacting operations on Yosemite Boulevard (SR 132) and Geer Road. In addition, the appropriate TDM measures should be implemented to avoid generating any guests traffic during peak periods on the adjacent street system (between 5:00-6:00 PM on a weekday and 1:00-3:00 PM on a weekend day).

END

- Supplemental -
Traffic Impact Analysis

- APPENDIX MATERIAL -

THE FRUIT YARD PROJECT
- Stanislaus County -

CONTENTS:

- Summary of Traffic Count Data
- Level of Service (LOS) Descriptions
- Level of Service (LOS) to Vehicle Delays Relationship Data
- Level of Service (LOS) Worksheets

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The Fruit Yard Project; Stanislaus County, California

Summary of ITM Count Data at Yosemite Blvd. (SR 132) / Geer Rd. - Albers Rd. - Dec. 10th (Thursday), 11th (Friday) and 12th (Saturday)

	Afternoon Peak Hour		Evening Period		% of
	Time	Volume	Time	Volume	PM Pk.
Dec. 10th (Thursday) -	4:30-5:30 PM	1,866	10:00-11:00 PM	326	17%
Dec. 11th (Friday) -	4:45-5:45 PM	1,953	10:00-11:00 PM	517	26%
Dec. 12th (Saturday) -	2:00-3:00 PM	1,316	10:00-11:00 PM	612	47%

Summary of 7-Day Traffic Count Data (Dec. 9th - 15th , 2015)

Weyer Road, South of Yosemite Boulevard (SR 132):

Date		Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
		Dec. 13th	Dec. 14th	Dec. 15th	Dec. 9th	Dec. 10th	Dec. 11th	Dec. 12th
ADT		**204**	**303**	**279**	**299**	**301**	**273**	**213**
24 Hr. Vol.	NB	97	138	122	136	141	120	95
	SB	107	165	157	163	160	153	118

November 2013 -

3-Day Avg. Weekday (Tuesday, Wednesday & Thursday): **293** ADT

5-Day Avg. Weekday (Monday - Friday): **291** ADT

7-Day Average (Sunday - Saturday): **267** ADT

Saturday: 73% 5-Day Weekday Average

Sunday: 70% 5-Day Weekday Average

ALL TRAFFIC DATA

City of Modesto
All Vehicles & Uturns On Unshifted
Nothing On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 15-7942-001 Albers Road/Geer Road & Yosemite Boulevard
Date : 12/10/2015

Unshifted Count = All Vehicles & Uturns

	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
16:00	28	99	10	0	137	43	53	16	0	112	6	83	41	0	130	17	56	13	0	86	465	0
16:15	18	113	12	0	143	26	36	7	0	69	6	94	53	0	153	20	71	14	0	105	470	0
16:30	23	84	13	0	120	28	49	18	0	95	3	96	38	0	137	12	64	9	0	85	437	0
16:45	24	117	15	0	156	35	27	14	0	76	8	99	30	0	137	14	85	8	0	107	476	0
Total	93	413	50	0	556	132	165	55	0	352	23	372	162	0	557	63	276	44	0	383	1848	0
17:00	23	91	20	0	134	30	46	11	1	88	5	101	38	0	144	17	70	14	0	101	467	1
17:15	27	114	8	0	149	22	38	18	0	78	7	115	36	0	158	20	70	11	0	101	486	0
17:30	30	87	7	0	124	38	42	15	0	95	8	80	43	0	131	17	52	16	0	85	435	0
17:45	22	79	14	0	115	24	27	10	0	61	6	70	37	0	113	13	38	8	0	59	348	0
Total	102	371	49	0	522	114	153	54	1	322	26	366	154	0	546	67	230	49	0	346	1736	1
22:00	7	22	1	0	30	6	4	5	0	15	1	13	15	0	29	2	14	0	0	16	90	0
22:15	5	12	1	0	18	4	8	1	0	13	0	18	11	0	29	2	11	0	0	13	73	0
22:30	6	22	1	0	29	3	10	1	0	14	1	17	8	0	26	4	12	0	0	16	85	0
22:45	6	18	1	0	25	4	7	3	0	14	1	14	11	0	26	2	11	0	0	13	78	0
Total	24	74	4	0	102	17	29	10	0	56	3	62	45	0	110	10	48	0	0	58	326	0
Grand Total	219	858	103	0	1180	263	347	119	1	730	52	800	361	0	1213	140	554	93	0	787	3910	1
Apprch %	18.6%	72.7%	8.7%	0.0%		36.0%	47.5%	16.3%	0.1%		4.3%	66.0%	29.8%	0.0%		17.8%	70.4%	11.8%	0.0%			
Total %	5.6%	21.9%	2.6%	0.0%	30.2%	6.7%	8.9%	3.0%	0.0%	18.7%	1.3%	20.5%	9.2%	0.0%	31.0%	3.6%	14.2%	2.4%	0.0%	20.1%	100.0%	

NOON PEAK	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	23	84	13	0	120	28	49	18	0	95	3	96	38	0	137	12	64	9	0	85	437
16:45	24	117	15	0	156	35	27	14	0	76	8	99	30	0	137	14	85	8	0	107	476
17:00	23	91	20	0	134	30	46	11	1	88	5	101	38	0	144	17	70	14	0	101	467
17:15	27	114	8	0	149	22	38	18	0	78	7	115	36	0	158	20	70	11	0	101	486
Total Volume	97	406	56	0	559	115	160	61	1	337	23	411	142	0	576	63	289	42	0	394	1866
% App Total	17.4%	72.6%	10.0%	0.0%		34.1%	47.5%	18.1%	0.3%		4.0%	71.4%	24.7%	0.0%		16.0%	73.4%	10.7%	0.0%		
PHF	.898	.868	.700	.000	.896	.821	.816	.847	.250	.887	.719	.893	.934	.000	.911	.788	.850	.750	.000	.921	.960

PM PEAK HOUR	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 22:00 to 23:00																					
Peak Hour For Entire Intersection Begins at 22:00																					
22:00	7	22	1	0	30	6	4	5	0	15	1	13	15	0	29	2	14	0	0	16	90
22:15	5	12	1	0	18	4	8	1	0	13	0	18	11	0	29	2	11	0	0	13	73
22:30	6	22	1	0	29	3	10	1	0	14	1	17	8	0	26	4	12	0	0	16	85
22:45	6	18	1	0	25	4	7	3	0	14	1	14	11	0	26	2	11	0	0	13	78
Total Volume	24	74	4	0	102	17	29	10	0	56	3	62	45	0	110	10	48	0	0	58	326
% App Total	23.5%	72.5%	3.9%	0.0%		30.4%	51.8%	17.9%	0.0%		2.7%	56.4%	40.9%	0.0%		17.2%	82.8%	0.0%	0.0%		
PHF	.857	.841	1.000	.000	.850	.708	.725	.500	.000	.933	.750	.861	.750	.000	.948	.625	.857	.000	.000	.906	.906

ALL TRAFFIC DATA

City of Modesto
All Vehicles & Uturns On Unshifted
Nothing On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 15-7942-001 Albers Road/Geer Road & Yosemite Boulevard
Date : 12/11/2015

Unshifted Count = All Vehicles & Uturns

	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
16:00	17	101	8	0	126	41	45	15	0	101	4	83	45	0	132	10	63	11	0	84	443	0
16:15	18	117	25	0	160	40	57	15	0	112	9	104	38	0	151	19	64	5	0	88	511	0
16:30	24	94	10	0	128	36	42	16	0	94	5	95	30	0	130	23	53	9	0	85	437	0
16:45	31	116	22	0	169	35	46	14	0	95	4	99	25	0	128	14	66	10	0	90	482	0
Total	90	428	65	0	583	152	190	60	0	402	22	381	138	0	541	66	246	35	0	347	1873	0
17:00	26	130	9	0	165	43	50	17	0	110	10	81	52	0	143	21	57	9	0	87	505	0
17:15	22	97	9	0	128	27	45	16	0	88	6	131	37	0	174	14	66	17	0	97	487	0
17:30	22	112	13	0	147	40	43	17	0	100	5	102	40	0	147	11	65	9	0	85	479	0
17:45	18	94	14	0	126	44	45	11	0	100	8	102	44	0	154	10	58	8	0	76	456	0
Total	88	433	45	0	566	154	183	61	0	398	29	416	173	0	618	56	246	43	0	345	1927	0
22:00	6	29	1	0	36	9	6	1	0	16	4	39	20	0	63	6	22	0	0	28	143	0
22:15	11	33	1	0	45	9	13	3	0	25	3	19	18	0	40	3	19	2	0	24	134	0
22:30	3	26	0	0	29	11	8	4	0	23	6	30	9	0	45	4	19	3	0	26	123	0
22:45	12	19	3	0	34	6	16	3	0	25	2	18	16	0	36	4	18	0	0	22	117	0
Total	32	107	5	0	144	35	43	11	0	89	15	106	63	0	184	17	78	5	0	100	517	0
Grand Total	210	968	115	0	1293	341	416	132	0	889	66	903	374	0	1343	139	570	83	0	792	4317	0
Apprch %	16.2%	74.9%	8.9%	0.0%		38.4%	46.8%	14.8%	0.0%		4.9%	67.2%	27.8%	0.0%		17.6%	72.0%	10.5%	0.0%			
Total %	4.9%	22.4%	2.7%	0.0%	30.0%	7.9%	9.6%	3.1%	0.0%	20.6%	1.5%	20.9%	8.7%	0.0%	31.1%	3.2%	13.2%	1.9%	0.0%	18.3%	100.0%	

NOON PEAK	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	31	116	22	0	169	35	46	14	0	95	4	99	25	0	128	14	66	10	0	90	482
17:00	26	130	9	0	165	43	50	17	0	110	10	81	52	0	143	21	57	9	0	87	505
17:15	22	97	9	0	128	27	45	16	0	88	6	131	37	0	174	14	66	17	0	97	487
17:30	22	112	13	0	147	40	43	17	0	100	5	102	40	0	147	11	65	9	0	85	479
Total Volume	101	455	53	0	609	145	184	64	0	393	25	413	154	0	592	60	254	45	0	359	1953
% App Total	16.6%	74.7%	8.7%	0.0%		36.9%	46.8%	16.3%	0.0%		4.2%	69.8%	26.0%	0.0%		16.7%	70.8%	12.5%	0.0%		
PHF	.815	.875	.602	.000	.901	.843	.920	.941	.000	.893	.625	.788	.740	.000	.851	.714	.962	.662	.000	.925	.967

PM PEAK HOUR	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 22:00 to 23:00																					
Peak Hour For Entire Intersection Begins at 22:00																					
22:00	6	29	1	0	36	9	6	1	0	16	4	39	20	0	63	6	22	0	0	28	143
22:15	11	33	1	0	45	9	13	3	0	25	3	19	18	0	40	3	19	2	0	24	134
22:30	3	26	0	0	29	11	8	4	0	23	6	30	9	0	45	4	19	3	0	26	123
22:45	12	19	3	0	34	6	16	3	0	25	2	18	16	0	36	4	18	0	0	22	117
Total Volume	32	107	5	0	144	35	43	11	0	89	15	106	63	0	184	17	78	5	0	100	517
% App Total	22.2%	74.3%	3.5%	0.0%		39.3%	48.3%	12.4%	0.0%		8.2%	57.6%	34.2%	0.0%		17.0%	78.0%	5.0%	0.0%		
PHF	.667	.811	.417	.000	.800	.795	.672	.688	.000	.890	.625	.679	.788	.000	.730	.708	.886	.417	.000	.893	.904

ALL TRAFFIC DATA

City of Modesto
All Vehicles & Uturns On Unshifted
Nothing On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 15-7942-001 Albers Road/Geer Road & Yosemite Boulevard
Date : 12/12/2015

Unshifted Count = All Vehicles & Uturns

	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
13:00	12	57	11	0	80	33	37	11	0	81	2	80	43	0	125	16	35	9	0	60	346	0
13:15	18	66	11	0	95	26	46	15	0	87	4	56	35	0	95	10	47	8	0	65	342	0
13:30	11	65	9	0	85	25	35	10	0	70	5	74	42	0	121	7	41	7	0	55	331	0
13:45	18	62	6	0	86	26	30	7	0	63	9	53	35	0	97	9	32	4	0	45	291	0
Total	59	250	37	0	346	110	148	43	0	301	20	263	155	0	438	42	155	28	0	225	1310	0
14:00	11	73	16	0	100	21	34	14	0	69	4	56	30	0	90	9	41	6	0	56	315	0
14:15	24	56	13	0	93	30	40	10	0	80	5	76	40	0	121	8	41	7	0	56	350	0
14:30	18	52	7	0	77	36	29	12	0	77	5	54	37	0	96	14	47	6	0	67	317	0
14:45	19	57	13	0	89	31	34	14	0	79	5	72	34	0	111	3	48	4	0	55	334	0
Total	72	238	49	0	359	118	137	50	0	305	19	258	141	0	418	34	177	23	0	234	1316	0
22:00	4	31	2	0	37	11	11	5	0	27	2	39	8	0	49	4	21	4	0	29	142	0
22:15	5	45	5	0	55	14	14	4	0	32	3	30	17	0	50	4	17	3	0	24	161	0
22:30	12	49	5	0	66	7	12	3	0	22	4	36	14	0	54	4	17	1	0	22	164	0
22:45	3	38	4	0	45	12	12	1	0	25	1	40	15	0	56	3	13	3	0	19	145	0
Total	24	163	16	0	203	44	49	13	0	106	10	145	54	0	209	15	68	11	0	94	612	0
Grand Total	155	651	102	0	908	272	334	106	0	712	49	666	350	0	1065	91	400	62	0	553	3238	0
Apprch %	17.1%	71.7%	11.2%	0.0%		38.2%	46.9%	14.9%	0.0%		4.6%	62.5%	32.9%	0.0%		16.5%	72.3%	11.2%	0.0%			
Total %	4.8%	20.1%	3.2%	0.0%	28.0%	8.4%	10.3%	3.3%	0.0%	22.0%	1.5%	20.6%	10.8%	0.0%	32.9%	2.8%	12.4%	1.9%	0.0%	17.1%	100.0%	

NOON PEAK	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 14:00 to 15:00																					
Peak Hour For Entire Intersection Begins at 14:00																					
14:00	11	73	16	0	100	21	34	14	0	69	4	56	30	0	90	9	41	6	0	56	315
14:15	24	56	13	0	93	30	40	10	0	80	5	76	40	0	121	8	41	7	0	56	350
14:30	18	52	7	0	77	36	29	12	0	77	5	54	37	0	96	14	47	6	0	67	317
14:45	19	57	13	0	89	31	34	14	0	79	5	72	34	0	111	3	48	4	0	55	334
Total Volume	72	238	49	0	359	118	137	50	0	305	19	258	141	0	418	34	177	23	0	234	1316
% App Total	20.1%	66.3%	13.6%	0.0%		38.7%	44.9%	16.4%	0.0%		4.5%	61.7%	33.7%	0.0%		14.5%	75.6%	9.8%	0.0%		
PHF	.750	.815	.766	.000	.898	.819	.856	.893	.000	.953	.950	.849	.881	.000	.864	.607	.922	.821	.000	.873	.940

PM PEAK HOUR	Albers Road/Geer Road Southbound					Yosemite Boulevard Westbound					Albers Road/Geer Road Northbound					Yosemite Boulevard Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 22:00 to 23:00																					
Peak Hour For Entire Intersection Begins at 22:00																					
22:00	4	31	2	0	37	11	11	5	0	27	2	39	8	0	49	4	21	4	0	29	142
22:15	5	45	5	0	55	14	14	4	0	32	3	30	17	0	50	4	17	3	0	24	161
22:30	12	49	5	0	66	7	12	3	0	22	4	36	14	0	54	4	17	1	0	22	164
22:45	3	38	4	0	45	12	12	1	0	25	1	40	15	0	56	3	13	3	0	19	145
Total Volume	24	163	16	0	203	44	49	13	0	106	10	145	54	0	209	15	68	11	0	94	612
% App Total	11.8%	80.3%	7.9%	0.0%		41.5%	46.2%	12.3%	0.0%		4.8%	69.4%	25.8%	0.0%		16.0%	72.3%	11.7%	0.0%		
PHF	.500	.832	.800	.000	.769	.786	.875	.650	.000	.828	.625	.906	.794	.000	.933	.938	.810	.688	.000	.810	.933

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Wednesday
Date: 12/9/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	136	163	0	0	299

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	1		5		0	0	6	
00:15	0		0		0	0	0		12:15	4		3		0	0	7	
00:30	0		0		0	0	0		12:30	5		9		0	0	14	
00:45	0		0		0	0	0		12:45	1	11	2	19	0	0	3	30
01:00	0		0		0	0	0		13:00	1		0		0	0	1	
01:15	0		0		0	0	0		13:15	3		4		0	0	7	
01:30	0		0		0	0	0		13:30	0		2		0	0	2	
01:45	0		0		0	0	0		13:45	4	8	5	11	0	0	9	19
02:00	0		0		0	0	0		14:00	1		2		0	0	3	
02:15	0		0		0	0	0		14:15	3		7		0	0	10	
02:30	0		0		0	0	0		14:30	5		1		0	0	6	
02:45	0		0		0	0	0		14:45	3	12	5	15	0	0	8	27
03:00	0		0		0	0	0		15:00	5		3		0	0	8	
03:15	1		0		0	0	1		15:15	1		2		0	0	3	
03:30	0		0		0	0	0		15:30	3		5		0	0	8	
03:45	1	2	1	1	0	0	2	3	15:45	2	11	4	14	0	0	6	25
04:00	0		0		0	0	0		16:00	2		1		0	0	3	
04:15	0		0		0	0	0		16:15	4		2		0	0	6	
04:30	0		1		0	0	1		16:30	3		3		0	0	6	
04:45	0		0	1	0	0	0	1	16:45	4	13	2	8	0	0	6	21
05:00	0		0		0	0	0		17:00	6		5		0	0	11	
05:15	0		2		0	0	2		17:15	2		6		0	0	8	
05:30	1		1		0	0	2		17:30	3		0		0	0	3	
05:45	0	1	0	3	0	0	0	4	17:45	1	12	0	11	0	0	1	23
06:00	0		0		0	0	0		18:00	3		4		0	0	7	
06:15	2		3		0	0	5		18:15	2		2		0	0	4	
06:30	0		1		0	0	1		18:30	3		2		0	0	5	
06:45	1	3	0	4	0	0	1	7	18:45	2	10	2	10	0	0	4	20
07:00	0		3		0	0	3		19:00	4		0		0	0	4	
07:15	0		5		0	0	5		19:15	1		3		0	0	4	
07:30	3		3		0	0	6		19:30	3		3		0	0	6	
07:45	2	5	4	15	0	0	6	20	19:45	1	9	0	6	0	0	1	15
08:00	1		4		0	0	5		20:00	0		4		0	0	4	
08:15	3		2		0	0	5		20:15	1		0		0	0	1	
08:30	2		4		0	0	6		20:30	0		1		0	0	1	
08:45	0	6	1	11	0	0	1	17	20:45	1	2	0	5	0	0	1	7
09:00	1		3		0	0	4		21:00	2		1		0	0	3	
09:15	2		1		0	0	3		21:15	2		0		0	0	2	
09:30	2		3		0	0	5		21:30	1		0		0	0	1	
09:45	1	6	2	9	0	0	3	15	21:45	1	6	0	1	0	0	1	7
10:00	5		0		0	0	5		22:00	0		0		0	0	0	
10:15	2		3		0	0	5		22:15	0		1		0	0	1	
10:30	1		3		0	0	4		22:30	1		0		0	0	1	
10:45	3	11	2	8	0	0	5	19	22:45	0	1	1	2	0	0	1	3
11:00	2		3		0	0	5		23:00	0		0		0	0	0	
11:15	3		4		0	0	7		23:15	0		0		0	0	0	
11:30	0		0		0	0	0		23:30	0		0		0	0	0	
11:45	2	7	2	9	0	0	4	16	23:45	0		0		0	0	0	
TOTALS		41		61				102	TOTALS		95		102				197
SPLIT %		40.2%		59.8%				34.1%	SPLIT %		48.2%		51.8%				65.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	136	163	0	0	299

AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	16:15	12:00			14:15
AM Pk Volume	12	19			31	PM Pk Volume	17	19			32
Pk Hr Factor	0.600	0.528			0.554	Pk Hr Factor	0.708	0.528			0.800
7 - 9 Volume	11	26	0	0	37	4 - 6 Volume	25	19	0	0	44
7 - 9 Peak Hour	07:30	07:15			07:15	4 - 6 Peak Hour	16:15	16:30			16:30
7 - 9 Pk Volume	9	16	0	0	22	4 - 6 Pk Volume	17	16	0	0	31
Pk Hr Factor	0.750	0.800	0.000	0.000	0.917	Pk Hr Factor	0.708	0.667	0.000	0.000	0.705

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Thursday
Date: 12/10/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	141	160	0	0	301

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	4		1		0	0	5	
00:15	0		0		0	0	0		12:15	3		1		0	0	4	
00:30	0		0		0	0	0		12:30	1		5		0	0	6	
00:45	0		0		0	0	0		12:45	2	10	3	10	0	0	5	20
01:00	0		0		0	0	0		13:00	2		3		0	0	5	
01:15	0		0		0	0	0		13:15	1		2		0	0	3	
01:30	0		0		0	0	0		13:30	2		1		0	0	3	
01:45	0		0		0	0	0		13:45	1	6	2	8	0	0	3	14
02:00	0		1		0	0	1		14:00	11		5		0	0	16	
02:15	2		0		0	0	2		14:15	7		4		0	0	11	
02:30	0		1		0	0	1		14:30	5		3		0	0	8	
02:45	0	2	0	2	0	0	0	4	14:45	4	27	5	17	0	0	9	44
03:00	0		0		0	0	0		15:00	7		5		0	0	12	
03:15	1		0		0	0	1		15:15	2		2		0	0	4	
03:30	0		0		0	0	0		15:30	1		4		0	0	5	
03:45	0	1	0		0	0	0	1	15:45	2	12	2	13	0	0	4	25
04:00	1		0		0	0	1		16:00	2		4		0	0	6	
04:15	0		0		0	0	0		16:15	2		1		0	0	3	
04:30	0		0		0	0	0		16:30	2		5		0	0	7	
04:45	0	1	0		0	0	0	1	16:45	3	9	3	13	0	0	6	22
05:00	0		2		0	0	2		17:00	3		4		0	0	7	
05:15	0		0		0	0	0		17:15	2		2		0	0	4	
05:30	0		2		0	0	2		17:30	2		3		0	0	5	
05:45	1	1	0	4	0	0	1	5	17:45	2	9	1	10	0	0	3	19
06:00	0		1		0	0	1		18:00	1		5		0	0	6	
06:15	1		2		0	0	3		18:15	2		0		0	0	2	
06:30	0		2		0	0	2		18:30	4		1		0	0	5	
06:45	1	2	2	7	0	0	3	9	18:45	4	11	4	10	0	0	8	21
07:00	0		2		0	0	2		19:00	1		1		0	0	2	
07:15	2		3		0	0	5		19:15	3		1		0	0	4	
07:30	2		4		0	0	6		19:30	1		3		0	0	4	
07:45	4	8	8	17	0	0	12	25	19:45	2	7	1	6	0	0	3	13
08:00	3		3		0	0	6		20:00	3		3		0	0	6	
08:15	0		2		0	0	2		20:15	0		3		0	0	3	
08:30	0		1		0	0	1		20:30	1		0		0	0	1	
08:45	0	3	1	7	0	0	1	10	20:45	0	4	0	6	0	0	0	10
09:00	1		2		0	0	3		21:00	1		0		0	0	1	
09:15	0		1		0	0	1		21:15	1		0		0	0	1	
09:30	1		3		0	0	4		21:30	0		1		0	0	1	
09:45	2	4	1	7	0	0	3	11	21:45	0	2	0	1	0	0	0	3
10:00	3		2		0	0	5		22:00	2		0		0	0	2	
10:15	4		3		0	0	7		22:15	0		0		0	0	0	
10:30	3		1		0	0	4		22:30	1		1		0	0	2	
10:45	2	12	2	8	0	0	4	20	22:45	1	4	2	3	0	0	3	7
11:00	0		2		0	0	2		23:00	0		1		0	0	1	
11:15	2		4		0	0	6		23:15	0		1		0	0	1	
11:30	2		2		0	0	4		23:30	0		0		0	0	0	
11:45	2	6	1	9	0	0	3	15	23:45	0		0	2	0	0	0	2
TOTALS		40		61				101	TOTALS		101		99				200
SPLIT %		39.6%		60.4%				33.6%	SPLIT %		50.5%		49.5%				66.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	141	160	0	0	301

AM Peak Hour	09:45	07:15			07:15	PM Peak Hour	14:00	14:00			14:00
AM Pk Volume	12	18			29	PM Pk Volume	27	17			44
Pk Hr Factor	0.750	0.563			0.604	Pk Hr Factor	0.614	0.850			0.688
7 - 9 Volume	11	24	0	0	35	4 - 6 Volume	18	23	0	0	41
7 - 9 Peak Hour	07:15	07:15			07:15	4 - 6 Peak Hour	16:15	16:30			16:30
7 - 9 Pk Volume	11	18	0	0	29	4 - 6 Pk Volume	10	14	0	0	24
Pk Hr Factor	0.688	0.563	0.000	0.000	0.604	Pk Hr Factor	0.833	0.700	0.000	0.000	0.857

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Friday
Date: 12/11/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	120	153	0	0	273

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	4		5		0	0	9	
00:15	0		0		0	0	0		12:15	2		3		0	0	5	
00:30	0		0		0	0	0		12:30	1		4		0	0	5	
00:45	0		0		0	0	0		12:45	4	11	3	15	0	0	7	26
01:00	0		0		0	0	0		13:00	2		2		0	0	4	
01:15	0		0		0	0	0		13:15	1		1		0	0	2	
01:30	1		0		0	0	1		13:30	0		6		0	0	6	
01:45	0	1	0		0	0	0	1	13:45	4	7	3	12	0	0	7	19
02:00	0		1		0	0	1		14:00	3		2		0	0	5	
02:15	1		0		0	0	1		14:15	4		4		0	0	8	
02:30	1		0		0	0	1		14:30	4		2		0	0	6	
02:45	0	2	1	2	0	0	1	4	14:45	3	14	5	13	0	0	8	27
03:00	1		0		0	0	1		15:00	3		2		0	0	5	
03:15	0		0		0	0	0		15:15	3		2		0	0	5	
03:30	0		0		0	0	0		15:30	3		1		0	0	4	
03:45	0	1	0		0	0	0	1	15:45	1	10	1	6	0	0	2	16
04:00	0		0		0	0	0		16:00	3		5		0	0	8	
04:15	0		0		0	0	0		16:15	1		0		0	0	1	
04:30	0		0		0	0	0		16:30	2		5		0	0	7	
04:45	0		0		0	0	0		16:45	3	9	1	11	0	0	4	20
05:00	0		1		0	0	1		17:00	10		6		0	0	16	
05:15	0		0		0	0	0		17:15	4		7		0	0	11	
05:30	0		2		0	0	2		17:30	3		2		0	0	5	
05:45	0		0	3	0	0	0	3	17:45	0	17	4	19	0	0	4	36
06:00	0		0		0	0	0		18:00	1		2		0	0	3	
06:15	0		1		0	0	1		18:15	0		1		0	0	1	
06:30	1		0		0	0	1		18:30	3		1		0	0	4	
06:45	1	2	1	2	0	0	2	4	18:45	1	5	0	4	0	0	1	9
07:00	0		2		0	0	2		19:00	2		0		0	0	2	
07:15	1		5		0	0	6		19:15	1		1		0	0	2	
07:30	2		6		0	0	8		19:30	3		2		0	0	5	
07:45	2	5	2	15	0	0	4	20	19:45	3	9	2	5	0	0	5	14
08:00	1		3		0	0	4		20:00	0		0		0	0	0	
08:15	1		3		0	0	4		20:15	0		1		0	0	1	
08:30	2		2		0	0	4		20:30	0		1		0	0	1	
08:45	0	4	3	11	0	0	3	15	20:45	0		3	5	0	0	3	5
09:00	1		2		0	0	3		21:00	1		0		0	0	1	
09:15	1		3		0	0	4		21:15	2		0		0	0	2	
09:30	1		3		0	0	4		21:30	1		1		0	0	2	
09:45	2	5	2	10	0	0	4	15	21:45	0	4	1	2	0	0	1	6
10:00	0		4		0	0	4		22:00	1		2		0	0	3	
10:15	1		1		0	0	2		22:15	1		0		0	0	1	
10:30	4		4		0	0	8		22:30	1		1		0	0	2	
10:45	2	7	2	11	0	0	4	18	22:45	1	4	0	3	0	0	1	7
11:00	0		0		0	0	0		23:00	0		0		0	0	0	
11:15	1		0		0	0	1		23:15	0		0		0	0	0	
11:30	2		3		0	0	5		23:30	0		0		0	0	0	
11:45	0	3	1	4	0	0	1	7	23:45	0		0		0	0	0	
TOTALS		30		58				88	TOTALS		90		95				185
SPLIT %		34.1%		65.9%				32.2%	SPLIT %		48.6%		51.4%				67.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	120	153	0	0	273

AM Peak Hour	11:30	07:15			07:15	PM Peak Hour	16:45	16:30			16:30
AM Pk Volume	8	16			22	PM Pk Volume	20	19			38
Pk Hr Factor	0.500	0.667			0.688	Pk Hr Factor	0.500	0.679			0.594
7 - 9 Volume	9	26	0	0	35	4 - 6 Volume	26	30	0	0	56
7 - 9 Peak Hour	07:15	07:15			07:15	4 - 6 Peak Hour	16:45	16:30			16:30
7 - 9 Pk Volume	6	16	0	0	22	4 - 6 Pk Volume	20	19	0	0	38
Pk Hr Factor	0.750	0.667	0.000	0.000	0.688	Pk Hr Factor	0.500	0.679	0.000	0.000	0.594

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Saturday
Date: 12/12/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	95	118	0	0	213

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	1		3		0	0	4	
00:15	0		0		0	0	0		12:15	2		2		0	0	4	
00:30	0		0		0	0	0		12:30	3		3		0	0	6	
00:45	0		1	1	0	0	1	1	12:45	2	8	0	8	0	0	2	16
01:00	0		0		0	0	0		13:00	0		2		0	0	2	
01:15	0		0		0	0	0		13:15	3		2		0	0	5	
01:30	0		0		0	0	0		13:30	1		1		0	0	2	
01:45	0		0		0	0	0		13:45	3	7	1	6	0	0	4	13
02:00	0		0		0	0	0		14:00	4		3		0	0	7	
02:15	0		0		0	0	0		14:15	0		3		0	0	3	
02:30	1		1		0	0	2		14:30	2		1		0	0	3	
02:45	0	1	0	1	0	0	0	2	14:45	3	9	5	12	0	0	8	21
03:00	0		1		0	0	1		15:00	0		2		0	0	2	
03:15	2		2		0	0	4		15:15	1		5		0	0	6	
03:30	1		0		0	0	1		15:30	1		0		0	0	1	
03:45	0	3	0	3	0	0	0	6	15:45	2	4	0	7	0	0	2	11
04:00	0		0		0	0	0		16:00	3		4		0	0	7	
04:15	0		0		0	0	0		16:15	1		3		0	0	4	
04:30	0		0		0	0	0		16:30	1		1		0	0	2	
04:45	0		0		0	0	0		16:45	3	8	1	9	0	0	4	17
05:00	1		0		0	0	1		17:00	3		2		0	0	5	
05:15	0		0		0	0	0		17:15	1		1		0	0	2	
05:30	0		0		0	0	0		17:30	1		3		0	0	4	
05:45	0	1	0		0	0	0	1	17:45	1	6	1	7	0	0	2	13
06:00	0		0		0	0	0		18:00	0		1		0	0	1	
06:15	1		0		0	0	1		18:15	1		2		0	0	3	
06:30	0		2		0	0	2		18:30	3		4		0	0	7	
06:45	1	2	0	2	0	0	1	4	18:45	3	7	0	7	0	0	3	14
07:00	0		1		0	0	1		19:00	2		3		0	0	5	
07:15	4		0		0	0	4		19:15	1		2		0	0	3	
07:30	0		1		0	0	1		19:30	0		2		0	0	2	
07:45	1	5	1	3	0	0	2	8	19:45	0	3	2	9	0	0	2	12
08:00	1		3		0	0	4		20:00	1		0		0	0	1	
08:15	2		0		0	0	2		20:15	1		3		0	0	4	
08:30	0		0		0	0	0		20:30	1		0		0	0	1	
08:45	4	7	1	4	0	0	5	11	20:45	1	4	0	3	0	0	1	7
09:00	0		1		0	0	1		21:00	0		0		0	0	0	
09:15	1		3		0	0	4		21:15	1		2		0	0	3	
09:30	0		5		0	0	5		21:30	0		1		0	0	1	
09:45	1	2	3	12	0	0	4	14	21:45	0	1	1	4	0	0	1	5
10:00	0		0		0	0	0		22:00	0		2		0	0	2	
10:15	0		0		0	0	0		22:15	0		1		0	0	1	
10:30	3		3		0	0	6		22:30	1		2		0	0	3	
10:45	2	5	1	4	0	0	3	9	22:45	0	1	0	5	0	0	0	6
11:00	1		0		0	0	1		23:00	1		0		0	0	1	
11:15	5		6		0	0	11		23:15	1		0		0	0	1	
11:30	2		2		0	0	4		23:30	0		0		0	0	0	
11:45	1	9	3	11	0	0	4	20	23:45	0	2	0		0	0	0	2
TOTALS		35		41				76	TOTALS		60		77				137
SPLIT %		46.1%		53.9%				35.7%	SPLIT %		43.8%		56.2%				64.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	95	118	0	0	213

AM Peak Hour	10:30	11:15			11:15	PM Peak Hour	13:15	14:30			14:00
AM Pk Volume	11	14			23	PM Pk Volume	11	13			21
Pk Hr Factor	0.550	0.583			0.523	Pk Hr Factor	0.688	0.650			0.656
7 - 9 Volume	12	7	0	0	19	4 - 6 Volume	14	16	0	0	30
7 - 9 Peak Hour	08:00	07:15			07:15	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	7	5	0	0	11	4 - 6 Pk Volume	8	9	0	0	17
Pk Hr Factor	0.438	0.417	0.000	0.000	0.688	Pk Hr Factor	0.667	0.563	0.000	0.000	0.607

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Sunday
Date: 12/13/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	97	107	0	0	204

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	1		5		0	0	6	
00:15	0		0		0	0	0		12:15	5		0		0	0	5	
00:30	0		0		0	0	0		12:30	5		1		0	0	6	
00:45	0		0		0	0	0		12:45	3	14	4	10	0	0	7	24
01:00	0		0		0	0	0		13:00	1		1		0	0	2	
01:15	0		0		0	0	0		13:15	0		6		0	0	6	
01:30	0		0		0	0	0		13:30	3		2		0	0	5	
01:45	0		0		0	0	0		13:45	0	4	0	9	0	0	0	13
02:00	0		0		0	0	0		14:00	1		0		0	0	1	
02:15	0		0		0	0	0		14:15	1		0		0	0	1	
02:30	0		0		0	0	0		14:30	1		3		0	0	4	
02:45	0		0		0	0	0		14:45	1	4	1	4	0	0	2	8
03:00	0		0		0	0	0		15:00	3		0		0	0	3	
03:15	0		0		0	0	0		15:15	7		5		0	0	12	
03:30	1		0		0	0	1		15:30	3		3		0	0	6	
03:45	0	1	0		0	0	0	1	15:45	3	16	8	16	0	0	11	32
04:00	0		0		0	0	0		16:00	1		1		0	0	2	
04:15	2		0		0	0	2		16:15	4		2		0	0	6	
04:30	0		0		0	0	0		16:30	2		3		0	0	5	
04:45	0	2	0		0	0	0	2	16:45	2	9	4	10	0	0	6	19
05:00	0		0		0	0	0		17:00	2		5		0	0	7	
05:15	0		0		0	0	0		17:15	3		3		0	0	6	
05:30	0		0		0	0	0		17:30	1		1		0	0	2	
05:45	0		1	1	0	0	1	1	17:45	0	6	0	9	0	0	0	15
06:00	1		0		0	0	1		18:00	5		3		0	0	8	
06:15	0		0		0	0	0		18:15	2		1		0	0	3	
06:30	0		0		0	0	0		18:30	1		0		0	0	1	
06:45	0	1	0		0	0	0	1	18:45	2	10	2	6	0	0	4	16
07:00	1		0		0	0	1		19:00	0		2		0	0	2	
07:15	1		1		0	0	2		19:15	2		0		0	0	2	
07:30	0		1		0	0	1		19:30	1		1		0	0	2	
07:45	0	2	2	4	0	0	2	6	19:45	2	5	0	3	0	0	2	8
08:00	0		1		0	0	1		20:00	0		0		0	0	0	
08:15	0		1		0	0	1		20:15	1		0		0	0	1	
08:30	1		2		0	0	3		20:30	1		1		0	0	2	
08:45	1	2	1	5	0	0	2	7	20:45	0	2	0	1	0	0	0	3
09:00	1		1		0	0	2		21:00	0		1		0	0	1	
09:15	0		2		0	0	2		21:15	0		0		0	0	0	
09:30	0		2		0	0	2		21:30	1		0		0	0	1	
09:45	1	2	2	7	0	0	3	9	21:45	0	1	0	1	0	0	0	2
10:00	1		2		0	0	3		22:00	1		0		0	0	1	
10:15	3		4		0	0	7		22:15	0		0		0	0	0	
10:30	1		4		0	0	5		22:30	1		2		0	0	3	
10:45	3	8	3	13	0	0	6	21	22:45	0	2	0	2	0	0	0	4
11:00	2		2		0	0	4		23:00	0		0		0	0	0	
11:15	0		1		0	0	1		23:15	1		0		0	0	1	
11:30	2		2		0	0	4		23:30	0		0		0	0	0	
11:45	1	5	1	6	0	0	2	11	23:45	0	1	0		0	0	0	1
TOTALS		23		36				59	TOTALS		74		71				145
SPLIT %		39.0%		61.0%				28.9%	SPLIT %		51.0%		49.0%				71.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	97	107	0	0	204

AM Peak Hour	11:45	10:00			10:15	PM Peak Hour	15:00	15:15			15:00
AM Pk Volume	12	13			22	PM Pk Volume	16	17			32
Pk Hr Factor	0.600	0.813			0.786	Pk Hr Factor	0.571	0.531			0.667
7 - 9 Volume	4	9	0	0	13	4 - 6 Volume	15	19	0	0	34
7 - 9 Peak Hour	07:00	07:45			07:45	4 - 6 Peak Hour	16:15	16:30			16:15
7 - 9 Pk Volume	2	6	0	0	7	4 - 6 Pk Volume	10	15	0	0	24
Pk Hr Factor	0.500	0.750	0.000	0.000	0.583	Pk Hr Factor	0.625	0.750	0.000	0.000	0.857

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Monday
Date: 12/14/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	138	165	0	0	303

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	4		2		0	0	6	
00:15	0		0		0	0	0		12:15	4		6		0	0	10	
00:30	0		0		0	0	0		12:30	2		4		0	0	6	
00:45	0		0		0	0	0		12:45	1	11	4	16	0	0	5	27
01:00	0		0		0	0	0		13:00	2		1		0	0	3	
01:15	0		0		0	0	0		13:15	5		3		0	0	8	
01:30	0		0		0	0	0		13:30	3		4		0	0	7	
01:45	0		0		0	0	0		13:45	1	11	4	12	0	0	5	23
02:00	1		0		0	0	1		14:00	3		4		0	0	7	
02:15	0		1		0	0	1		14:15	5		7		0	0	12	
02:30	0		0		0	0	0		14:30	0		3		0	0	3	
02:45	0	1	0	1	0	0	0	2	14:45	6	14	2	16	0	0	8	30
03:00	0		0		0	0	0		15:00	2		3		0	0	5	
03:15	0		0		0	0	0		15:15	5		2		0	0	7	
03:30	0		0		0	0	0		15:30	1		6		0	0	7	
03:45	0		0		0	0	0		15:45	5	13	1	12	0	0	6	25
04:00	0		0		0	0	0		16:00	5		3		0	0	8	
04:15	0		0		0	0	0		16:15	1		3		0	0	4	
04:30	0		0		0	0	0		16:30	4		3		0	0	7	
04:45	1	1	0		0	0	1	1	16:45	2	12	3	12	0	0	5	24
05:00	1		1		0	0	2		17:00	5		6		0	0	11	
05:15	0		2		0	0	2		17:15	2		2		0	0	4	
05:30	0		0		0	0	0		17:30	1		0		0	0	1	
05:45	0	1	0	3	0	0	0	4	17:45	0	8	2	10	0	0	2	18
06:00	0		0		0	0	0		18:00	4		5		0	0	9	
06:15	0		0		0	0	0		18:15	3		2		0	0	5	
06:30	1		1		0	0	2		18:30	1		5		0	0	6	
06:45	2	3	3	4	0	0	5	7	18:45	0	8	0	12	0	0	0	20
07:00	2		4		0	0	6		19:00	2		1		0	0	3	
07:15	1		3		0	0	4		19:15	3		1		0	0	4	
07:30	1		4		0	0	5		19:30	2		1		0	0	3	
07:45	0	4	2	13	0	0	2	17	19:45	1	8	0	3	0	0	1	11
08:00	4		3		0	0	7		20:00	2		1		0	0	3	
08:15	4		4		0	0	8		20:15	1		1		0	0	2	
08:30	4		2		0	0	6		20:30	0		0		0	0	0	
08:45	1	13	6	15	0	0	7	28	20:45	3	6	1	3	0	0	4	9
09:00	1		2		0	0	3		21:00	0		0		0	0	0	
09:15	2		1		0	0	3		21:15	0		0		0	0	0	
09:30	1		1		0	0	2		21:30	0		0		0	0	0	
09:45	3	7	2	6	0	0	5	13	21:45	0		0		0	0	0	
10:00	1		2		0	0	3		22:00	0		0		0	0	0	
10:15	1		6		0	0	7		22:15	0		1		0	0	1	
10:30	4		3		0	0	7		22:30	2		0		0	0	2	
10:45	1	7	3	14	0	0	4	21	22:45	0	2	1	2	0	0	1	4
11:00	4		2		0	0	6		23:00	0		0		0	0	0	
11:15	2		1		0	0	3		23:15	1		0		0	0	1	
11:30	0		4		0	0	4		23:30	0		0		0	0	0	
11:45	1	7	3	10	0	0	4	17	23:45	0	1	1	1	0	0	1	2
TOTALS		44		66				110	TOTALS		94		99				193
SPLIT %		40.0%		60.0%				36.3%	SPLIT %		48.7%		51.3%				63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	138	165	0	0	303

AM Peak Hour	08:00	08:00			08:00	PM Peak Hour	15:15	13:30			13:30
AM Pk Volume	13	15			28	PM Pk Volume	16	19			31
Pk Hr Factor	0.813	0.625			0.875	Pk Hr Factor	0.800	0.679			0.646
7 - 9 Volume	17	28	0	0	45	4 - 6 Volume	20	22	0	0	42
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:30	16:15			16:15
7 - 9 Pk Volume	13	15	0	0	28	4 - 6 Pk Volume	13	15	0	0	27
Pk Hr Factor	0.813	0.625	0.000	0.000	0.875	Pk Hr Factor	0.650	0.625	0.000	0.000	0.614

Prepared by NDS/ATD

VOLUME

Weyer Road south of Yosemite Boulevard

Day: Tuesday
Date: 12/15/2015

City: Modesto
Project #: 15-7943-001

DAILY TOTALS	NB	SB	EB	WB	Total
	122	157	0	0	279

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0		0	0	0		12:00	2		3		0	0	5	
00:15	0		0		0	0	0		12:15	4		4		0	0	8	
00:30	0		0		0	0	0		12:30	4		2		0	0	6	
00:45	0		0		0	0	0		12:45	3	13	4	13	0	0	7	26
01:00	0		0		0	0	0		13:00	1		4		0	0	5	
01:15	0		0		0	0	0		13:15	2		0		0	0	2	
01:30	0		0		0	0	0		13:30	1		1		0	0	2	
01:45	0		0		0	0	0		13:45	2	6	5	10	0	0	7	16
02:00	0		0		0	0	0		14:00	2		3		0	0	5	
02:15	0		0		0	0	0		14:15	4		6		0	0	10	
02:30	0		1		0	0	1		14:30	3		7		0	0	10	
02:45	0		0	1	0	0	0	1	14:45	4	13	3	19	0	0	7	32
03:00	0		0		0	0	0		15:00	4		3		0	0	7	
03:15	1		1		0	0	2		15:15	3		2		0	0	5	
03:30	0		0		0	0	0		15:30	1		5		0	0	6	
03:45	0	1	0	1	0	0	0	2	15:45	4	12	3	13	0	0	7	25
04:00	0		0		0	0	0		16:00	2		1		0	0	3	
04:15	0		0		0	0	0		16:15	3		2		0	0	5	
04:30	0		0		0	0	0		16:30	1		2		0	0	3	
04:45	0		1	1	0	0	1	1	16:45	2	8	1	6	0	0	3	14
05:00	0		1		0	0	1		17:00	2		3		0	0	5	
05:15	0		0		0	0	0		17:15	3		3		0	0	6	
05:30	0		2		0	0	2		17:30	1		0		0	0	1	
05:45	0		0	3	0	0	0	3	17:45	3	9	1	7	0	0	4	16
06:00	0		0		0	0	0		18:00	3		1		0	0	4	
06:15	0		1		0	0	1		18:15	2		3		0	0	5	
06:30	0		3		0	0	3		18:30	4		2		0	0	6	
06:45	0		1	5	0	0	1	5	18:45	4	13	1	7	0	0	5	20
07:00	1		3		0	0	4		19:00	1		4		0	0	5	
07:15	1		5		0	0	6		19:15	2		5		0	0	7	
07:30	2		4		0	0	6		19:30	2		1		0	0	3	
07:45	3	7	2	14	0	0	5	21	19:45	3	8	1	11	0	0	4	19
08:00	2		4		0	0	6		20:00	3		1		0	0	4	
08:15	0		3		0	0	3		20:15	1		1		0	0	2	
08:30	0		1		0	0	1		20:30	1		1		0	0	2	
08:45	0	2	1	9	0	0	1	11	20:45	1	6	0	3	0	0	1	9
09:00	1		2		0	0	3		21:00	1		0		0	0	1	
09:15	2		3		0	0	5		21:15	0		1		0	0	1	
09:30	0		2		0	0	2		21:30	1		0		0	0	1	
09:45	2	5	3	10	0	0	5	15	21:45	0	2	0	1	0	0	0	3
10:00	3		1		0	0	4		22:00	1		0		0	0	1	
10:15	0		3		0	0	3		22:15	0		0		0	0	0	
10:30	2		0		0	0	2		22:30	0		0		0	0	0	
10:45	2	7	4	8	0	0	6	15	22:45	0	1	0		0	0	0	1
11:00	2		5		0	0	7		23:00	0		0		0	0	0	
11:15	2		3		0	0	5		23:15	0		0		0	0	0	
11:30	2		2		0	0	4		23:30	0		0		0	0	0	
11:45	2	8	3	13	0	0	5	21	23:45	1	1	2	2	0	0	3	3
TOTALS		30		65				**95**	**TOTALS**		92		92				**184**
SPLIT %		31.6%		68.4%				**34.1%**	**SPLIT %**		50.0%		50.0%				**65.9%**

DAILY TOTALS	NB	SB	EB	WB	Total
	122	157	0	0	279

AM Peak Hour	11:45	07:15			**11:45**	**PM Peak Hour**	14:15	13:45			**14:15**
AM Pk Volume	12	15			**24**	**PM Pk Volume**	15	21			**34**
Pk Hr Factor	0.750	0.750			**0.750**	**Pk Hr Factor**	0.938	0.750			**0.850**
7 - 9 Volume	9	23	0	0	**32**	**4 - 6 Volume**	17	13	0	0	**30**
7 - 9 Peak Hour	07:15	07:15			**07:15**	**4 - 6 Peak Hour**	17:00	16:30			**16:30**
7 - 9 Pk Volume	8	15	0	0	**23**	**4 - 6 Pk Volume**	9	9	0	0	**17**
Pk Hr Factor	0.667	0.750	0.000	0.000	**0.958**	**Pk Hr Factor**	0.750	0.750	0.000	0.000	**0.708**

The ability of a highway system to carry traffic is expressed in terms of its "service Level" at critical locations, usually intersections. Service levels are defined as follows:

"A" Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.

"B" Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.

"C" Conditions of stable flow, delays are low to moderate, full use of peak direction signal phase(s) is experienced.

"D" Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.

"E" Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.

"F" Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

PINNACLE TRAFFIC ENGINEERING

LEVELS OF SERVICE DESCRIPTION

930 San Benito Street - Hollister, CA 95023
(831) 638-9260 / FAX (831) 638-9268

TWO-WAY STOP SIGN CONTROLLED INTERSECTIONS

EXHIBIT 17-2. LEVEL-OF-SERVICE CRITERIA FOR TWSC INTERSECTIONS

Level of Service	Average Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

ALL-WAY STOP SIGN CONTROLLED INTERSECTIONS

The level-of-service criteria are given in Exhibit 17-22. The criteria for AWSC intersections have different threshold values than do those for signalized intersections primarily because drivers expect different levels of performance from distinct types of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection. Thus a higher level of control delay is acceptable at a signalized intersection for the same LOS.

EXHIBIT 17-22. LEVEL-OF-SERVICE CRITERIA FOR AWSC INTERSECTIONS

Level of Service	Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

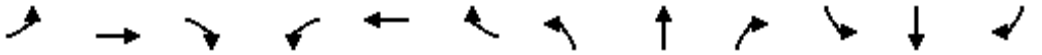
SIGNALIZED INTERSECTIONS

The average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value. The criteria are listed in Exhibit 16-2.

EXHIBIT 16-2. LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
B	> 10–20
C	> 20–35
D	> 35–55
E	> 55–80
F	> 80

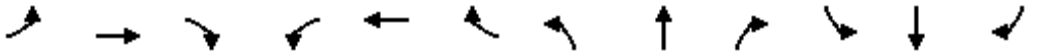
930 San Benito Street - Hollister, CA 95023
(831) 638-9260 / FAX (831) 638-9268



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	63	289	42	115	160	61	23	411	142	97	406	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	66	301	44	120	167	64	24	428	148	101	423	58
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	485	70	156	496	183	37	1642	735	132	1619	221
Arrive On Green	0.05	0.16	0.16	0.09	0.20	0.20	0.02	0.46	0.46	0.07	0.52	0.52
Sat Flow, veh/h	1774	3104	449	1774	2532	935	1774	3539	1583	1774	3130	427
Grp Volume(v), veh/h	66	170	175	120	115	116	24	428	148	101	238	243
Grp Sat Flow(s),veh/h/ln	1774	1770	1783	1774	1770	1698	1774	1770	1583	1774	1770	1787
Q Serve(g_s), s	2.7	6.6	6.7	4.9	4.1	4.3	1.0	5.4	4.1	4.1	5.5	5.6
Cycle Q Clear(g_c), s	2.7	6.6	6.7	4.9	4.1	4.3	1.0	5.4	4.1	4.1	5.5	5.6
Prop In Lane	1.00		0.25	1.00		0.55	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	85	276	278	156	347	333	37	1642	735	132	915	924
V/C Ratio(X)	0.77	0.62	0.63	0.77	0.33	0.35	0.64	0.26	0.20	0.77	0.26	0.26
Avail Cap(c_a), veh/h	314	506	510	435	626	601	169	1642	735	386	915	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	28.9	29.0	32.8	25.4	25.5	35.7	12.0	11.6	33.4	9.9	9.9
Incr Delay (d2), s/veh	13.8	2.2	2.3	7.8	0.6	0.6	16.9	0.4	0.6	8.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.4	3.5	2.7	2.1	2.1	0.7	2.7	1.9	2.3	2.8	2.9
LnGrp Delay(d),s/veh	48.4	31.2	31.3	40.6	26.0	26.1	52.5	12.4	12.3	42.3	10.6	10.6
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		411			351			600			582	
Approach Delay, s/veh		34.0			31.0			14.0			16.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	38.1	10.5	15.5	5.5	42.0	7.5	18.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	29.0	18.0	21.0	7.0	38.0	13.0	26.0
Max Q Clear Time (g_c+I1), s	6.1	7.4	6.9	8.7	3.0	7.6	4.7	6.3
Green Ext Time (p_c), s	0.1	6.6	0.2	2.7	0.0	7.3	0.1	3.3

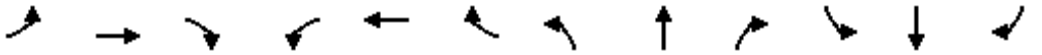
Intersection Summary	
HCM 2010 Ctrl Delay	21.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	48	0	17	29	10	3	62	45	24	74	4
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	53	0	19	32	11	3	68	49	26	81	4
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	20	206	0	32	171	56	6	2162	967	42	2169	106
Arrive On Green	0.01	0.06	0.00	0.02	0.07	0.07	0.00	0.61	0.61	0.02	0.63	0.63
Sat Flow, veh/h	1774	3632	0	1774	2624	857	1774	3539	1583	1774	3434	168
Grp Volume(v), veh/h	11	53	0	19	21	22	3	68	49	26	41	44
Grp Sat Flow(s),veh/h/ln	1774	1770	0	1774	1770	1712	1774	1770	1583	1774	1770	1833
Q Serve(g_s), s	0.3	0.8	0.0	0.6	0.6	0.7	0.1	0.4	0.7	0.8	0.5	0.5
Cycle Q Clear(g_c), s	0.3	0.8	0.0	0.6	0.6	0.7	0.1	0.4	0.7	0.8	0.5	0.5
Prop In Lane	1.00		0.00	1.00		0.50	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	20	206	0	32	116	112	6	2162	967	42	1117	1158
V/C Ratio(X)	0.55	0.26	0.00	0.59	0.18	0.20	0.52	0.03	0.05	0.62	0.04	0.04
Avail Cap(c_a), veh/h	416	1277	0	544	766	741	384	2162	967	576	1117	1158
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	25.0	0.0	27.0	24.5	24.5	27.6	4.3	4.3	26.8	3.9	3.9
Incr Delay (d2), s/veh	21.7	0.7	0.0	15.6	0.7	0.8	57.4	0.0	0.1	13.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.0	0.4	0.3	0.3	0.1	0.2	0.3	0.6	0.2	0.3
LnGrp Delay(d),s/veh	48.9	25.6	0.0	42.6	25.2	25.4	85.0	4.3	4.4	40.5	3.9	3.9
LnGrp LOS	D	C		D	C	C	F	A	A	D	A	A
Approach Vol, veh/h		64			62			120			111	
Approach Delay, s/veh		29.6			30.6			6.4			12.5	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	37.9	5.0	7.2	4.2	39.0	4.6	7.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	29.0	17.0	20.0	12.0	35.0	13.0	24.0
Max Q Clear Time (g_c+I1), s	2.8	2.7	2.6	2.8	2.1	2.5	2.3	2.7
Green Ext Time (p_c), s	0.0	1.0	0.0	0.4	0.0	1.1	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	254	45	145	184	64	25	413	154	101	455	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	62	262	46	149	190	66	26	426	159	104	469	55
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	444	77	192	546	184	40	1579	707	136	1597	187
Arrive On Green	0.04	0.15	0.15	0.11	0.21	0.21	0.02	0.45	0.45	0.08	0.50	0.50
Sat Flow, veh/h	1774	3018	523	1774	2602	876	1774	3539	1583	1774	3194	373
Grp Volume(v), veh/h	62	152	156	149	127	129	26	426	159	104	259	265
Grp Sat Flow(s),veh/h/ln	1774	1770	1771	1774	1770	1708	1774	1770	1583	1774	1770	1797
Q Serve(g_s), s	2.5	5.8	5.9	5.9	4.4	4.6	1.0	5.5	4.4	4.1	6.2	6.2
Cycle Q Clear(g_c), s	2.5	5.8	5.9	5.9	4.4	4.6	1.0	5.5	4.4	4.1	6.2	6.2
Prop In Lane	1.00		0.30	1.00		0.51	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	80	260	260	192	372	359	40	1579	707	136	885	899
V/C Ratio(X)	0.78	0.58	0.60	0.78	0.34	0.36	0.65	0.27	0.23	0.77	0.29	0.29
Avail Cap(c_a), veh/h	320	492	492	518	688	665	173	1579	707	394	885	899
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	28.6	28.7	31.3	24.2	24.3	34.9	12.5	12.3	32.6	10.5	10.5
Incr Delay (d2), s/veh	14.9	2.1	2.2	6.7	0.5	0.6	16.4	0.4	0.7	8.7	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.0	3.1	3.3	2.2	2.2	0.7	2.8	2.1	2.3	3.2	3.3
LnGrp Delay(d),s/veh	48.9	30.7	30.9	37.9	24.7	24.9	51.3	13.0	13.0	41.3	11.4	11.4
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		370			405			611			628	
Approach Delay, s/veh		33.8			29.6			14.6			16.3	
Approach LOS		C			C			B			B	

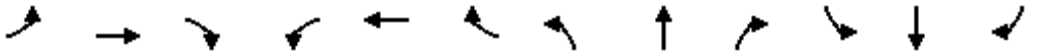
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	36.1	11.8	14.6	5.6	40.0	7.2	19.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	27.0	21.0	20.0	7.0	36.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	6.1	7.5	7.9	7.9	3.0	8.2	4.5	6.6
Green Ext Time (p_c), s	0.2	6.7	0.3	2.7	0.0	7.5	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	17	78	5	35	43	11	15	106	63	32	107	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	19	87	6	39	48	12	17	118	70	36	119	6
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	224	15	57	228	55	29	2119	948	54	2101	105
Arrive On Green	0.02	0.07	0.07	0.03	0.08	0.08	0.02	0.60	0.60	0.03	0.61	0.61
Sat Flow, veh/h	1774	3362	230	1774	2830	682	1774	3539	1583	1774	3430	172
Grp Volume(v), veh/h	19	45	48	39	29	31	17	118	70	36	61	64
Grp Sat Flow(s),veh/h/ln	1774	1770	1822	1774	1770	1742	1774	1770	1583	1774	1770	1832
Q Serve(g_s), s	0.6	1.4	1.5	1.3	0.9	1.0	0.6	0.8	1.1	1.2	0.8	0.8
Cycle Q Clear(g_c), s	0.6	1.4	1.5	1.3	0.9	1.0	0.6	0.8	1.1	1.2	0.8	0.8
Prop In Lane	1.00		0.13	1.00		0.39	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	32	118	121	57	143	140	29	2119	948	54	1084	1122
V/C Ratio(X)	0.59	0.38	0.39	0.69	0.21	0.22	0.58	0.06	0.07	0.67	0.06	0.06
Avail Cap(c_a), veh/h	392	662	682	483	753	741	302	2119	948	483	1084	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	26.3	26.3	28.2	25.3	25.3	28.7	4.9	4.9	28.2	4.6	4.6
Incr Delay (d2), s/veh	16.0	2.0	2.0	13.6	0.7	0.8	16.9	0.1	0.2	13.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.8	0.8	0.8	0.5	0.5	0.4	0.4	0.5	0.8	0.4	0.4
LnGrp Delay(d),s/veh	44.6	28.3	28.3	41.8	26.0	26.1	45.6	4.9	5.1	41.7	4.7	4.7
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		112			99			205			161	
Approach Delay, s/veh		31.1			32.2			8.4			13.0	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	39.2	5.9	7.9	5.0	40.0	5.1	8.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	16.0	22.0	10.0	36.0	13.0	25.0
Max Q Clear Time (g_c+I1), s	3.2	3.1	3.3	3.5	2.6	2.8	2.6	3.0
Green Ext Time (p_c), s	0.0	1.7	0.0	0.7	0.0	1.8	0.0	0.8

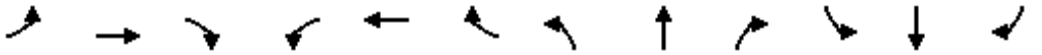
Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	177	23	118	137	50	19	258	141	72	238	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	36	188	24	126	146	53	20	274	150	77	253	52
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	384	48	166	477	167	33	1675	749	100	1499	303
Arrive On Green	0.03	0.12	0.12	0.09	0.19	0.19	0.02	0.47	0.47	0.06	0.51	0.51
Sat Flow, veh/h	1774	3163	399	1774	2574	900	1774	3539	1583	1774	2934	593
Grp Volume(v), veh/h	36	104	108	126	99	100	20	274	150	77	151	154
Grp Sat Flow(s),veh/h/ln	1774	1770	1792	1774	1770	1704	1774	1770	1583	1774	1770	1758
Q Serve(g_s), s	1.3	3.4	3.5	4.3	3.0	3.2	0.7	2.8	3.5	2.7	2.9	2.9
Cycle Q Clear(g_c), s	1.3	3.4	3.5	4.3	3.0	3.2	0.7	2.8	3.5	2.7	2.9	2.9
Prop In Lane	1.00		0.22	1.00		0.53	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	53	215	218	166	328	316	33	1675	749	100	904	898
V/C Ratio(X)	0.68	0.48	0.50	0.76	0.30	0.32	0.60	0.16	0.20	0.77	0.17	0.17
Avail Cap(c_a), veh/h	283	593	601	623	932	897	255	1675	749	425	904	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	25.7	25.7	27.7	22.0	22.1	30.5	9.4	9.6	29.2	8.2	8.2
Incr Delay (d2), s/veh	14.4	1.7	1.7	6.9	0.5	0.6	16.1	0.2	0.6	11.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.8	1.8	2.5	1.5	1.6	0.5	1.4	1.6	1.6	1.5	1.5
LnGrp Delay(d),s/veh	44.5	27.4	27.5	34.6	22.5	22.7	46.6	9.6	10.2	40.9	8.6	8.6
LnGrp LOS	D	C	C	C	C	C	D	A	B	D	A	A
Approach Vol, veh/h		248			325			444			382	
Approach Delay, s/veh		29.9			27.3			11.5			15.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	33.6	9.9	11.6	5.2	36.0	5.9	15.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	26.0	22.0	21.0	9.0	32.0	10.0	33.0
Max Q Clear Time (g_c+I1), s	4.7	5.5	6.3	5.5	2.7	4.9	3.3	5.2
Green Ext Time (p_c), s	0.1	4.1	0.3	2.1	0.0	4.4	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	15	68	11	44	49	13	10	145	54	24	163	16
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	16	73	12	47	53	14	11	156	58	26	175	17
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	204	33	66	247	63	20	2064	924	42	1945	187
Arrive On Green	0.02	0.07	0.07	0.04	0.09	0.09	0.01	0.58	0.58	0.02	0.60	0.60
Sat Flow, veh/h	1774	3055	491	1774	2796	711	1774	3539	1583	1774	3263	314
Grp Volume(v), veh/h	16	42	43	47	33	34	11	156	58	26	94	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1776	1774	1770	1737	1774	1770	1583	1774	1770	1807
Q Serve(g_s), s	0.5	1.2	1.3	1.5	1.0	1.0	0.3	1.1	0.9	0.8	1.3	1.3
Cycle Q Clear(g_c), s	0.5	1.2	1.3	1.5	1.0	1.0	0.3	1.1	0.9	0.8	1.3	1.3
Prop In Lane	1.00		0.28	1.00		0.41	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	28	118	119	66	156	153	20	2064	924	42	1054	1077
V/C Ratio(X)	0.57	0.35	0.37	0.71	0.21	0.22	0.55	0.08	0.06	0.62	0.09	0.09
Avail Cap(c_a), veh/h	384	671	674	609	895	878	352	2064	924	481	1054	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	24.7	24.7	26.4	23.5	23.5	27.2	5.0	5.0	26.8	4.8	4.8
Incr Delay (d2), s/veh	17.1	1.8	1.9	13.3	0.7	0.7	21.6	0.1	0.1	13.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.7	0.9	0.5	0.5	0.3	0.5	0.4	0.6	0.6	0.7
LnGrp Delay(d),s/veh	44.2	26.5	26.6	39.6	24.1	24.2	48.9	5.1	5.1	40.4	4.9	4.9
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		101			114			225			218	
Approach Delay, s/veh		29.3			30.5			7.2			9.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	36.3	6.1	7.7	4.6	37.0	4.9	8.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	29.0	19.0	21.0	11.0	33.0	12.0	28.0
Max Q Clear Time (g_c+I1), s	2.8	3.1	3.5	3.3	2.3	3.3	2.5	3.0
Green Ext Time (p_c), s	0.0	2.3	0.1	0.7	0.0	2.4	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	72	301	75	127	210	61	60	421	154	97	417	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	314	78	132	219	64	62	439	160	101	434	100
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	480	117	169	572	163	79	1615	722	131	1390	318
Arrive On Green	0.05	0.17	0.17	0.10	0.21	0.21	0.04	0.46	0.46	0.07	0.49	0.49
Sat Flow, veh/h	1774	2820	690	1774	2720	776	1774	3539	1583	1774	2862	654
Grp Volume(v), veh/h	75	195	197	132	141	142	62	439	160	101	267	267
Grp Sat Flow(s),veh/h/ln	1774	1770	1741	1774	1770	1726	1774	1770	1583	1774	1770	1747
Q Serve(g_s), s	3.3	8.1	8.3	5.7	5.3	5.6	2.7	6.0	4.8	4.4	7.2	7.3
Cycle Q Clear(g_c), s	3.3	8.1	8.3	5.7	5.3	5.6	2.7	6.0	4.8	4.4	7.2	7.3
Prop In Lane	1.00		0.40	1.00		0.45	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	97	301	296	169	372	363	79	1615	722	131	859	848
V/C Ratio(X)	0.77	0.65	0.66	0.78	0.38	0.39	0.78	0.27	0.22	0.77	0.31	0.31
Avail Cap(c_a), veh/h	295	475	467	408	588	573	159	1615	722	363	859	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	30.3	30.4	34.6	26.5	26.6	37.0	13.2	12.9	35.6	12.2	12.2
Incr Delay (d2), s/veh	12.0	2.4	2.6	7.6	0.6	0.7	15.2	0.4	0.7	9.1	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.1	4.2	3.1	2.7	2.7	1.7	3.0	2.2	2.5	3.7	3.7
LnGrp Delay(d),s/veh	48.5	32.7	33.0	42.2	27.1	27.3	52.2	13.6	13.6	44.7	13.1	13.2
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		467			415			661			635	
Approach Delay, s/veh		35.3			32.0			17.2			18.2	
Approach LOS		D			C			B			B	

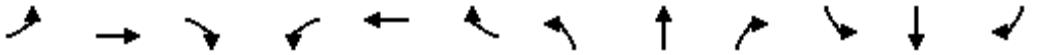
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	39.7	11.5	17.3	7.5	42.0	8.3	20.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	29.0	18.0	21.0	7.0	38.0	13.0	26.0
Max Q Clear Time (g_c+I1), s	6.4	8.0	7.7	10.3	4.7	9.3	5.3	7.6
Green Ext Time (p_c), s	0.1	7.1	0.2	3.0	0.0	7.8	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	42	88	21	21	33	10	12	65	49	24	77	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	46	97	23	23	36	11	13	71	54	26	85	8
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	235	54	38	181	53	23	2088	934	42	1967	183
Arrive On Green	0.04	0.08	0.08	0.02	0.07	0.07	0.01	0.59	0.59	0.02	0.60	0.60
Sat Flow, veh/h	1774	2859	658	1774	2704	789	1774	3539	1583	1774	3274	304
Grp Volume(v), veh/h	46	59	61	23	23	24	13	71	54	26	45	48
Grp Sat Flow(s),veh/h/ln	1774	1770	1747	1774	1770	1723	1774	1770	1583	1774	1770	1809
Q Serve(g_s), s	1.5	1.8	1.9	0.7	0.7	0.7	0.4	0.5	0.8	0.8	0.6	0.6
Cycle Q Clear(g_c), s	1.5	1.8	1.9	0.7	0.7	0.7	0.4	0.5	0.8	0.8	0.6	0.6
Prop In Lane	1.00		0.38	1.00		0.46	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	65	145	143	38	119	116	23	2088	934	42	1063	1087
V/C Ratio(X)	0.71	0.41	0.43	0.60	0.19	0.21	0.56	0.03	0.06	0.62	0.04	0.04
Avail Cap(c_a), veh/h	596	750	741	470	625	609	345	2088	934	470	1063	1087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	24.7	24.7	27.5	25.0	25.0	27.8	4.9	4.9	27.4	4.6	4.6
Incr Delay (d2), s/veh	13.5	1.8	2.0	14.5	0.8	0.9	19.5	0.0	0.1	13.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.9	1.0	0.5	0.4	0.4	0.3	0.2	0.4	0.6	0.3	0.3
LnGrp Delay(d),s/veh	40.5	26.5	26.7	41.9	25.7	25.9	47.3	4.9	5.0	41.2	4.7	4.7
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		166			70			138			119	
Approach Delay, s/veh		30.5			31.1			8.9			12.7	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	37.4	5.2	8.6	4.7	38.0	6.1	7.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	24.0	11.0	34.0	19.0	20.0
Max Q Clear Time (g_c+I1), s	2.8	2.8	2.7	3.9	2.4	2.6	3.5	2.7
Green Ext Time (p_c), s	0.0	1.1	0.0	0.8	0.0	1.2	0.1	0.8

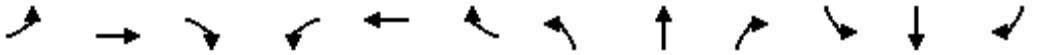
Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	266	78	157	234	64	62	423	166	101	466	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	71	274	80	162	241	66	64	436	171	104	480	96
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	442	127	206	628	168	82	1502	672	135	1337	266
Arrive On Green	0.05	0.16	0.16	0.12	0.23	0.23	0.05	0.42	0.42	0.08	0.45	0.45
Sat Flow, veh/h	1774	2717	778	1774	2761	740	1774	3539	1583	1774	2944	585
Grp Volume(v), veh/h	71	177	177	162	153	154	64	436	171	104	287	289
Grp Sat Flow(s),veh/h/ln	1774	1770	1725	1774	1770	1732	1774	1770	1583	1774	1770	1759
Q Serve(g_s), s	2.9	6.7	7.0	6.5	5.3	5.5	2.6	5.9	5.1	4.2	7.7	7.8
Cycle Q Clear(g_c), s	2.9	6.7	7.0	6.5	5.3	5.5	2.6	5.9	5.1	4.2	7.7	7.8
Prop In Lane	1.00		0.45	1.00		0.43	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	92	288	281	206	402	394	82	1502	672	135	804	799
V/C Ratio(X)	0.77	0.61	0.63	0.79	0.38	0.39	0.78	0.29	0.25	0.77	0.36	0.36
Avail Cap(c_a), veh/h	269	463	451	513	707	692	269	1502	672	366	804	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	28.3	28.4	31.2	23.7	23.8	34.3	13.7	13.5	32.9	12.9	12.9
Incr Delay (d2), s/veh	12.9	2.1	2.3	6.5	0.6	0.6	14.5	0.5	0.9	8.8	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.5	3.5	3.5	2.7	2.7	1.6	2.9	2.3	2.4	4.0	4.0
LnGrp Delay(d),s/veh	46.9	30.4	30.7	37.7	24.3	24.4	48.7	14.2	14.4	41.7	14.2	14.2
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		425			469			671			680	
Approach Delay, s/veh		33.3			29.0			17.6			18.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	34.8	12.4	15.8	7.4	37.0	7.8	20.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	29.0	21.0	19.0	11.0	33.0	11.0	29.0
Max Q Clear Time (g_c+I1), s	6.2	7.9	8.5	9.0	4.6	9.8	4.9	7.5
Green Ext Time (p_c), s	0.1	7.4	0.3	2.9	0.1	7.7	0.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	49	118	23	39	47	11	24	109	67	32	110	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	54	131	26	43	52	12	27	121	74	36	122	9
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	288	56	62	264	59	43	1946	871	54	1860	136
Arrive On Green	0.04	0.10	0.10	0.03	0.09	0.09	0.02	0.55	0.55	0.03	0.56	0.56
Sat Flow, veh/h	1774	2958	574	1774	2877	642	1774	3539	1583	1774	3345	244
Grp Volume(v), veh/h	54	77	80	43	31	33	27	121	74	36	64	67
Grp Sat Flow(s),veh/h/ln	1774	1770	1762	1774	1770	1749	1774	1770	1583	1774	1770	1820
Q Serve(g_s), s	1.7	2.3	2.4	1.3	0.9	1.0	0.8	0.9	1.2	1.1	0.9	0.9
Cycle Q Clear(g_c), s	1.7	2.3	2.4	1.3	0.9	1.0	0.8	0.9	1.2	1.1	0.9	0.9
Prop In Lane	1.00		0.33	1.00		0.37	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	72	173	172	62	162	160	43	1946	871	54	984	1012
V/C Ratio(X)	0.75	0.45	0.46	0.69	0.19	0.20	0.62	0.06	0.08	0.66	0.07	0.07
Avail Cap(c_a), veh/h	605	762	758	509	667	659	414	1946	871	477	984	1012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	23.7	23.8	26.6	23.4	23.4	26.9	5.8	5.9	26.7	5.7	5.7
Incr Delay (d2), s/veh	14.3	1.8	2.0	13.1	0.6	0.6	13.6	0.1	0.2	12.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.2	1.2	0.9	0.5	0.5	0.6	0.4	0.6	0.7	0.5	0.5
LnGrp Delay(d),s/veh	40.7	25.5	25.7	39.7	24.0	24.1	40.5	5.9	6.1	39.6	5.8	5.8
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		211			107			222			167	
Approach Delay, s/veh		29.5			30.3			10.2			13.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	34.7	5.9	9.4	5.4	35.0	6.3	9.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	29.0	16.0	24.0	13.0	31.0	19.0	21.0
Max Q Clear Time (g_c+I1), s	3.1	3.2	3.3	4.4	2.8	2.9	3.7	3.0
Green Ext Time (p_c), s	0.0	1.7	0.0	1.1	0.0	1.8	0.1	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	210	62	136	171	50	57	270	155	72	253	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	64	223	66	145	182	53	61	287	165	77	269	81
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	82	415	120	190	584	165	78	1502	672	100	1178	348
Arrive On Green	0.05	0.15	0.15	0.11	0.21	0.21	0.04	0.42	0.42	0.06	0.44	0.44
Sat Flow, veh/h	1774	2711	783	1774	2724	772	1774	3539	1583	1774	2696	795
Grp Volume(v), veh/h	64	144	145	145	116	119	61	287	165	77	175	175
Grp Sat Flow(s),veh/h/ln	1774	1770	1725	1774	1770	1727	1774	1770	1583	1774	1770	1722
Q Serve(g_s), s	2.2	4.6	4.8	4.9	3.4	3.6	2.1	3.1	4.1	2.6	3.8	3.9
Cycle Q Clear(g_c), s	2.2	4.6	4.8	4.9	3.4	3.6	2.1	3.1	4.1	2.6	3.8	3.9
Prop In Lane	1.00		0.45	1.00		0.45	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	82	271	264	190	379	370	78	1502	672	100	773	752
V/C Ratio(X)	0.78	0.53	0.55	0.76	0.31	0.32	0.79	0.19	0.25	0.77	0.23	0.23
Avail Cap(c_a), veh/h	373	601	586	660	888	866	373	1502	672	431	773	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	24.1	24.2	26.8	20.4	20.5	29.3	11.1	11.4	28.8	10.9	10.9
Incr Delay (d2), s/veh	14.9	1.6	1.8	6.2	0.5	0.5	15.8	0.3	0.9	11.7	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.4	2.4	2.7	1.7	1.8	1.4	1.6	2.0	1.6	2.0	2.0
LnGrp Delay(d),s/veh	44.0	25.7	26.0	33.0	20.9	21.0	45.0	11.4	12.3	40.5	11.6	11.6
LnGrp LOS	D	C	C	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		353			380			513			427	
Approach Delay, s/veh		29.1			25.5			15.7			16.8	
Approach LOS		C			C			B			B	

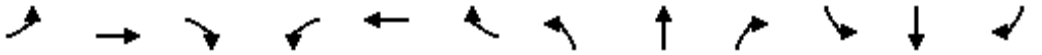
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	30.2	10.6	13.5	6.7	31.0	6.8	17.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	25.0	23.0	21.0	13.0	27.0	13.0	31.0
Max Q Clear Time (g_c+I1), s	4.6	6.1	6.9	6.8	4.1	5.9	4.2	5.6
Green Ext Time (p_c), s	0.1	4.4	0.3	2.7	0.1	4.6	0.1	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	33	91	26	50	54	13	21	148	59	24	167	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	35	98	28	54	58	14	23	159	63	26	180	22
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	236	65	72	276	64	38	1983	887	42	1789	216
Arrive On Green	0.03	0.09	0.09	0.04	0.10	0.10	0.02	0.56	0.56	0.02	0.56	0.56
Sat Flow, veh/h	1774	2743	756	1774	2850	665	1774	3539	1583	1774	3181	384
Grp Volume(v), veh/h	35	62	64	54	35	37	23	159	63	26	99	103
Grp Sat Flow(s),veh/h/ln	1774	1770	1729	1774	1770	1745	1774	1770	1583	1774	1770	1795
Q Serve(g_s), s	1.1	1.8	1.9	1.7	1.0	1.1	0.7	1.1	1.0	0.8	1.4	1.5
Cycle Q Clear(g_c), s	1.1	1.8	1.9	1.7	1.0	1.1	0.7	1.1	1.0	0.8	1.4	1.5
Prop In Lane	1.00		0.44	1.00		0.38	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	53	152	149	72	171	169	38	1983	887	42	995	1010
V/C Ratio(X)	0.66	0.41	0.43	0.75	0.21	0.22	0.60	0.08	0.07	0.62	0.10	0.10
Avail Cap(c_a), veh/h	449	704	687	577	831	820	417	1983	887	417	995	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	23.9	24.0	26.3	23.0	23.1	26.8	5.6	5.6	26.8	5.6	5.6
Incr Delay (d2), s/veh	12.8	1.7	2.0	14.1	0.6	0.6	14.3	0.1	0.2	13.7	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.0	1.0	1.1	0.5	0.6	0.5	0.6	0.5	0.6	0.7	0.8
LnGrp Delay(d),s/veh	39.4	25.7	26.0	40.4	23.6	23.7	41.1	5.7	5.7	40.4	5.8	5.8
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		161			126			245			228	
Approach Delay, s/veh		28.8			30.8			9.0			9.8	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	35.0	6.3	8.8	5.2	35.1	5.7	9.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	31.0	18.0	22.0	13.0	31.0	14.0	26.0
Max Q Clear Time (g_c+I1), s	2.8	3.1	3.7	3.9	2.7	3.5	3.1	3.1
Green Ext Time (p_c), s	0.0	2.5	0.1	1.0	0.0	2.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	72	301	75	177	304	61	53	421	154	97	577	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	75	314	78	184	317	64	55	439	160	101	601	143
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	480	117	228	718	143	70	1502	672	130	1301	309
Arrive On Green	0.05	0.17	0.17	0.13	0.24	0.24	0.04	0.42	0.42	0.07	0.46	0.46
Sat Flow, veh/h	1774	2820	690	1774	2942	587	1774	3539	1583	1774	2839	674
Grp Volume(v), veh/h	75	195	197	184	189	192	55	439	160	101	374	370
Grp Sat Flow(s),veh/h/ln	1774	1770	1741	1774	1770	1759	1774	1770	1583	1774	1770	1744
Q Serve(g_s), s	3.3	8.1	8.3	7.9	7.1	7.3	2.4	6.4	5.1	4.4	11.4	11.5
Cycle Q Clear(g_c), s	3.3	8.1	8.3	7.9	7.1	7.3	2.4	6.4	5.1	4.4	11.4	11.5
Prop In Lane	1.00		0.40	1.00		0.33	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	97	301	296	228	432	429	70	1502	672	130	811	799
V/C Ratio(X)	0.78	0.65	0.66	0.81	0.44	0.45	0.78	0.29	0.24	0.77	0.46	0.46
Avail Cap(c_a), veh/h	203	428	421	452	676	672	203	1502	672	271	811	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	30.4	30.5	33.3	25.1	25.2	37.4	14.9	14.5	35.8	14.6	14.6
Incr Delay (d2), s/veh	12.3	2.3	2.6	6.7	0.7	0.7	17.1	0.5	0.8	9.4	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	4.2	4.2	4.3	3.6	3.6	1.5	3.2	2.3	2.5	5.9	5.9
LnGrp Delay(d),s/veh	49.0	32.7	33.0	40.0	25.8	25.9	54.5	15.4	15.3	45.1	16.5	16.6
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		467			565			654			845	
Approach Delay, s/veh		35.5			30.5			18.6			19.9	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	37.3	14.1	17.4	7.1	40.0	8.3	23.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	33.0	20.0	19.0	9.0	36.0	9.0	30.0
Max Q Clear Time (g_c+I1), s	6.4	8.4	9.9	10.3	4.4	13.5	5.3	9.3
Green Ext Time (p_c), s	0.1	9.3	0.3	3.1	0.0	9.0	0.0	4.7

Intersection Summary	
HCM 2010 Ctrl Delay	24.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	83	182	14	21	33	10	12	225	99	24	77	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	91	200	15	23	36	11	13	247	109	26	85	8
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	390	29	38	190	56	23	1985	888	42	1872	174
Arrive On Green	0.07	0.12	0.12	0.02	0.07	0.07	0.01	0.56	0.56	0.02	0.57	0.57
Sat Flow, veh/h	1774	3340	249	1774	2704	789	1774	3539	1583	1774	3274	304
Grp Volume(v), veh/h	91	105	110	23	23	24	13	247	109	26	45	48
Grp Sat Flow(s),veh/h/ln	1774	1770	1819	1774	1770	1723	1774	1770	1583	1774	1770	1809
Q Serve(g_s), s	2.9	3.2	3.3	0.7	0.7	0.8	0.4	1.9	1.9	0.8	0.7	0.7
Cycle Q Clear(g_c), s	2.9	3.2	3.3	0.7	0.7	0.8	0.4	1.9	1.9	0.8	0.7	0.7
Prop In Lane	1.00		0.14	1.00		0.46	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	120	207	213	38	125	121	23	1985	888	42	1011	1034
V/C Ratio(X)	0.76	0.51	0.52	0.61	0.18	0.20	0.56	0.12	0.12	0.62	0.04	0.05
Avail Cap(c_a), veh/h	768	981	1008	338	552	537	246	1985	888	338	1011	1034
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	23.9	24.0	28.0	25.3	25.3	28.3	6.0	6.0	27.9	5.4	5.4
Incr Delay (d2), s/veh	9.2	1.9	1.9	14.6	0.7	0.8	19.6	0.1	0.3	14.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.7	1.8	0.5	0.4	0.4	0.3	1.0	0.9	0.6	0.3	0.4
LnGrp Delay(d),s/veh	35.7	25.9	25.9	42.6	26.0	26.1	48.0	6.1	6.3	41.9	5.5	5.5
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		306			70			369			119	
Approach Delay, s/veh		28.8			31.5			7.6			13.5	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	36.4	5.2	10.7	4.8	37.0	7.9	8.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	30.0	11.0	32.0	8.0	33.0	25.0	18.0
Max Q Clear Time (g_c+I1), s	2.8	3.9	2.7	5.3	2.4	2.7	4.9	2.8
Green Ext Time (p_c), s	0.0	2.5	0.0	1.5	0.0	2.6	0.2	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	266	78	207	328	64	55	423	166	101	626	134
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	71	274	80	213	338	66	57	436	171	104	645	138
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	413	118	258	728	141	73	1513	677	134	1340	286
Arrive On Green	0.05	0.15	0.15	0.15	0.25	0.25	0.04	0.43	0.43	0.08	0.46	0.46
Sat Flow, veh/h	1774	2717	778	1774	2960	572	1774	3539	1583	1774	2903	620
Grp Volume(v), veh/h	71	177	177	213	201	203	57	436	171	104	393	390
Grp Sat Flow(s),veh/h/ln	1774	1770	1725	1774	1770	1762	1774	1770	1583	1774	1770	1753
Q Serve(g_s), s	3.2	7.5	7.8	9.3	7.7	7.9	2.6	6.4	5.6	4.6	12.3	12.3
Cycle Q Clear(g_c), s	3.2	7.5	7.8	9.3	7.7	7.9	2.6	6.4	5.6	4.6	12.3	12.3
Prop In Lane	1.00		0.45	1.00		0.32	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	92	269	262	258	435	433	73	1513	677	134	817	810
V/C Ratio(X)	0.78	0.66	0.68	0.82	0.46	0.47	0.78	0.29	0.25	0.78	0.48	0.48
Avail Cap(c_a), veh/h	199	353	345	487	640	638	199	1513	677	266	817	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	32.0	32.1	33.2	25.7	25.8	38.1	15.0	14.7	36.4	14.9	14.9
Incr Delay (d2), s/veh	13.0	2.7	3.4	6.5	0.8	0.8	16.4	0.5	0.9	9.3	2.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.9	3.9	5.0	3.9	3.9	1.6	3.2	2.6	2.6	6.5	6.4
LnGrp Delay(d),s/veh	50.5	34.7	35.5	39.8	26.5	26.6	54.4	15.5	15.6	45.6	16.9	17.0
LnGrp LOS	D	C	D	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		425			617			664			887	
Approach Delay, s/veh		37.7			31.1			18.9			20.3	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	38.2	15.7	16.2	7.3	41.0	8.1	23.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	34.0	22.0	16.0	9.0	37.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	6.6	8.4	11.3	9.8	4.6	14.3	5.2	9.9
Green Ext Time (p_c), s	0.1	9.8	0.4	2.4	0.0	9.3	0.0	4.5

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	212	16	39	47	11	24	269	117	32	110	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	100	236	18	43	52	12	27	299	130	36	122	9
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	445	34	61	269	60	43	1842	824	54	1761	129
Arrive On Green	0.07	0.13	0.13	0.03	0.09	0.09	0.02	0.52	0.52	0.03	0.53	0.53
Sat Flow, veh/h	1774	3335	253	1774	2877	642	1774	3539	1583	1774	3345	244
Grp Volume(v), veh/h	100	124	130	43	31	33	27	299	130	36	64	67
Grp Sat Flow(s),veh/h/ln	1774	1770	1818	1774	1770	1749	1774	1770	1583	1774	1770	1820
Q Serve(g_s), s	3.1	3.7	3.8	1.4	0.9	1.0	0.9	2.5	2.4	1.1	1.0	1.0
Cycle Q Clear(g_c), s	3.1	3.7	3.8	1.4	0.9	1.0	0.9	2.5	2.4	1.1	1.0	1.0
Prop In Lane	1.00		0.14	1.00		0.37	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	133	236	243	61	165	163	43	1842	824	54	932	958
V/C Ratio(X)	0.75	0.53	0.53	0.70	0.19	0.20	0.62	0.16	0.16	0.67	0.07	0.07
Avail Cap(c_a), veh/h	778	963	989	374	559	553	343	1842	824	374	932	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	23.0	23.0	27.2	23.8	23.9	27.5	7.2	7.1	27.3	6.6	6.6
Incr Delay (d2), s/veh	8.3	1.8	1.8	13.4	0.5	0.6	13.7	0.2	0.4	13.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.0	2.0	0.9	0.5	0.5	0.6	1.3	1.2	0.8	0.5	0.5
LnGrp Delay(d),s/veh	34.2	24.8	24.8	40.6	24.4	24.5	41.3	7.3	7.5	40.5	6.8	6.8
LnGrp LOS	C	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		354			107			456			167	
Approach Delay, s/veh		27.5			30.9			9.4			14.0	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	33.7	6.0	11.6	5.4	34.0	8.3	9.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	29.0	12.0	31.0	11.0	30.0	25.0	18.0
Max Q Clear Time (g_c+I1), s	3.1	4.5	3.4	5.8	2.9	3.0	5.1	3.0
Green Ext Time (p_c), s	0.0	3.2	0.0	1.8	0.0	3.3	0.2	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	46	192	58	186	283	50	53	270	155	72	413	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	49	204	62	198	301	53	56	287	165	77	439	140
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	381	113	249	743	129	71	1528	684	100	1186	375
Arrive On Green	0.04	0.14	0.14	0.14	0.25	0.25	0.04	0.43	0.43	0.06	0.45	0.45
Sat Flow, veh/h	1774	2694	797	1774	3015	525	1774	3539	1583	1774	2648	837
Grp Volume(v), veh/h	49	132	134	198	175	179	56	287	165	77	292	287
Grp Sat Flow(s),veh/h/ln	1774	1770	1722	1774	1770	1770	1774	1770	1583	1774	1770	1715
Q Serve(g_s), s	1.9	4.8	5.0	7.5	5.8	5.9	2.2	3.5	4.6	3.0	7.6	7.7
Cycle Q Clear(g_c), s	1.9	4.8	5.0	7.5	5.8	5.9	2.2	3.5	4.6	3.0	7.6	7.7
Prop In Lane	1.00		0.46	1.00		0.30	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	62	250	243	249	436	436	71	1528	684	100	793	768
V/C Ratio(X)	0.78	0.53	0.55	0.80	0.40	0.41	0.79	0.19	0.24	0.77	0.37	0.37
Avail Cap(c_a), veh/h	281	458	446	613	790	790	281	1528	684	306	793	768
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	27.7	27.8	28.9	21.9	21.9	33.0	12.2	12.5	32.3	12.7	12.7
Incr Delay (d2), s/veh	19.0	1.7	1.9	5.7	0.6	0.6	17.1	0.3	0.8	11.8	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.5	2.5	4.1	2.9	3.0	1.4	1.7	2.2	1.8	3.9	3.9
LnGrp Delay(d),s/veh	52.2	29.4	29.7	34.6	22.5	22.6	50.2	12.5	13.4	44.2	14.0	14.1
LnGrp LOS	D	C	C	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		315			552			508			656	
Approach Delay, s/veh		33.1			26.9			16.9			17.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	34.0	13.7	13.8	6.8	35.1	6.4	21.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	30.0	24.0	18.0	11.0	31.0	11.0	31.0
Max Q Clear Time (g_c+I1), s	5.0	6.6	9.5	7.0	4.2	9.7	3.9	7.9
Green Ext Time (p_c), s	0.1	6.5	0.5	2.8	0.0	6.3	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.3
HCM 2010 LOS	C

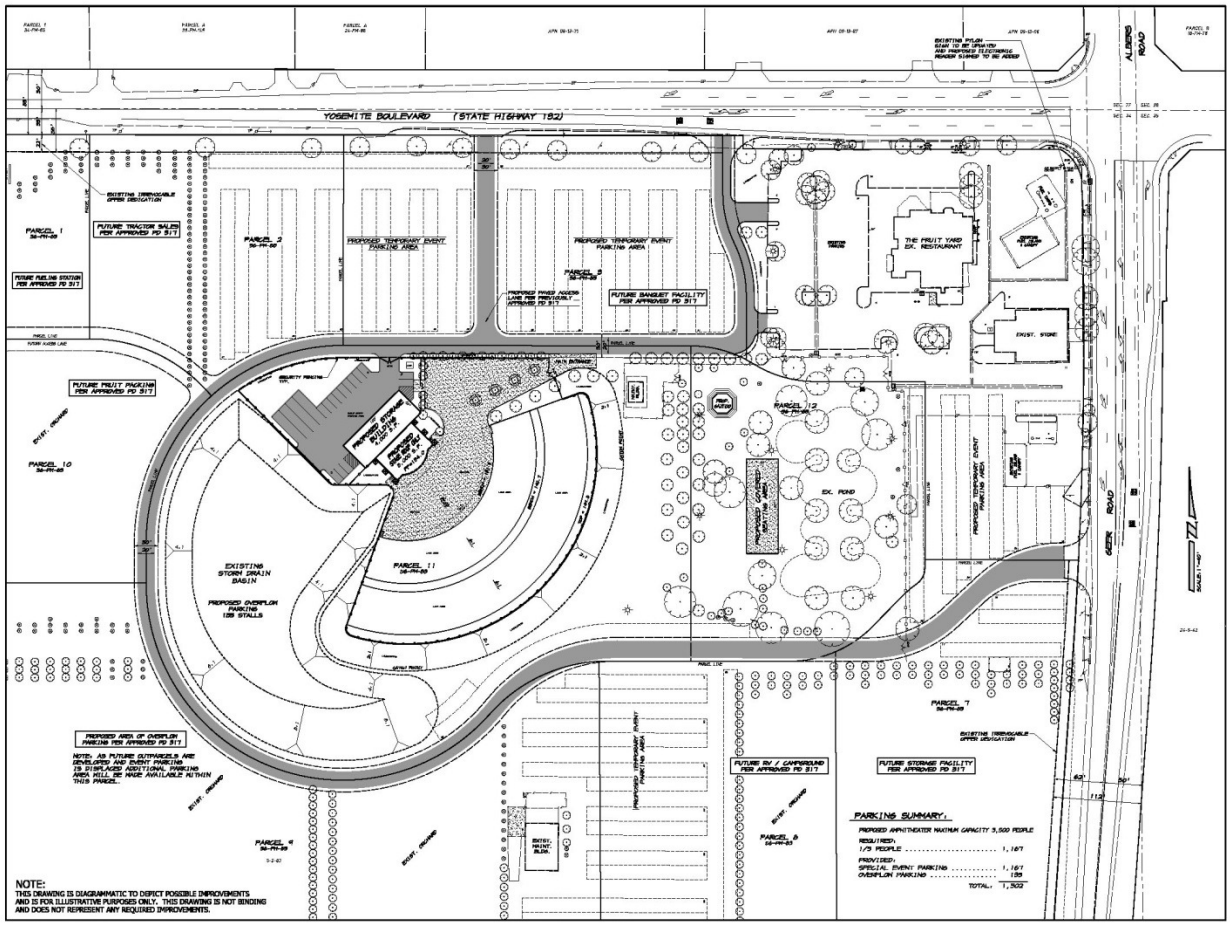
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	89	203	22	50	54	13	21	308	109	24	167	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	96	218	24	54	58	14	23	331	117	26	180	22
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	406	44	71	269	63	38	1913	856	42	1726	208
Arrive On Green	0.07	0.13	0.13	0.04	0.09	0.09	0.02	0.54	0.54	0.02	0.54	0.54
Sat Flow, veh/h	1774	3220	351	1774	2850	665	1774	3539	1583	1774	3181	384
Grp Volume(v), veh/h	96	119	123	54	35	37	23	331	117	26	99	103
Grp Sat Flow(s),veh/h/ln	1774	1770	1801	1774	1770	1745	1774	1770	1583	1774	1770	1795
Q Serve(g_s), s	3.1	3.7	3.8	1.8	1.1	1.2	0.8	2.8	2.2	0.9	1.6	1.6
Cycle Q Clear(g_c), s	3.1	3.7	3.8	1.8	1.1	1.2	0.8	2.8	2.2	0.9	1.6	1.6
Prop In Lane	1.00		0.19	1.00		0.38	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	127	223	227	71	167	165	38	1913	856	42	960	974
V/C Ratio(X)	0.76	0.53	0.54	0.77	0.21	0.22	0.61	0.17	0.14	0.62	0.10	0.11
Avail Cap(c_a), veh/h	659	747	760	479	568	560	330	1913	856	330	960	974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	24.2	24.3	28.2	24.8	24.8	28.7	6.9	6.7	28.6	6.6	6.6
Incr Delay (d2), s/veh	8.8	2.0	2.0	15.7	0.6	0.7	14.8	0.2	0.3	14.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.9	2.0	1.2	0.6	0.6	0.5	1.4	1.0	0.6	0.8	0.9
LnGrp Delay(d),s/veh	35.8	26.2	26.3	43.8	25.4	25.5	43.5	7.1	7.1	42.9	6.8	6.8
LnGrp LOS	D	C	C	D	C	C	D	A	A	D	A	A
Approach Vol, veh/h		338			126			471			228	
Approach Delay, s/veh		29.0			33.3			8.9			10.9	
Approach LOS		C			C			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.4	36.0	6.4	11.5	5.3	36.1	8.2	9.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	32.0	16.0	25.0	11.0	32.0	22.0	19.0
Max Q Clear Time (g_c+I1), s	2.9	4.8	3.8	5.8	2.8	3.6	5.1	3.2
Green Ext Time (p_c), s	0.0	4.0	0.1	1.7	0.0	4.0	0.2	1.5

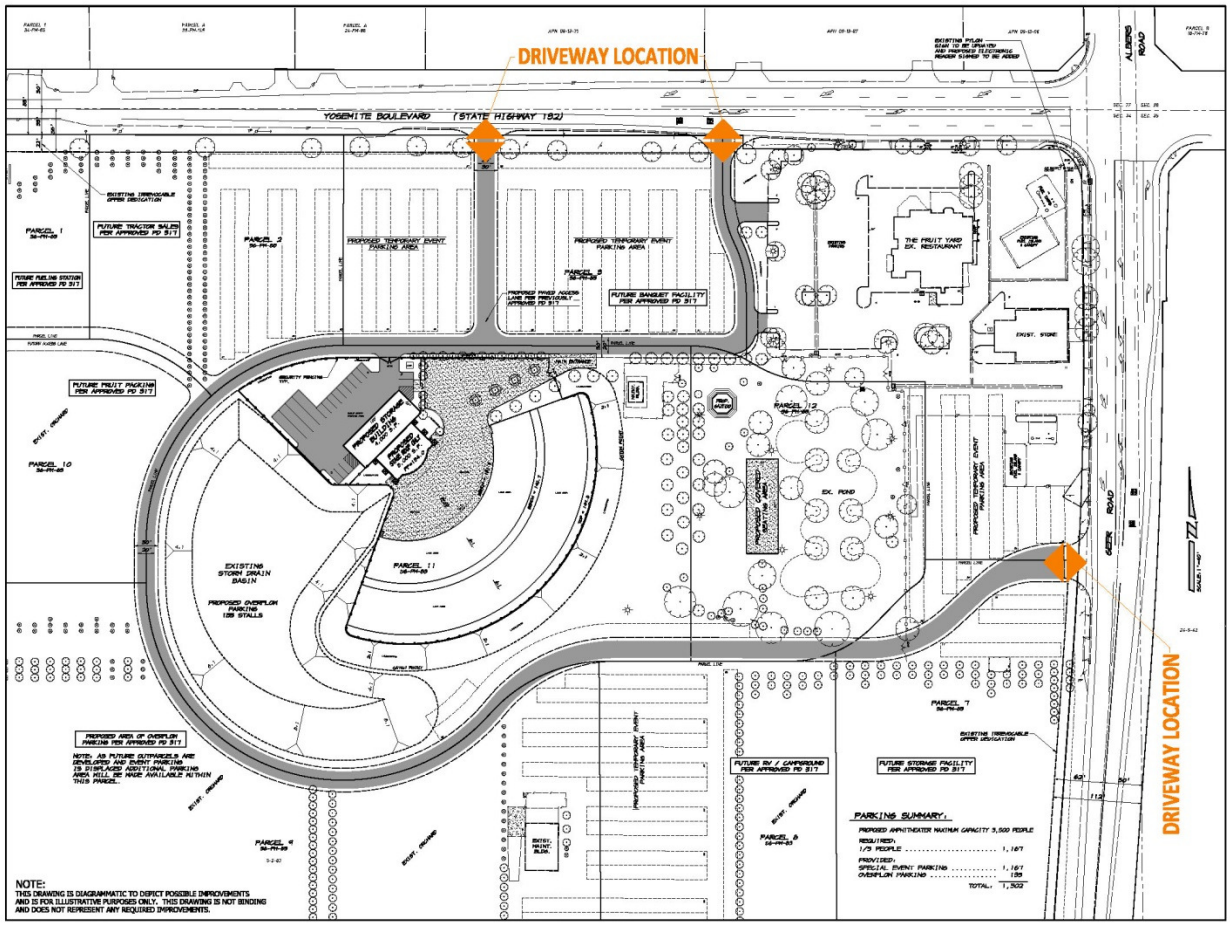
Intersection Summary	
HCM 2010 Ctrl Delay	17.8
HCM 2010 LOS	B

The Fruit Yard Traffic Management Plan

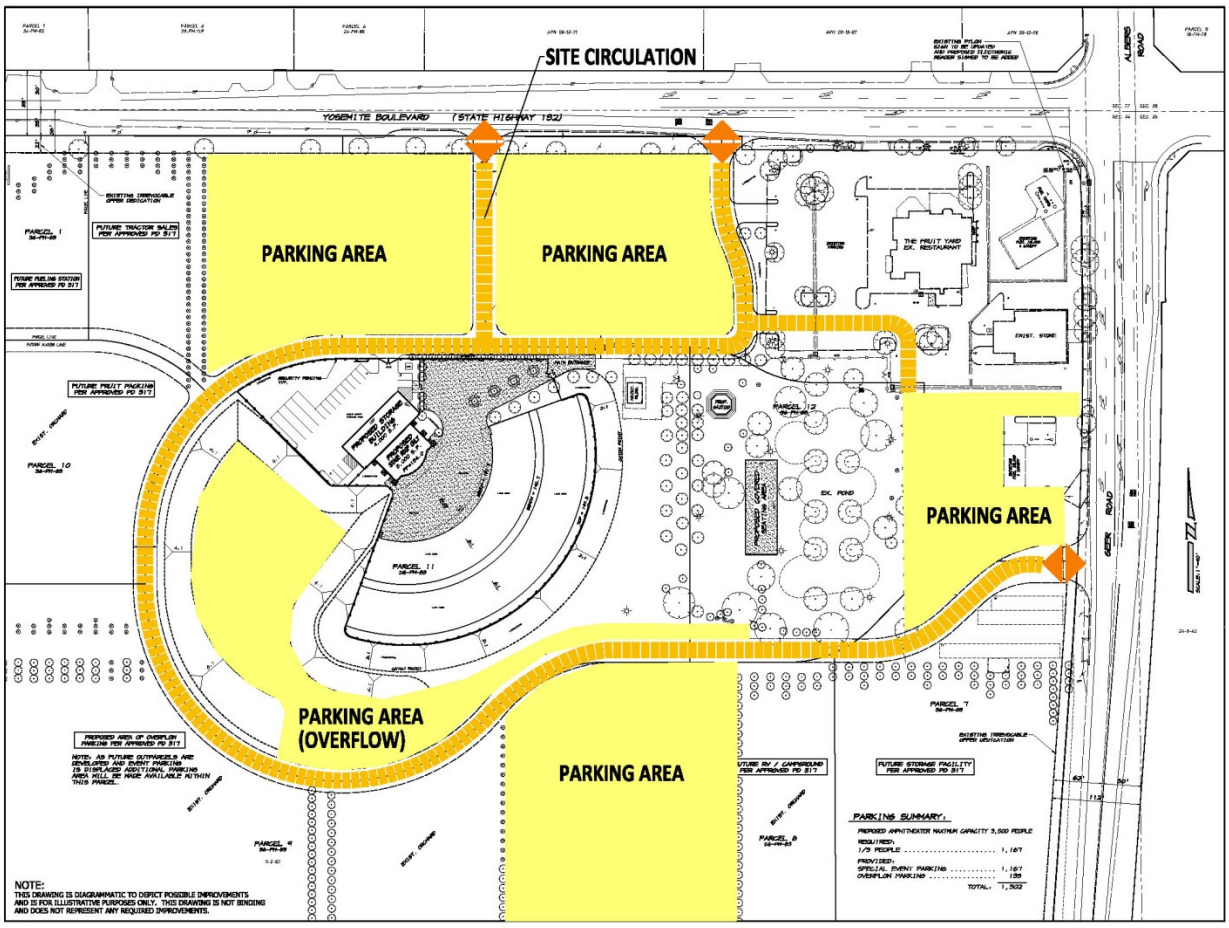
The following document constitutes the Fruit Yard Traffic Management Plan (TMP) which will be utilized for capacity level concerts at the amphitheater. Capacity level concerts will be those which have the possibility of attracting between 2,000 and 3,500 concertgoers to the site, for events starting around 6:00 p.m. and 7:00 p.m. in the evening and ending around 10:00 p.m. to 11:00 p.m. Such events are planned to be on weekend nights only (Friday or Saturday).



Access to the site will be provided as shown on the attached map. Access will be via the two main driveways on Yosemite Boulevard/State Highway 132 and one driveway on Geer road.



A minimum of one hour in advance of a concert, parking staff will arrive and be outfitted with appropriately colored vests to identify them as parking staff. A minimum of one person will be stationed at each driveway location, one at the location where cars will be directed from onsite into parking areas, and one within each parking area, a minimum of nine (9) individuals, but more may be used. Parking in the parking areas will occur far onto the site, so that backups will occur on the projects site and not on adjacent roadways. Access into parking areas will be handled by parking staff to direct people to their appropriate parking spaces as shown on the attached parking plan. At least two or three parking areas will be open at the same time to accommodate incoming traffic from all directions.



The day before any event, no parking signs will be placed along Geer Road and State Highway 132 to make sure vehicles aren't parked along the adjacent road frontages. A minimum of six hours before the event, temporary signage such as that shown below, will be placed to identify that a special event will be occurring, and to direct special event parking to the appropriate driveways and into the site.

Onsite security will remain on the site through the concert even to monitor the facilities and the parked cars.

After the event, which is expected to end between 10:00 p.m. and 11:00 p.m., parking staff will direct cars off the site in reverse order. Staff stationed in the parking areas, and at exits to the onsite roadways will direct motorists to the appropriate driveways to avoid onsite bottlenecks. As it may take ten or fifteen minutes to get the vehicles off of the site, non-preferred paths of travel will be blocked off with chains or signs so that traffic can be directed to the appropriate access points where driveways currently exist. It is expected that traffic will exit the event at the same locations they entered as shown on the previous map. Onsite traffic control will remain at the site for an hour after the event, or until the vast majority of the vehicles have departed the site.

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April 28, 2016

Mr. Jim P. Freitas
Associated Engineering Group, Inc.
4206 Technology Drive, Ste. 4
Modesto, CA 95356

RE: The Fruit Yard Project; Stanislaus County, California
Supplemental Traffic Impact Analysis (TIA) - Response to County Comments

Dear Mr. Freitas,

Pinnacle Traffic Engineering (PTE) has reviewed the comments provided by Andrew Malizia at Stanislaus County (email dated April 14, 2016). The Supplemental Traffic Impact Analysis (TIA) was reviewed and the specific comments were discussed with Andrew. The following is a brief response for each comment received from Stanislaus County:

1. The Supplemental TIA presents a focused analysis of the existing plus approved uses plus the amphitheater project conditions at Yosemite Boulevard (SR 132) / Geer Road - Albers Road intersection. As stated in the report (Page 19), the analysis presents a "worst" case scenario assuming that the amphitheater traffic could arrive before 6:00 PM. However, the proposed Transportation Demand Management (TDM) measures are designed to avoid generating any amphitheater traffic before 6:00 PM (e.g. a concert on a Friday would start at 7:00 PM or later). Based on my discussion with Andrew, I took a quick look at the "levels of service" (LOS) for the Geer Road / "D" Driveway intersection. I also added the traffic associated with the existing and approved project site uses. The analysis shows that average delays at the "D" Driveway intersection would be in the LOS A range, while delays on the "D" Driveway approach (traffic exiting the site) would be in the LOS D range (26.5 seconds). The delay is only slightly over the LOS C threshold (25.0 seconds). If County staff could provide the hourly directional volumes associated with the average daily traffic (ADT) data used for the initial analysis the peak period volumes could be adjusted to reflect the 6:00 to 7:00 PM period.

2. As indicated in the Supplemental TIA report (Page 24), the existing pavement width on Geer Road adjacent to "D" Driveway is sufficient to stripe a short northbound left turn lane. Therefore, the SimTraffic modeling included a short left turn lane on the approach to the "D" Driveway. The 95th percentile queue for the northbound left turn is estimated at 2.6 vehicles (approximately 65').

3. The peak hour factor (PHF) for the amphitheater traffic movements at the Yosemite Boulevard (SR 132) / Geer Road - Albers Road and Geer Road / "D" Driveway intersections were reduced to 0.75, which means all arriving traffic would enter within 45-minute period. Average delays at both intersections would still be within the LOS C range (see attached LOS worksheets). The percent heavy vehicles were also increased to 10% for the N-S and E-W movements along Geer Road and Yosemite Boulevard (SR 132), respectively. The LOS analysis referred under the previous responses was performed using the adjusted PHF and percent heavy vehicles. I've uploaded a new SimTraffic video to my DropBox folder (link provided below):

   (https://www.dropbox.com/s/3i7oounbiounsr1/Ex%20%2B%20App%20%2B%20Amph%20%28Inbound%29%20PM%20-%20Friday%20-%20SimTraffic%20-%20PTE%204-28-16%20Adjusted%20PHF.wmv?dl=0)

4. Input signal timing parameters for the Synchro 8 software include a 4 second "minimum initial", 3.5 second "yellow" clearance, and a 0.5 second "on-red" clearance. The "Phase Duration" (G + Y + Rc) is a calculated value produced by the software.

It is my understanding that Associated Engineering Group will investigate the possibilities of striping an exclusive left turn lane on the northbound approach of Geer Road at the "D" Driveway. In addition, the remaining County comments are to be addressed by the project team.

Please contact my office with any questions regarding the response to comment material.

Pinnacle Traffic Engineering

Larry D. Hail, CE, TE, PTOE
President

ldh:msw

attachments - Synchro 8 LOS Worksheets

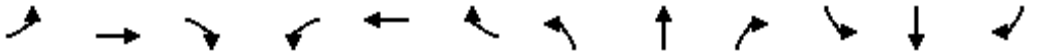
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	8	21	313	636	689	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	75	92	92	75
Heavy Vehicles, %	0	0	0	10	10	0
Mvmt Flow	9	23	417	691	749	296

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2275	749	749	0	-	0
Stage 1	749	-	-	-	-	-
Stage 2	1526	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	45	415	869	-	-	-
Stage 1	471	-	-	-	-	-
Stage 2	200	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	23	415	869	-	-	-
Mov Cap-2 Maneuver	84	-	-	-	-	-
Stage 1	471	-	-	-	-	-
Stage 2	104	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26.5	4.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	869	-	199	-	-
HCM Lane V/C Ratio	0.48	-	0.158	-	-
HCM Control Delay (s)	12.9	-	26.5	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	2.6	-	0.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	69	266	78	207	328	64	55	423	166	101	626	134
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1863	1756	1900	1863	1745	1900	1863	1727	1863	1863	1750	1900
Adj Flow Rate, veh/h	75	289	85	276	437	70	60	460	180	110	835	179
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.75	0.75	0.92	0.92	0.92	0.92	0.92	0.75	0.75
Percent Heavy Veh, %	2	10	10	2	10	10	2	10	2	2	10	10
Cap, veh/h	97	405	117	319	813	129	77	1301	627	140	1177	252
Arrive On Green	0.05	0.16	0.16	0.18	0.28	0.28	0.04	0.40	0.40	0.08	0.43	0.43
Sat Flow, veh/h	1774	2556	738	1774	2866	456	1774	3282	1583	1774	2725	584
Grp Volume(v), veh/h	75	187	187	276	252	255	60	460	180	110	509	505
Grp Sat Flow(s),veh/h/ln	1774	1668	1626	1774	1658	1664	1774	1641	1583	1774	1662	1647
Q Serve(g_s), s	3.6	9.1	9.4	13.0	11.0	11.1	2.9	8.4	6.6	5.2	21.5	21.5
Cycle Q Clear(g_c), s	3.6	9.1	9.4	13.0	11.0	11.1	2.9	8.4	6.6	5.2	21.5	21.5
Prop In Lane	1.00		0.45	1.00		0.27	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	97	264	258	319	470	472	77	1301	627	140	718	711
V/C Ratio(X)	0.78	0.71	0.73	0.87	0.54	0.54	0.78	0.35	0.29	0.78	0.71	0.71
Avail Cap(c_a), veh/h	186	311	303	455	560	563	186	1301	627	248	718	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	34.2	34.3	34.2	26.0	26.0	40.6	18.2	17.6	38.8	20.0	20.0
Incr Delay (d2), s/veh	12.4	5.9	7.0	11.7	0.9	1.0	15.3	0.8	1.1	9.2	5.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.6	4.7	7.4	5.2	5.2	1.7	4.0	3.1	2.9	10.9	10.8
LnGrp Delay(d),s/veh	52.4	40.1	41.4	45.9	26.9	27.0	55.9	18.9	18.8	48.0	25.8	25.9
LnGrp LOS	D	D	D	D	C	C	E	B	B	D	C	C
Approach Vol, veh/h		449			783			700			1124	
Approach Delay, s/veh		42.7			33.6			22.1			28.0	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	38.0	19.4	17.6	7.7	41.1	8.7	28.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	34.0	22.0	16.0	9.0	37.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	7.2	10.4	15.0	11.4	4.9	23.5	5.6	13.1
Green Ext Time (p_c), s	0.1	12.0	0.5	2.2	0.0	8.4	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C


GEER ROAD
90'
100'

Environmental Noise Analysis

The Fruit Yard Project

Stanislaus County, CA

BAC Job # 2015-129

Prepared For:

Associated Engineering Group

Attn: Jim Freitas
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Prepared By:

Bollard Acoustical Consultants, Inc.

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February 3, 2016

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Project History

Bollard Acoustical Consultants, Inc. (BAC) prepared a noise analysis for the Fruit Yard project dated August 31, 2015. On November 6, 2015, comments were received from Stanislaus County on the BAC noise analysis. The specific comments provided by the County are as follows:

1) A method for verifying compliance with the measures identified on page 12 needs to be incorporated into the project. The method may include a system for monitoring and recording sound levels for the duration of events in order to allow for enforcement. Simply identifying sound output limits without a means of monitoring is not sufficient.

2) The noise consultant should make an initial attempt to identify crowd noise based on previous work/other projects. Any error in the initial attempt will be captured when the evaluation of actual concerts occurs. If this type of initial attempt is not feasible, the analysis should clearly state such.

3) The noise analysis needs to define “large concert” and “small events” based on an actual measurable scale (such as crowd size).

4) The noise analysis provided only evaluates noise levels generated from the amphitheater. Unless all amplified noise will be limited to the amphitheater, an additional noise assessment needs to be conducted for amplified noise events to be conducted elsewhere on the site. A simple assumption that smaller events are expected to generate considerably lower sound levels then a concert event is not an adequate assessment and does not qualify in addressing the noise analysis needed for compliance with the 2008 approval.

5) The noise analysis provided only focuses on A-weighted sound levels expressed in dBA. An analysis of the bass or dBC levels generated from any sound event occurring in the park/amphitheater areas is needed. The bass "thump" is commonly the source of noise complaints.

6) The mapped contour lines provided in the noise analysis are very helpful and should be revised to incorporate the expanded evaluation of the park area.

7) The noise analysis needs to consider changes that may occur to intervening orchards which are identified as helping to absorb sound. Orchards are subject to removal and cannot be relied upon for long term sound mitigation. If the model used is accurate, what would the sound be without the orchards? Is mitigation needed to address changes in future conditions if the orchards are removed?

8) The noise analysis should clarify if the existing ambient noise environment factored in any nut harvesting activities, or other seasonal activities, that may have been occurring during the test period, but are not a constant factor.

9) The noise analysis needs to more specifically define the size and construction of the "sound wall along the rear of the stage" as identified on page 8 (of the original analysis).

Based on these comments, additional analysis was conducted by BAC to expand the scope of the noise study beyond the original focus of the amphitheater, and to develop responses to the above comments. This report includes the original analysis as well as the supplemental information requested by Stanislaus County.

Introduction

The proposed Fruit Yard project site is located at the southwest quadrant of the intersection of Yosemite Boulevard (SR 132) and Geer Road, in unincorporated Stanislaus County, California. The project site address is 7948 Yosemite Boulevard, on Assessor's Parcel Number 009-027-004. The site is zoned Planned Development (PD) and is surrounded by agricultural land uses and dispersed rural residences. Figure 1 shows the project site location and surrounding land uses. Figure 2 shows the proposed amphitheater site plan.

Due to the presence of rural residences in the general project vicinity, the Stanislaus County project conditions of approval (COA) contain provisions with respect to allowable noise generation of the proposed amphitheater. The specific COA's which are applicable to noise are as follows:

8. An acoustical analysis shall be prepared in accordance with the Noise Element of the Stanislaus County General Plan prior to any outdoor use of amplified sound or blasting devices to insure noise levels do not exceed the maximum allowable noise levels as allowed by the Noise Element.

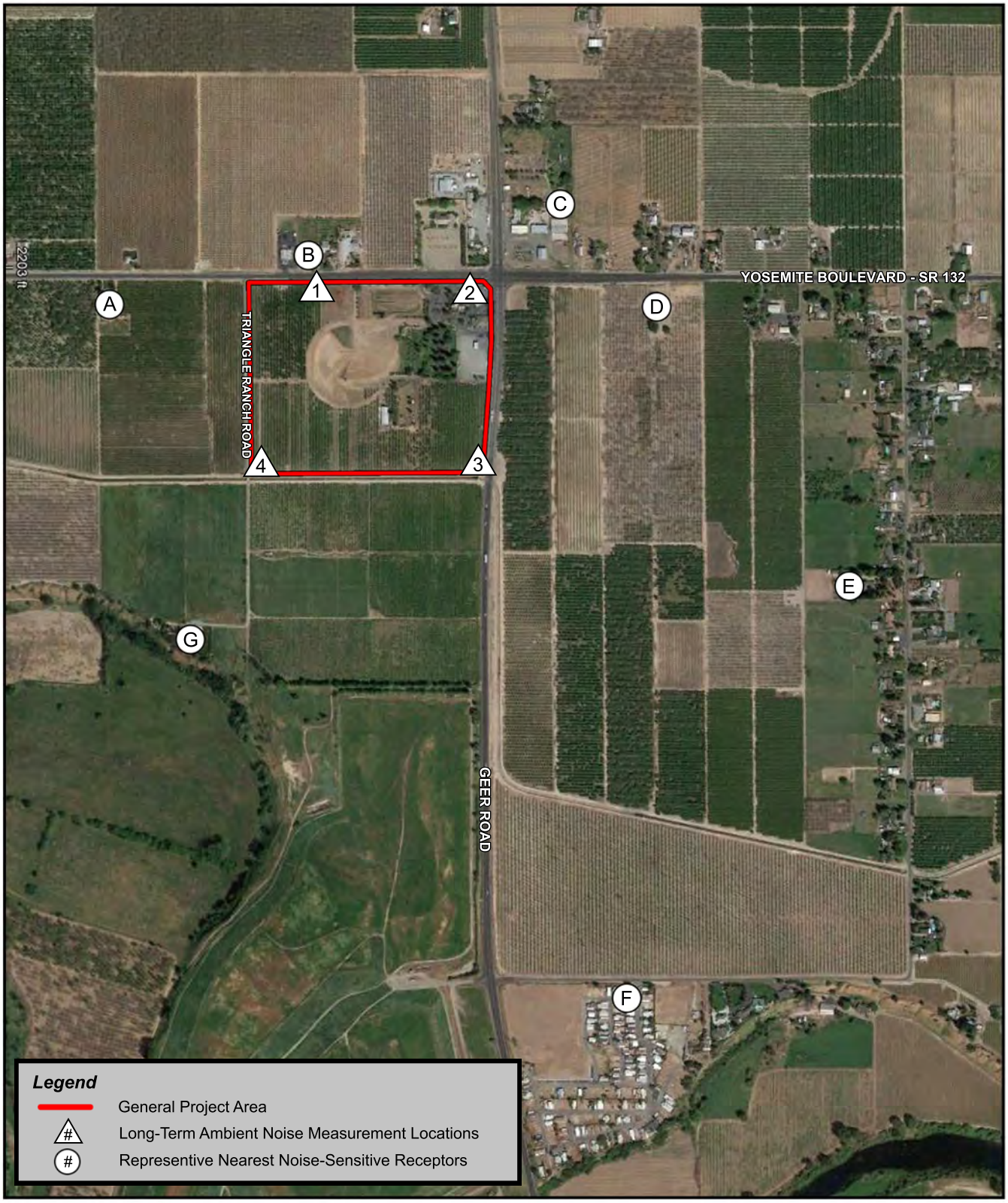
72. In accordance with the Noise Element of the Stanislaus County General Plan, noise levels associated with all on-site activities shall not exceed the maximum allowable noise levels as allowed by the Noise Element. The property owner shall be responsible for verifying compliance and for any costs associated with verification.

In response to these conditions, the project applicant has retained Bollard Acoustical Consultants, Inc. (BAC) to prepare this analysis of potential noise impacts associated with the generation of amplified music at the proposed amphitheater site and elsewhere on the site (County comment 4).

Specifically, this analysis has been prepared to quantify pre-project ambient noise levels in the immediate project vicinity, to identify the appropriate Stanislaus County noise level standards, to predict amplified music sound levels occurring anywhere on the site at the nearest potentially affected noise-sensitive land uses to the project site, to compare those levels against the applicable noise standards, and to recommend additional noise control measures if it is determined that those standards would be exceeded. This report contains the results of the sound study.

Figure 1

Project Area, Monitoring Sites, and Representative Receptor Locations
The Fruit Yard Project - Stanislaus County, California



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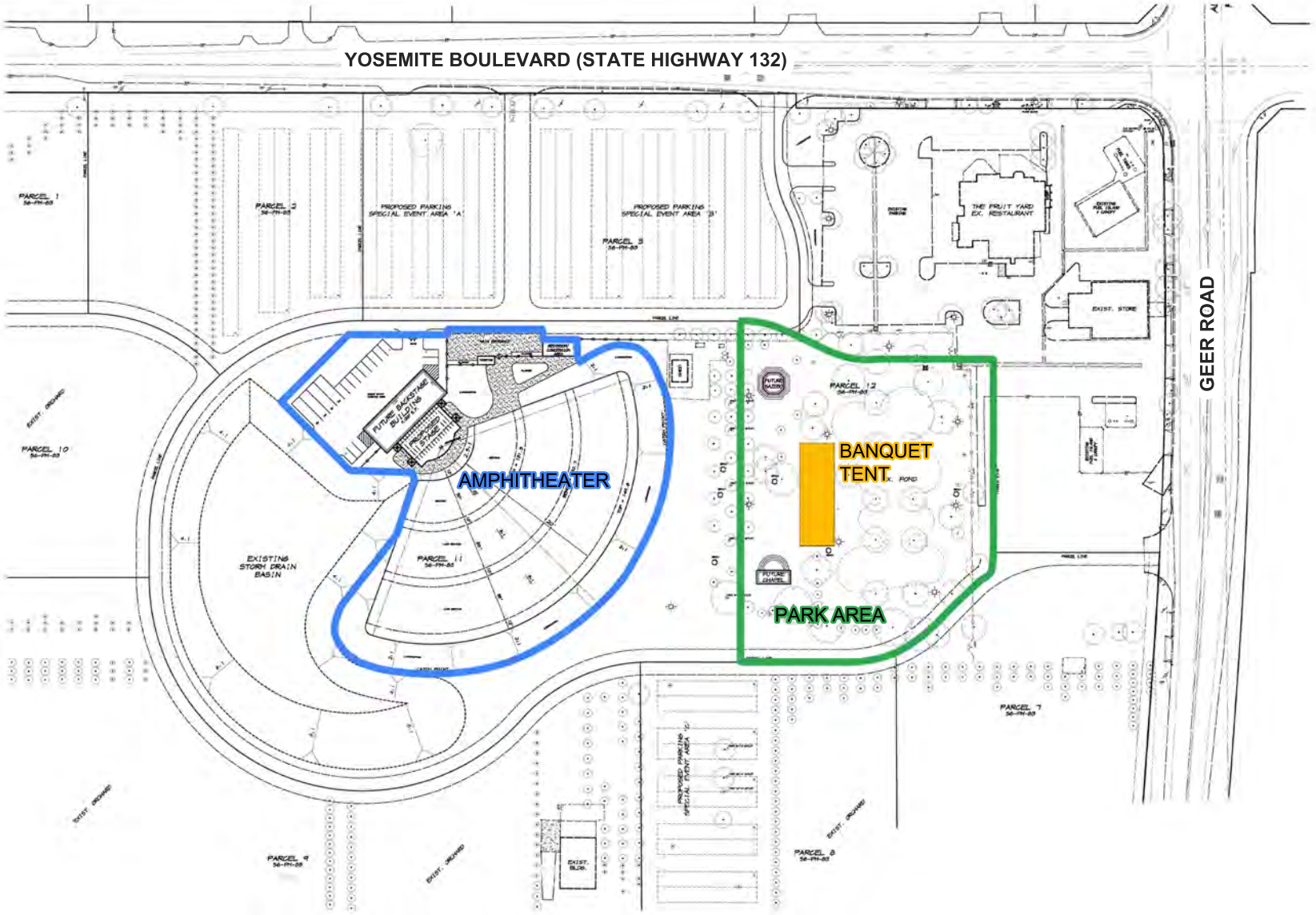
Scale (feet)
0 600 1,200

Figure 2

Project Site Plan

The Fruit Yard Project - Stanislaus County, California



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Acoustic Fundamentals & Terminology

Noise is often defined simply as unwanted sound. Loudness is the human impression of the strength of a sound pressure waves impacting the eardrum. The loudness of a noise does not necessarily correlate with its sound level.

The human ear does not perceive all frequencies equally. For sound levels in the normal range of human hearing, the human ear does not perceive very low and very high frequencies as well as mid-range frequencies. In other words, for two sounds of equal intensity in the normal range of human hearing, a mid-frequency sound is perceived as being louder than a low-frequency or very high frequency sound. This may seem counterintuitive as often times we may hear only low-frequency sounds, such as the bass of music being played in a nearby car or the sound of a distant concert. But this phenomenon is due to the fact that, due to their longer wavelengths, low-frequency sounds pass through barriers more efficiently than mid and high-frequency sounds, as well as the fact that low frequency sounds are not absorbed into the atmosphere as readily as higher frequency sounds (i.e. low frequency sound "carries" further over distance).

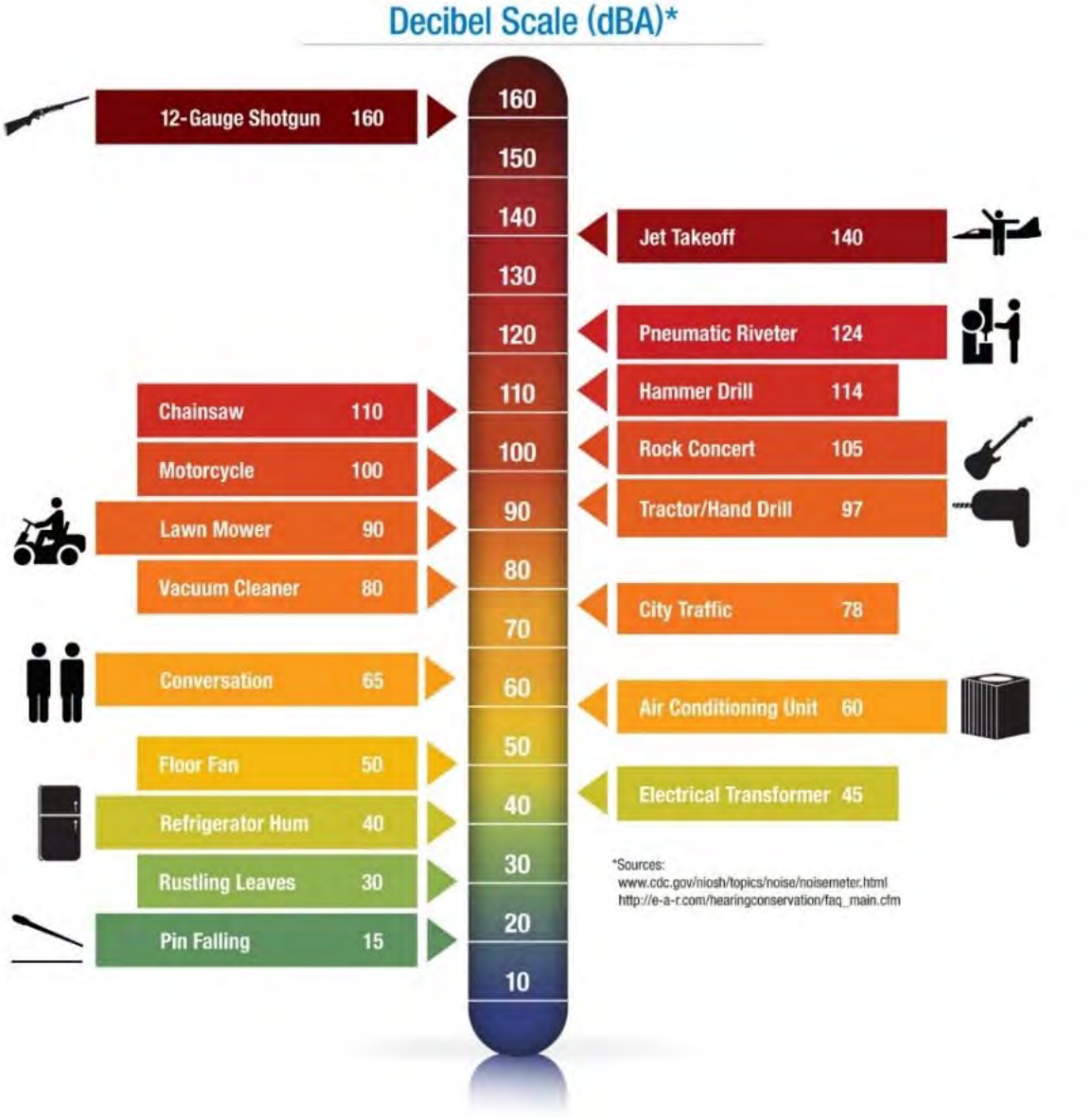
To account for the differences in perception of human hearing to different frequencies, the A-weighting scale was developed. A-weighted noise levels are basically linear, or flat, sound pressure levels shaped by a filter. The A-weighting filter adjusts the linear measurement to account for the way in which the ear responds to different frequencies of sound. Measurements in dBA are decibel scale readings that have been adjusted using the A-weighting filter to attempt to take into account the varying sensitivity of the human ear to different frequencies of sound. Researchers have generally agreed that A-weighted sound pressure levels (sound levels) are very well correlated with community reaction to noise for sound levels in the normal range of human hearing. Figure 3 provides examples of maximum sound levels associated with common noise sources.

At very high noise levels, the human ear perceives very low and very high frequency sounds better than at the more moderate ranges of noise levels commonly encountered in society. To better represent the loudness of very high noise levels, the C-weighting scale was developed. The C-weighting scale is quite flat, and therefore includes much more of the low-frequency range of sounds than the A scale. The effect of using a C-weighting scale vs. an A-weighting scale is that the C-weighting scale will report higher noise levels (due to less low-frequency sound being filtered as compared to the A-weighting filter).

The decibel notation used for sound levels describes a logarithmic relationship of acoustical energy, so that sound levels cannot be added or subtracted in the conventional arithmetic manner. For example, a doubling of acoustical energy results in a change of 3 decibels (dB), which is usually considered to be barely perceptible. A 10-fold increase in acoustical energy yields a 10 decibel change, which is subjectively like a doubling of loudness.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent sound level (L_{eq}), usually measured over a one-hour period.

Figure 3
Typical A-Weighted Sound Levels of Common Noise Sources



Stanislaus County Criteria for Acceptable Noise Exposure

Stanislaus County General Plan Noise Element

The Stanislaus County General Plan Noise Element establishes acceptable noise level limits for both transportation and non-transportation noise sources. The primary objective of the Noise Element is to prescribe policies that lead to the preservation and enhancement of the quality of life for the residents of Stanislaus County by securing and maintaining an environment free from excessive noise.

For stationary noise sources, such as the proposed amphitheater, Stanislaus County regulates the level of noise that may impact adjacent noise-sensitive uses. For this project, the evaluation period is considered to be the worst-case hour during which amplified music would be in use. Noise generated by the project which exceeds the County's noise exposure limits at the closest noise-sensitive uses would require noise mitigation. The County's General noise exposure limits applicable to this project are summarized in Table 1.

Table 1
Maximum Allowable Noise Exposure[1] for Stationary Noise Sources
Stanislaus County Noise Element of the General Plan

	Daytime Standard (7 a.m.-10 p.m.)	Nighttime Standard (10 p.m.-7 a.m.)
Hourly L_{eq}, dBA	55	45
Maximum Level (L_{max}), dBA	75	65

1. Each of the noise level standards specified in Table 1 shall be reduced by five (5) dBA for pure tone noises, noise consisting primarily of speech or music, or for recurring impulsive noises. The standards in Table 1 should be applied at a residential or other noise-sensitive land use and not on the property of a noise-generating land use. Where measured ambient noise levels exceed the standards, the standards shall be increased to the ambient levels.

Source: Stanislaus County Noise Element of the General Plan

As noted in the footnote to Table 1, a -5 dB adjustment is applied to the County's noise standards for sounds consisting of music. In addition, in areas with elevated ambient conditions, the noise standards are increased to match ambient conditions. While it is clear that a -5 dB offset to the Table 1 standards is warranted because the noise source is music, an ambient noise survey was required to determine if existing ambient conditions are sufficiently elevated so as to warrant increasing the noise level standards. Ambient conditions in the immediate project vicinity are described in the following section.

Discussion of Alternative Noise Standards for Amplified Music

Pursuant to the County's adopted noise level standards shown in Table 1, the original noise analysis focused on A-weighted sound levels expressed in dBA. As noted in Stanislaus County Comment #5 (see Page 1), the County is requesting that this revised report include an analysis of the bass (low frequency) levels generated from any sound event occurring in the park/amphitheater area using the C-weighting scale This request was made because the bass "thump" is commonly the source of noise complaints in the County.

As noted in the Acoustic Fundamentals and Terminology section of this report, sound levels measured using the C-weighting scale will always be higher than levels measured using the A-weighting scale. This is because the C-weighted filter is much flatter than the A-weighted filter. The result is that more low-frequency sound is included in a C-weighted measurement than in an A-weighted measurement. The numeric difference in measured A and C-weighted sound levels associated with amplified music at the project site will depend on the level of low-frequency sound generated by the sound systems utilized at the site.

To evaluate potential noise impacts of the proposed amplified music at the project site in terms of C-weighted levels, appropriate C-weighted noise standards must be considered. Stanislaus County recently conditioned an event center in the County to comply with C-weighted sound level limits *within* the entertainment venue. However, these limits were applied *inside* an enclosed venue whereas amplified music at the Project site will occur *outdoors*.

For guidance in developing *exterior* C-weighted noise level standards for this project, the City of Roseville Noise Ordinance was consulted. Section 9.24.110 of the Roseville Municipal Code (Noise Regulation), contains exterior noise level limits for amplified sound in terms of A and C-weighting scales, as well as one-third octave band thresholds. Those standards indicate that the C-weighted noise level standards are 25 dB higher than the corresponding A-weighting standards for amplified music during both daytime and nighttime periods. For example, the daytime A-weighted standard for amplified music is 50 dBA and the daytime C-weighted noise standard is 75 dBC.

On the surface, the use of a C-weighted noise level standard that is 25 dB higher than the corresponding A-weighting noise standard might appear to indicate the C-weighted standard is less restrictive than the A-weighted standard. However, in the 31.5 hertz 1/3 octave frequency band, the difference between A and C weighting filters is 35 dB. Therefore, if the sound source in question contains considerable content in that low frequency band, the use of a C-weighted standard which is 25 dB greater than the A-weighted standard would result in a 10 dB *reduction* in very low frequency sound at the receiver. A 10 dB reduction is substantial, representing a halving of perceived loudness.

In BAC's professional opinion, the most effective means of controlling sound in the community resulting from amplified sound at the Project site would be to place logical limits on the level of the low-frequency sound originating at the source. Specific recommendations for such limits are included in the Conclusions and Recommendations section of this report.

Existing Ambient Noise Environment

The ambient noise environment in the immediate project vicinity is primarily defined by traffic on Yosemite Boulevard and Geer Road, as well as by local agricultural-related activities. To generally quantify the existing ambient noise environment in the immediate project vicinity, continuous hourly noise level measurements were conducted at four locations surrounding the project site from Friday, June 19 through Sunday, June 21, 2015. The noise measurement locations are shown on Figure 1.

Larson-Davis Laboratories (LDL) Model 820 precision integrating sound levels meter were used to complete the noise level measurement survey. The meters were calibrated before use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy off the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

The noise level measurement survey results are summarized below in Table 2. The detailed results of the ambient noise surveys are contained in Appendix B in tabular format and graphically in Appendix C.

Table 2
Summary of Ambient Noise Measurement Results
Fruit Yard Project Vicinity

			Daytime (7 am - 10 pm)		Nighttime (10 pm - 7 am)	
Site	**Date**	**L_{dn}**	**L_{eq}**	**L_{max}**	**L_{eq}**	**L_{max}**
1	Friday, June 19	67	65	96	59	83
	Saturday, June 20	66	63	90	58	81
	Sunday, June 21	64	62	93	56	83
	Average	**66**	**63**	**93**	**58**	**82**
2	Friday, June 19	71	66	94	64	92
	Saturday, June 20	71	66	97	64	94
	Sunday, June 21	69	66	98	61	86
	Average	**70**	**66**	**96**	**63**	**91**
3	Friday, June 19	67	64	93	60	83
	Saturday, June 20	66	62	91	60	82
	Sunday, June 21	65	61	90	57	86
	Average	**66**	**62**	**91**	**59**	**84**
4	Friday, June 19	58	58	94	49	67
	Saturday, June 20	55	49	80	49	74
	Sunday, June 21	53	48	73	47	74
	Average	**55**	**52**	**82**	**48**	**72**

Source: Bollard Acoustical Consultants, Inc.

The Table 2 data indicate that measured ambient noise levels in the immediate project vicinity currently exceed the Stanislaus County noise level standards shown in Table 1 at the existing residences located adjacent to Both Yosemite Boulevard and Geer Road (Representative Receptors A, B, C, and D on Figure 1). As a result, the County noise standards for those receptors were adjusted upwards based on the ambient noise level data collected at Sites 1 and 2. At the residences which are removed from the local roadways (Receptors E, F & G), measured ambient noise levels were considerably lower. As a result, the County noise standards for those receptors were adjusted downwards based on the ambient noise level data collected at Site 4. After adjusting the County noise standards to reflect local ambient conditions, a -5 dB offset was applied to the adjusted standards to account for the fact that the noise source in question consists of music. Table 3 provides the adjusted noise level standards for the two types of residential receptors in the immediate project vicinity.

Table 3
Stanislaus County Noise Standards Applied to this Project
After Adjustment for Elevated Ambient and Noise Source Consisting of Music

Receptor	Noise Metric	Adjusted Daytime Standard (7 a.m.-10 p.m.)	Adjusted Nighttime Standard (10 p.m.-7 a.m.)
A, B, C, D	Hourly L_{eq}, dB	60	55
(near busy roadways)	Maximum Level (L_{max}), dB	80	70
E, F, G	Hourly L_{eq}, dB	50	40
(isolated from busy roads)	Maximum Level (L_{max}), dB	65	55

Source: Stanislaus County Noise Element of the General Plan adjusted for ambient conditions and music noise source.

It should be noted that the dominant noise source during the ambient survey period was local traffic on SR-132 and Geer Road. This was particularly evident at measurement Sites 1-3, which represented existing residences located in the immediate vicinity of those roadways. Measurement Site 4 was removed from the local roadways, but distant roadway noise remained the major noise source affecting that location. No orchard harvesting operations were observed by BAC staff during the noise survey in the vicinity of Measurement Site 4. Although the passing of farm vehicles near measurement Site 4 resulted in brief periods of elevated noise levels, Appendices C10-C12 indicate that average daytime noise levels at that location did not fluctuate in a manner consistent with nearby harvesting operations.

Project-Generated Amplified Music Analysis

Pursuant to Stanislaus County Comments 3 and 4 shown on Page 1, this revised analysis includes an evaluation of the sound generated by larger concerts and events held at the amphitheater as well as smaller events held in the park area. A separate discussion of potential impacts of amplified music played at both locations follows.

Amplified Music Originating in Amphitheater

The proposed amphitheater site plan is shown on Figure 2. That figure illustrates that the amphitheater stage will face southeast, away from the nearest existing residences located immediately opposite the project site on Yosemite, Boulevard. With the exception of stage monitors, the speakers used during a concert at this venue would similarly face towards the southeast. Due to the directionality of speakers, this measure will substantially reduce the noise exposure at existing residences to the north of the project site. In addition, the project applicant is proposing a solid wall along the rear of the stage, which would further attenuate sound from both main and monitor speakers in the northerly direction.

The earthen berm which forms the amphitheater, is estimated to be approximately 20 feet tall around the rear of the amphitheater. See Appendix D for photographs of the existing site grading which indicate the amphitheater slope. This earthen berm will provide substantial shielding of music noise in the south and east directions.

To quantify the sound propagation from the amphitheater during a concert event, BAC utilized the SoundPLAN 7.1 model. SoundPlan is a state-of-the-art, three-dimensional, sound propagation model. Inputs to the model included site aerial photography, existing earthen berm elevations, the proposed sound barrier at the rear of the stage, and inputs pertaining to speaker locations and sound output of those speakers.

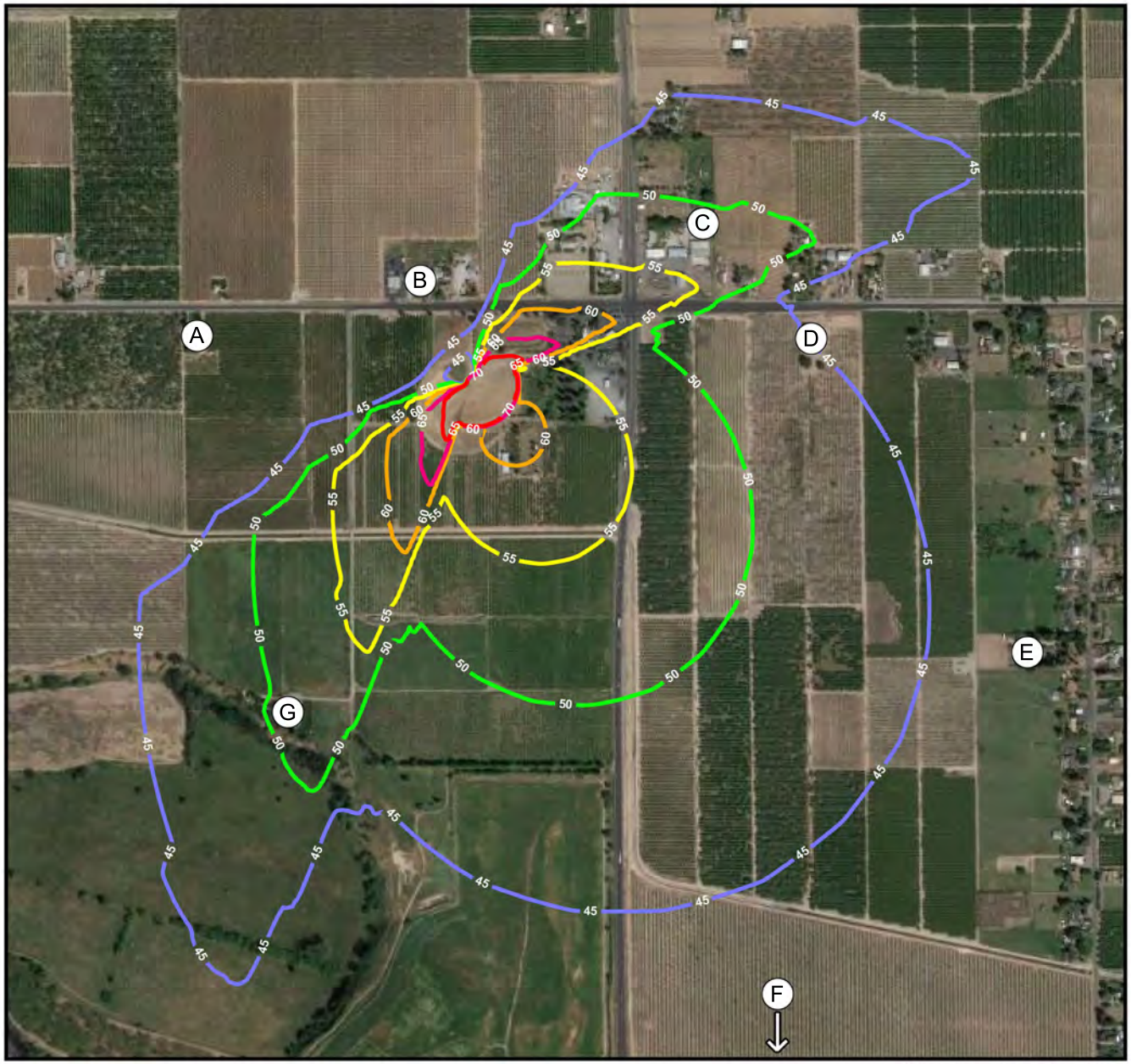
To provide a reasonably worst-case assessment of amphitheater sound generation, reference sound pressure levels of 90 dB Leq and 100 dB Lmax were assumed at a distance of 100 feet from the front of the stage. The results of the SoundPlan Model run are shown in Figure 4 for average (Leq) sound levels, and in Figure 5 for maximum (Lmax) noise levels.

The modeling results shown on Figure 4 indicate that the average noise levels generated during concert events would range from approximately 45 to 50 dB Leq at the nearest residences. The modeling results shown on Figure 5 indicate that the maximum noise levels generated during concert events would range from approximately 55 to 65 dB Lmax at the nearest residences.

The SoundPlan results shown in Figures 4 and 5 indicate that, with the exception of Receptor G, project noise generation would be acceptable at all of the nearest residential receptor locations relative to the adjusted noise level standards shown in Table 3.

At the Residence represented by Receptor G, the predicted average and maximum noise levels are predicted to be approximately 50 dB Leq and 60 dB Lmax, respectively. While these predicted noise levels would be acceptable during daytime hours (7 am – 10 pm), they would exceed the Table 3 noise standards during nighttime hours (10 pm – 7 am). However, because the SoundPlan Model did not account for the considerable sound absorption provided by the approximately 1,000 feet of intervening orchards, the Figure 4 and 5 noise levels are predicted to be overstated at Receptor G.

Figure 4



The Fruit Yard Project
Stanislaus County, California
Concert Noise Level Contours

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200
feet

Leq, dBA

- = 45
- = 50
- = 55
- = 60
- = 65
- = 70

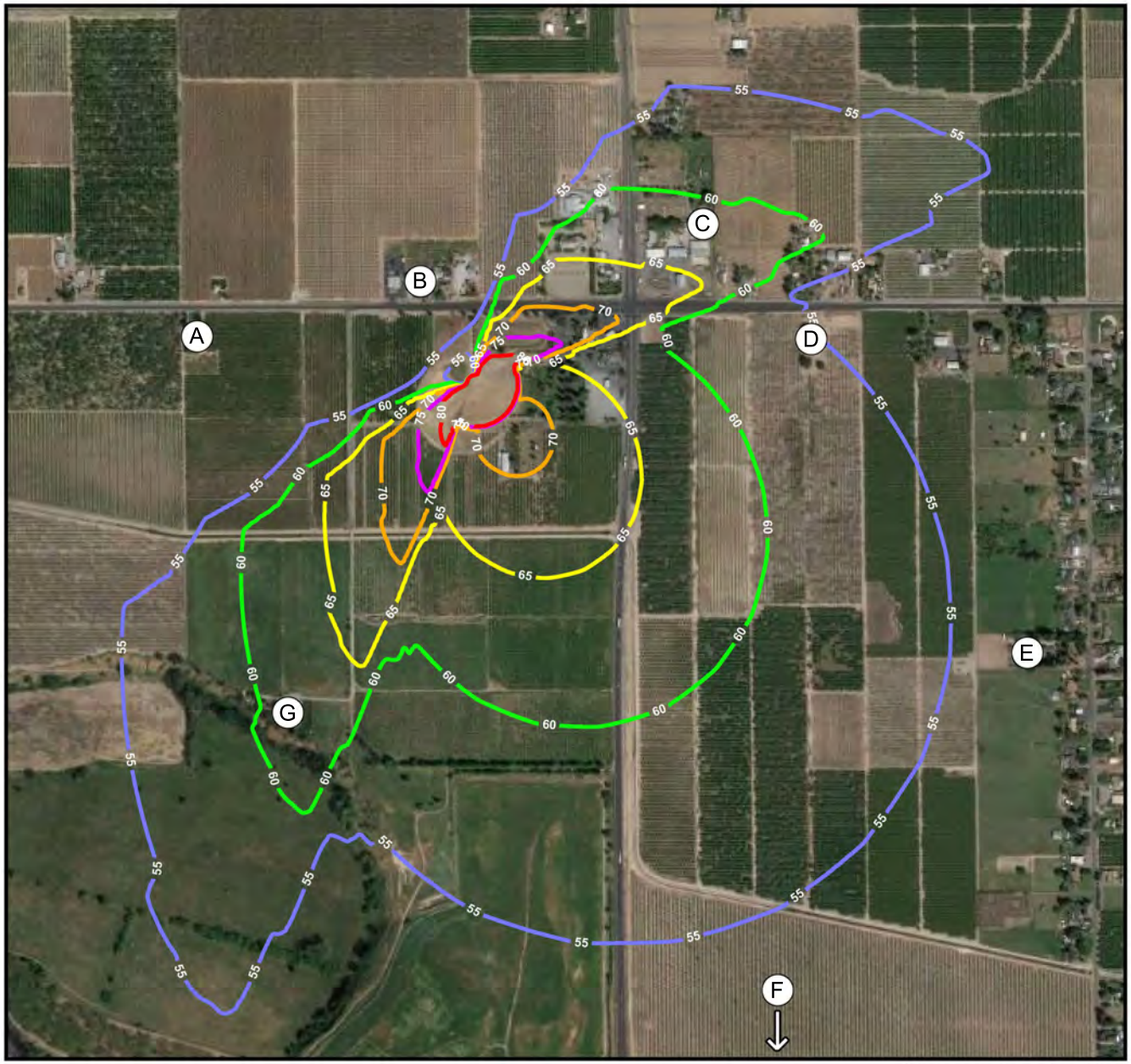
Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Average noise level contours
- Based on reference noise level of 90 dB Leq 100 feet from stage

Figure 5



The Fruit Yard Project
Stanislaus County, California
Concert Noise Level Contours

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200
feet

Lmax, dBA

= 55
= 60
= 65
= 70
= 75
= 80

Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Maximum noise level contours
- Based on reference noise level of 100 dB Lmax 100 feet from the stage

To check the accuracy of the SoundPlan model in predicting amphitheater-generated sound levels at the nearest receptors, an event simulation was conducted at the project site on Thursday, June 18, 2015. The methodology and results of that simulation are provided in the following section of this report.

Amphitheater Event Simulation

To check the accuracy of the SoundPlan Model in predicting amphitheater sound levels at the nearest potentially affected receptor locations, BAC conducted an event simulation at the amphitheater site on June 18, 2015. The simulation consisted of playing amplified music at high sound levels through four (4) Yamaha MSR 400 watt concert speakers with built-in amplifiers and a Yamaha MSR 800 watt sub-woofer with built in amplifier, using an MP3 player as the source. The sound system was placed at the graded stage area of the proposed amphitheater with the speakers oriented to the southeast. Appendix D shows photographs of the event simulation speaker array.

While sound was played through the sound system to a reference level of 85-90 dBA at 100 feet from the speakers, noise level measurements were conducted at eight (8) locations in the vicinity of the amphitheater. Those locations included the following:

- A reference location 100 feet from the speaker array.
- Three locations on top of the amphitheater berm 225 feet from the speaker array corresponding to the left, middle, and right side limits of amphitheater seating.
- A position directly south of the amphitheater berm.
- A position at long-term noise monitoring Site 1 shown on Figure 1.
- A position adjacent to Receptor G shown on Figure 1.
- A position adjacent to Receptor F shown on Figure 1.

The results of the simulation are as follows:

- The amphitheater berm was measured to reduce music levels by approximately 15 dB at the position directly behind (south of) the berm relative to sound levels measured on top of the berm with direct line of sight to the speakers. This is generally consistent with the SoundPlan model predictions. Appendix E-1 shows the results of the simulation at this location directly shielded by the amphitheater berm.

- The amphitheater berm orientation is in the optimum direction to reduce event-related sound levels at the largest concentration of existing residences on Weyer Road and beyond. Without the amphitheater berm, event sound levels in that direction would be considerably higher at those residences (approximately 10+ dB higher).

- After considering the proposed sound barrier at the rear of the sound stage (which was not present during the simulation), sound levels measured at Receptor B, the nearest residence on the north side of Yosemite Boulevard, were consistent with the simulation results. The specific barrier modeled for this assessment was the backstage building identified as being 100 feet wide. BAC assumed this building would be 20 feet tall relative to the stage.

- At Receptor G, which is the nearest residence to the southwest of the amphitheater, sound levels measured during the event simulation were nearly inaudible, and were approximately 10 dB lower than levels predicted using the SoundPlan Model. This is believed to be due to the considerable absorption of sound provided by the intervening 1,000 feet of orchards between the amphitheater and this receptor. Appendix E-2 shows the results of the amphitheater simulation for this receptor. As a result of this shielding, a -10 dB offset was applied to levels predicted at Receptor G, resulting in compliance with the County's noise standards for both daytime and nighttime periods.

  In Stanislaus County Comment #7 on page 1 of this report, the County requested that the analysis evaluate potential noise impacts should intervening orchards be removed. If the intervening orchards are removed at some point in the future, the -10 dB of attenuation identified during the simulation would no longer apply, and additional analysis of potential noise mitigation measures would be required to ensure compliance with the applicable County noise standards.

- At Receptor F, which represents the mobile home park at the southeast corner of Jantzen Road and Geer Road, the simulation sound levels were completely inaudible. Based on this finding, and the SoundPlan model results, exceedance of the County's noise standards is not anticipated at this location.

Amphitheater Crowd Noise Evaluation

As stated previously, the proposed amphitheater has been oriented such that the stage speakers would be directed away from the nearest residential receptors location on the north side of State Route 132 (Yosemite Boulevard). While the amphitheater speakers would generally face southeast, amphitheaters crowds would face predominately northwest, towards the residences on the north side of SR 132.

Crowd noise would be generated by a combination of patrons clapping and verbally expressing their appreciation for the performers (cheering). The level of crowd noise received at the existing residences located on the north side of SR 132 (Receptor B on Figure 1), would depend on the size and enthusiasm of the crowd, as well as the duration of the hour during which the crowd is clapping and cheering.

Regarding crowd cheering, the *Handbook of Noise Control* (Harris, Acoustical Society of America, 1998), provides average A-weighted sound levels of speech for different vocal efforts (table 16.1, p16.2.). Those vocal efforts are categorized as casual, normal, raised, loud and shouting. BAC utilized these reference levels in the computations of crowd noise at the nearest potentially impacted residence.

During a normal event such as a concert, it is BAC's experience that the crowd noise is intermittent, peaking in intensity at the beginning of a popular song, and at the end of nearly every song. The percentage of the hour during which a crowd is cheering/applauding is also a function of the duration of the song being played and the duration of time between songs. For a conservative estimate of crowd noise generation, this analysis assumed the crowd would be

cheering/applauding during approximately 10% of a given hour during a concert performance. The volume level of cheering patrons during that time is expected to vary from “raised” to “loud” to “shouting”.

Based on a maximum capacity crowd of 3,500 patrons in the amphitheater and the above-described assumptions, BAC computed a worst-case hourly noise level of 57 dBA Leq the nearest residence, located approximately 750 feet to the northwest of the center of the amphitheater seating area. This level does not include shielding by other patrons or the building ate the rear of the stage which will serve as a sound barrier. After consideration of that shielding, BAC estimates that worst-case hourly average crowd noise level would be approximately 55 dB L_{eq} or less at the nearest residence to the north.

BAC file data for patrons clapping also varies depending on the intensity of the applause. Applause generally ranges from “polite” to “normal” to “enthusiastic”. At a concert, applause normally falls within the normal to enthusiastic categories. Assuming comparable durations of clapping as cheering during a given hour of a concert event, the computed noise level at the nearest residence from crowd applause also computed to be 55 dB L_{eq} or less.

Combined level for worst-case crowd cheering and applause is expected to be approximately 58 dB Leq or less at the nearest residence to the north. This level would be considered satisfactory relative to County daytime noise criteria but would exceed the County’s nighttime noise standards at the nearest residence to the north. As a result, amphitheater events with more than 2,000 patrons would require limitation to daytime hours to ensure crowd noise does not exceed acceptable limits. Once concert events have been held at the amphitheater site, noise level data collected during the event can be correlated with crowd sizes to confirm these assumptions.

Amplified Music Originating in the Park Area

According to project representatives, larger events generally consisting of crowd sizes of 500 or more, and would typically be held in the amphitheater, whereas smaller events with crowd sizes below 500 would typically be held in the park area.

The park area is shown on Figure 2. That figure also shows a proposed banquet tent located in the central portion of the park, just west of the lake feature. It is likely that receptions with amplified music would occur within the banquet tent, but the park area could accommodate amplified music at other locations as well. It was assumed that the speakers could be positioned in a variety of locations and oriented to the north, south, east or west.

To quantify the sound propagation from the park area during an amplified sound event, BAC utilized the same SoundPLAN 7.1 model previously used to model amphitheater sound levels. Given the smaller size of the park events relative to events held in the amphitheater, a reference sound pressure level of 75 dBA Leq was assumed at a distance of 100 feet from the front of the speakers. This level of sound is consistent with that generated during a wedding reception or small concert. The results of the SoundPlan Model run are shown in Figures 6-9 for speaker positions facing north, east, south and west, respectively.

Figure 6

The Fruit Yard Project
Stanislaus County, California
Park Area Noise Level Contours

Noise contours created with SoundPLAN 7.1

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200
feet

Leq, dBA

= 45
= 50
= 55
= 60
= 65
= 70

Legend

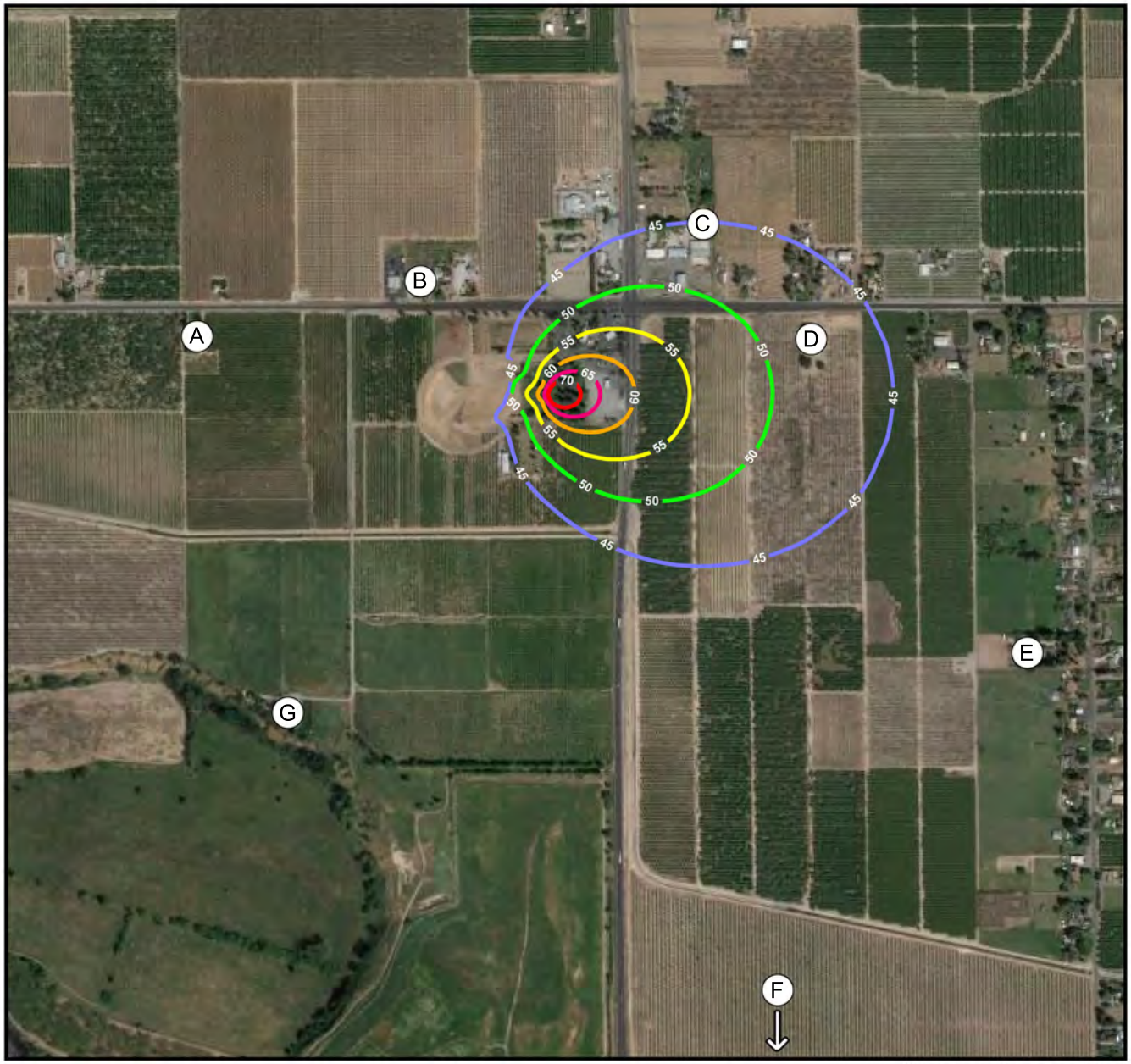
(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Park/banquet area sound system
- Speakers facing north
- Average noise level contours
- Based on reference noise level of 75 dB Leq 100 feet from speakers

Figure 7

The Fruit Yard Project
Stanislaus County, California
Park Area Noise Level Contours



Noise contours created with SoundPLAN 7.1

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200
feet

Leq, dBA

= 45
= 50
= 55
= 60
= 65
= 70

Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Park/banquet area sound system
- Speakers facing east
- Average noise level contours
- Based on reference noise level of 75 dB Leq 100 feet from speakers

Figure 8

Noise contours created with SoundPLAN 7.1

The Fruit Yard Project
Stanislaus County, California
Park Area Noise Level Contours

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200 feet

Leq, dBA

- = 45
- = 50
- = 55
- = 60
- = 65
- = 70

Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Park/banquet area sound system
- Speakers facing south
- Average noise level contours
- Based on reference noise level of 75 dB Leq 100 feet from speakers

Figure 9

Noise contours created with SoundPLAN 7.1

The Fruit Yard Project
Stanislaus County, California
Park Area Noise Level Contours

BOLLARD
Acoustical Consultants

Scale
0 200 400 800 1200 feet

Leq, dBA

	=	45
	=	50
	=	55
	=	60
	=	65
	=	70

Legend

(#) Representive Nearest Noise-Sensitive Receptors

Notes:

- Park/banquet area sound system
- Speakers facing west
- Average noise level contours
- Based on reference noise level of 75 dB Leq 100 feet from speakers

The modeling results shown on Figures 6-9 indicate the directionality of sound speakers. Evaluation of those figures indicate that the average noise levels generated during small amplified music events in the park area would be satisfactory relative to the Table 3 noise standards are all of the nearest residences to the project site during both daytime and nighttime hours. Figure 8 shows that the south-facing speaker orientation would result in the lowest off-site noise levels. Therefore, if small event sound levels are to exceed 75 dBA Leq at a reference distance of 100 feet, a south or southwest-facing speaker orientation is recommended.

As with amplified music generated at the amphitheater area, low frequency sound generated during amplified music events within the park area is also a concern to Stanislaus County. Specific recommendations for control of low-frequency sound are provided in the following section.

Conclusions and Recommendations

This analysis concludes that events at the Fruit Yard Amphitheater and Park Area utilizing amplified music can comply with the applicable Stanislaus County noise standards with appropriate noise mitigation measures incorporated into the project design and operation. The following specific recommendations are provided to ensure the project is both within compliance with those County noise regulations and to reduce the potential for nuisance noise complaints associated with audible low-frequency sound even if it is within compliance with County noise standards:

Amphitheater Event Recommendations

1. To ensure compliance with County noise standards, amphitheater sound system output should be limited to an average of 90 dBA Leq averaged over a 5 minute period and a maximum of 100 dBA Lmax at a position located 100 feet from the Amphitheater stage.

2. To control low-frequency sound in the surrounding neighborhood, C-weighted sound levels should be limited to 100 dBC Leq averaged over a 5 minute period and a maximum of 110 dBC Lmax at a position located 100 feet from the Amphitheater stage. In addition, amplified music shall be limited to an average of 85 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

3. BAC recommends that the first two large concerts held at the amphitheater be limited to daytime hours (music ending at or before 10 pm) to provide an opportunity to evaluate facility noise generation, including crowd noise, at the nearest residences during the less sensitive daytime hours.

4. During the first 2 large concerts held at the amphitheater, noise levels should be monitored by a qualified acoustical consultant. The monitoring should be conducted continuously from the sound stage, with periodic noise monitoring near the closest residences in all directions surrounding the amphitheater. The noise measurements should include the sound check prior to the concert so the event promoters understand the noise thresholds to be satisfied during the concert event. The purpose of the measurements is to verify

compliance with the project's noise standards. If the measurement results indicate that the music levels exceed the appropriate noise standards, additional sound controls should implemented prior to the following concert. Such measures could include reducing the overall output of the amplified sound system, relocating and/or reorienting speakers, use of acoustic curtains along the sides of the speakers to further focus the sound energy into the amphitheater seating area, and limiting amplified music to before 10 pm.

5. A handheld sound level meter should be procured and used at the soundstage to periodically monitor the sound system output during all subsequent amphitheater events. Only by being aware of the instantaneous sound levels can the sound technicians make the appropriate adjustments to the sound mixing board. The meter should meet a Type/Class 1 or 2 compliance and be capable of monitoring in both A and C weighting Scales. In addition, the meter shall be fitted with the manufacturer's windscreen and calibrated before use. A cost-effective option for noise monitoring equipment would be an iOS option available in combination with an iPad/iPhone using microphone and acquisition hardware from AudioControl and software from Studio Six Digital. SSD software would include the AudioTools and several in-app purchases including SPL Graph and SPL Traffic Light.

6. For simplification and to minimize equipment costs, sound level limit triggers shall be set to Leq, C-weighting. The sound technician shall locally check both C-weighted and 1/3-octave band results during sound check prior to an event to establish system gain limits and ensure compliance with the specified limits.

7. The amphitheater owner should make it very clear to event producers what the sound level limits are at the sound stage and the time at which music is required to cease.

8. Although sound generated by concert activities at the amphitheater are predicted to be satisfactory relative to Stanislaus County noise standards, music will likely be audible at some of the nearest residences to the project site at times. This audibility will vary depending on atmospheric conditions and size of concert, but audibility is not a test of significance for noise impact. Nonetheless, a mechanism should be developed whereby residents concerned about concert sound levels can reach a Fruit Yard representative during the concert so that appropriate investigation of those concerns can be accommodated. Typical smaller events, such as weddings, charity auctions, etc., are expected to generate considerably lower sound levels than a concert event.

9. To maintain crowd noise at acceptable levels, amphitheater events exceeding 2,000 attendees should be concluded by 10 pm. Noise monitoring of crowd noise during the first two events can be utilized to determine if this measure will be necessary long-term.

Park Event Recommendations

1. To ensure compliance with County noise standards, park sound system output should be limited to an average of 75 dBA Leq averaged over a 5 minute period and a maximum of 85 dBA Lmax at a position located 100 feet from the sound system speakers. Sound levels up to 80 dBA Leq at the 100 foot reference distance would be acceptable provided the sound system speakers are oriented south or southwest.

2. To control low-frequency sound in the surrounding neighborhood, C-weighted sound levels should be limited to 85 dBC Leq averaged over a 5 minute period and a maximum of 95 dBC Lmax at a position located 100 feet from the speakers. In addition, amplified music shall be limited to an average of 75 dB (Linear) in each of the 1/3 octave band center frequencies from 31.5 to 80 Hertz.

3. The same IOS-based sound system procured to monitor events at the amphitheater should be utilized to monitor events in the Park Area of the project site.

This concludes BAC's analysis of amplified sound generated during events held at the Fruit Yard project in Stanislaus County, CA. Please contact Paul Bollard at (916) 663-0500 or PaulB@bacnoise.com with any questions regarding this report.

Appendix A

Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Masking	The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.
Noise	Unwanted sound.
Peak Noise	The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the Maximum level, which is the highest RMS level.
RT_{60}	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 sabin.
SEL	A rating, in decibels, of a discrete event, such as an aircraft flyover or train passby, that compresses the total sound energy of the event into a 1-s time period.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

Appendix B-1

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Friday, June 19, 2015

Hour	Leq	Lmax	L50	L90
0:00	55	78	42	37
1:00	54	78	41	35
2:00	54	76	41	35
3:00	56	76	46	39
4:00	58	75	50	43
5:00	63	83	57	50
6:00	63	78	57	50
7:00	63	82	57	48
8:00	65	90	56	45
9:00	63	85	56	44
10:00	63	85	56	43
11:00	66	96	57	45
12:00	66	95	58	45
13:00	63	82	58	46
14:00	64	84	60	50
15:00	71	95	61	49
16:00	64	89	59	46
17:00	64	83	60	48
18:00	63	83	57	45
19:00	61	77	56	46
20:00	61	80	56	50
21:00	62	81	56	50
22:00	61	78	56	46
23:00	59	83	51	43

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	71	61	65	63	54	59
Lmax (Maximum)	96	77	86	83	75	78
L50 (Median)	61	56	58	57	41	49
L90 (Background)	50	43	47	50	35	42

Computed Ldn, dB	67
% Daytime Energy	86%
% Nighttime Energy	14%

BOLLARD
Acoustical Consultants

Appendix B-2

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Saturday, June 20, 2015

Hour	Leq	Lmax	L50	L90
0:00	56	77	46	40
1:00	55	77	44	37
2:00	55	76	44	38
3:00	56	80	43	38
4:00	57	74	49	41
5:00	61	79	56	48
6:00	62	81	54	47
7:00	61	80	53	46
8:00	61	76	54	44
9:00	62	80	57	45
10:00	64	87	58	45
11:00	63	83	59	46
12:00	64	87	59	47
13:00	63	81	58	47
14:00	62	80	58	47
15:00	63	86	57	46
16:00	63	79	59	47
17:00	64	85	58	45
18:00	62	84	56	45
19:00	62	90	55	43
20:00	61	78	55	44
21:00	63	90	53	43
22:00	59	78	52	43
23:00	57	74	48	43

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	64	61	63	62	55	58
Lmax (Maximum)	90	76	83	81	74	77
L50 (Median)	59	53	57	56	43	48
L90 (Background)	47	43	45	48	37	42

Computed Ldn, dB	66
% Daytime Energy	82%
% Nighttime Energy	18%

BOLLARD
Acoustical Consultants

Appendix B-3

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Sunday, June 21, 2015

Hour	Leq	Lmax	L50	L90
0:00	56	83	46	41
1:00	57	81	44	37
2:00	53	74	41	36
3:00	52	73	41	34
4:00	52	69	42	36
5:00	58	81	51	43
6:00	57	74	48	43
7:00	58	79	49	42
8:00	61	90	50	42
9:00	61	81	55	43
10:00	61	80	56	44
11:00	63	81	59	46
12:00	64	88	59	45
13:00	61	77	58	44
14:00	62	82	57	44
15:00	62	83	57	45
16:00	61	81	56	44
17:00	66	93	56	45
18:00	61	80	56	46
19:00	62	82	56	45
20:00	61	83	55	45
21:00	66	92	59	47
22:00	60	81	51	43
23:00	54	76	44	38

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	66	58	62	60	52	56
Lmax (Maximum)	93	77	83	83	69	77
L50 (Median)	59	49	56	51	41	45
L90 (Background)	47	42	44	43	34	39

Computed Ldn, dB	64
% Daytime Energy	87%
% Nighttime Energy	13%

BOLLARD
Acoustical Consultants

Appendix B-4

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Friday, June 19, 2015

Hour	Leq	Lmax	L50	L90
0:00	59	86	53	45
1:00	60	85	51	42
2:00	63	92	53	40
3:00	61	80	56	47
4:00	63	80	59	52
5:00	67	86	64	59
6:00	68	91	65	61
7:00	71	91	67	62
8:00	67	89	63	59
9:00	65	82	63	58
10:00	66	82	63	58
11:00	65	83	62	58
12:00	66	86	63	58
13:00	66	86	63	59
14:00	67	90	63	59
15:00	65	81	62	58
16:00	65	86	62	57
17:00	65	80	63	59
18:00	66	94	61	57
19:00	64	85	60	56
20:00	64	83	61	57
21:00	65	87	60	57
22:00	66	90	60	56
23:00	64	86	58	52

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	71	64	66	68	59	64
Lmax (Maximum)	94	80	86	92	80	86
L50 (Median)	67	60	62	65	51	58
L90 (Background)	62	56	58	61	40	50

Computed Ldn, dB	71
% Daytime Energy	73%
% Nighttime Energy	27%

BOLLARD
Acoustical Consultants

Appendix B-5

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Saturday, June 20, 2015

Hour	Leq	Lmax	L50	L90
0:00	66	94	56	50
1:00	61	86	53	42
2:00	61	82	56	45
3:00	61	89	51	43
4:00	62	84	56	49
5:00	64	81	60	55
6:00	69	88	66	61
7:00	66	84	62	58
8:00	65	82	61	56
9:00	66	90	61	56
10:00	65	91	61	56
11:00	64	84	60	56
12:00	66	90	61	57
13:00	66	89	61	57
14:00	64	85	60	56
15:00	65	85	61	56
16:00	66	88	63	58
17:00	69	94	61	56
18:00	65	88	60	55
19:00	65	87	60	55
20:00	64	81	60	55
21:00	68	97	59	54
22:00	63	85	59	54
23:00	63	83	59	53

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69	64	66	69	61	64
Lmax (Maximum)	97	81	88	94	81	86
L50 (Median)	63	59	61	66	51	57
L90 (Background)	58	54	56	61	42	50

Computed Ldn, dB	71
% Daytime Energy	69%
% Nighttime Energy	31%

BOLLARD
Acoustical Consultants

Appendix B-6

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Sunday, June 21, 2015

Hour	Leq	Lmax	L50	L90
0:00	62	86	56	48
1:00	60	80	55	47
2:00	59	80	54	42
3:00	58	80	51	40
4:00	58	72	54	44
5:00	62	84	57	52
6:00	64	85	61	57
7:00	62	81	60	55
8:00	62	79	60	56
9:00	66	88	61	56
10:00	64	91	60	56
11:00	64	85	61	56
12:00	64	83	61	57
13:00	63	81	60	55
14:00	64	83	60	56
15:00	65	87	60	55
16:00	63	81	60	56
17:00	71	98	61	56
18:00	64	84	60	55
19:00	65	87	61	56
20:00	66	89	61	56
21:00	70	94	61	56
22:00	64	86	58	52
23:00	62	85	55	47

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	71	62	66	64	58	61
Lmax (Maximum)	98	79	86	86	72	82
L50 (Median)	61	60	60	61	51	56
L90 (Background)	57	55	56	57	40	48

Computed Ldn, dB	69
% Daytime Energy	81%
% Nighttime Energy	19%

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Appendix B-7

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Friday, June 19, 2015

Hour	Leq	Lmax	L50	L90
0:00	55	74	45	39
1:00	55	75	42	37
2:00	54	75	42	36
3:00	58	79	48	41
4:00	60	79	52	43
5:00	62	75	58	48
6:00	64	78	60	51
7:00	63	77	60	50
8:00	63	85	59	51
9:00	69	93	60	51
10:00	62	79	57	47
11:00	61	78	58	47
12:00	62	77	58	48
13:00	61	77	58	49
14:00	62	77	58	49
15:00	62	79	58	49
16:00	62	80	60	49
17:00	63	78	60	51
18:00	64	90	60	51
19:00	63	83	59	51
20:00	63	80	60	53
21:00	65	92	59	53
22:00	62	83	57	51
23:00	60	78	55	49

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69	61	64	64	54	60
Lmax (Maximum)	93	77	82	83	74	77
L50 (Median)	60	57	59	60	42	51
L90 (Background)	53	47	50	51	36	44

Computed Ldn, dB	67
% Daytime Energy	79%
% Nighttime Energy	21%

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Appendix B-8

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Saturday, June 20, 2015

Hour	Leq	Lmax	L50	L90
0:00	59	82	51	48
1:00	57	79	49	47
2:00	57	80	49	48
3:00	57	77	49	47
4:00	60	81	52	48
5:00	61	79	56	50
6:00	61	78	57	50
7:00	61	78	56	49
8:00	61	79	57	48
9:00	61	77	58	50
10:00	61	82	58	51
11:00	62	81	58	50
12:00	61	83	58	50
13:00	60	78	57	50
14:00	61	82	57	50
15:00	63	90	58	51
16:00	62	81	59	51
17:00	65	87	60	53
18:00	64	91	60	50
19:00	62	79	59	49
20:00	63	87	59	49
21:00	61	77	58	48
22:00	61	80	56	47
23:00	61	77	55	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	65	60	62	61	57	60
Lmax (Maximum)	91	77	82	82	77	79
L50 (Median)	60	56	58	57	49	53
L90 (Background)	53	48	50	50	46	48

Computed Ldn, dB	66
% Daytime Energy	75%
% Nighttime Energy	25%

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Appendix B-9

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Sunday, June 21, 2015

Hour	Leq	Lmax	L50	L90
0:00	57	77	49	44
1:00	56	75	48	43
2:00	55	72	46	42
3:00	56	79	46	43
4:00	55	75	46	44
5:00	57	74	48	45
6:00	60	86	50	45
7:00	58	74	52	45
8:00	59	75	55	45
9:00	61	85	57	48
10:00	61	85	57	48
11:00	61	75	58	49
12:00	60	76	58	50
13:00	60	77	57	48
14:00	61	76	58	49
15:00	61	82	57	49
16:00	61	78	58	49
17:00	62	86	58	49
18:00	62	75	59	49
19:00	63	85	59	50
20:00	62	82	60	50
21:00	65	90	58	49
22:00	59	75	54	47
23:00	59	85	50	45

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	65	58	61	60	55	57
Lmax (Maximum)	90	74	80	86	72	77
L50 (Median)	60	52	57	54	46	48
L90 (Background)	50	45	48	47	42	44

Computed Ldn, dB	65
% Daytime Energy	81%
% Nighttime Energy	19%

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Appendix B-10

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Friday, June 19, 2015

Hour	Leq	Lmax	L50	L90
0:00	42	57	40	37
1:00	42	59	40	36
2:00	43	61	41	36
3:00	46	58	43	39
4:00	47	59	46	41
5:00	52	64	51	48
6:00	53	66	52	49
7:00	48	60	48	45
8:00	48	68	46	43
9:00	51	72	45	41
10:00	49	71	45	41
11:00	50	66	48	44
12:00	51	64	47	42
13:00	69	94	56	45
14:00	49	62	47	43
15:00	48	63	46	42
16:00	48	70	44	41
17:00	47	63	45	42
18:00	46	64	44	41
19:00	48	65	45	42
20:00	49	68	47	44
21:00	49	60	48	45
22:00	52	67	50	44
23:00	48	61	46	42

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69	46	58	53	42	49
Lmax (Maximum)	94	60	67	67	57	61
L50 (Median)	56	44	47	52	40	45
L90 (Background)	45	41	43	49	36	41

Computed Ldn, dB	58
% Daytime Energy	92%
% Nighttime Energy	8%

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Appendix B-11

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Saturday, June 20, 2015

Hour	Leq	Lmax	L50	L90
0:00	46	64	44	39
1:00	44	59	42	37
2:00	44	59	42	37
3:00	43	59	40	37
4:00	44	59	43	39
5:00	55	74	51	48
6:00	52	64	50	47
7:00	53	80	48	45
8:00	46	63	45	42
9:00	47	69	44	41
10:00	46	63	43	40
11:00	47	65	43	40
12:00	47	62	43	39
13:00	55	76	43	39
14:00	45	60	42	38
15:00	46	57	44	40
16:00	49	71	45	41
17:00	49	68	46	42
18:00	49	68	47	43
19:00	50	71	46	42
20:00	46	61	44	41
21:00	45	63	43	40
22:00	44	57	43	40
23:00	46	65	44	41

Statistical Summary						
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	55	45	49	55	43	49
Lmax (Maximum)	80	57	66	74	57	62
L50 (Median)	48	42	44	51	40	44
L90 (Background)	45	38	41	48	37	41

Computed Ldn, dB	55
% Daytime Energy	66%
% Nighttime Energy	34%

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Appendix B-12

2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Sunday, June 21, 2015

Hour	Leq	Lmax	L50	L90
0:00	44	60	43	39
1:00	44	58	41	36
2:00	42	60	39	35
3:00	41	59	39	34
4:00	40	52	39	35
5:00	53	74	49	44
6:00	48	64	46	43
7:00	48	64	44	41
8:00	46	65	43	40
9:00	47	66	43	39
10:00	44	60	43	39
11:00	49	70	44	40
12:00	51	73	42	39
13:00	43	58	41	38
14:00	44	59	42	38
15:00	45	64	43	39
16:00	45	62	43	40
17:00	51	71	45	41
18:00	50	70	45	41
19:00	49	72	45	41
20:00	47	71	44	41
21:00	48	68	46	42
22:00	45	59	43	40
23:00	45	67	41	37

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	51	43	48	53	40	47
Lmax (Maximum)	73	58	66	74	52	61
L50 (Median)	46	41	44	49	39	42
L90 (Background)	42	38	40	44	34	38

Computed Ldn, dB	53
% Daytime Energy	70%
% Nighttime Energy	30%

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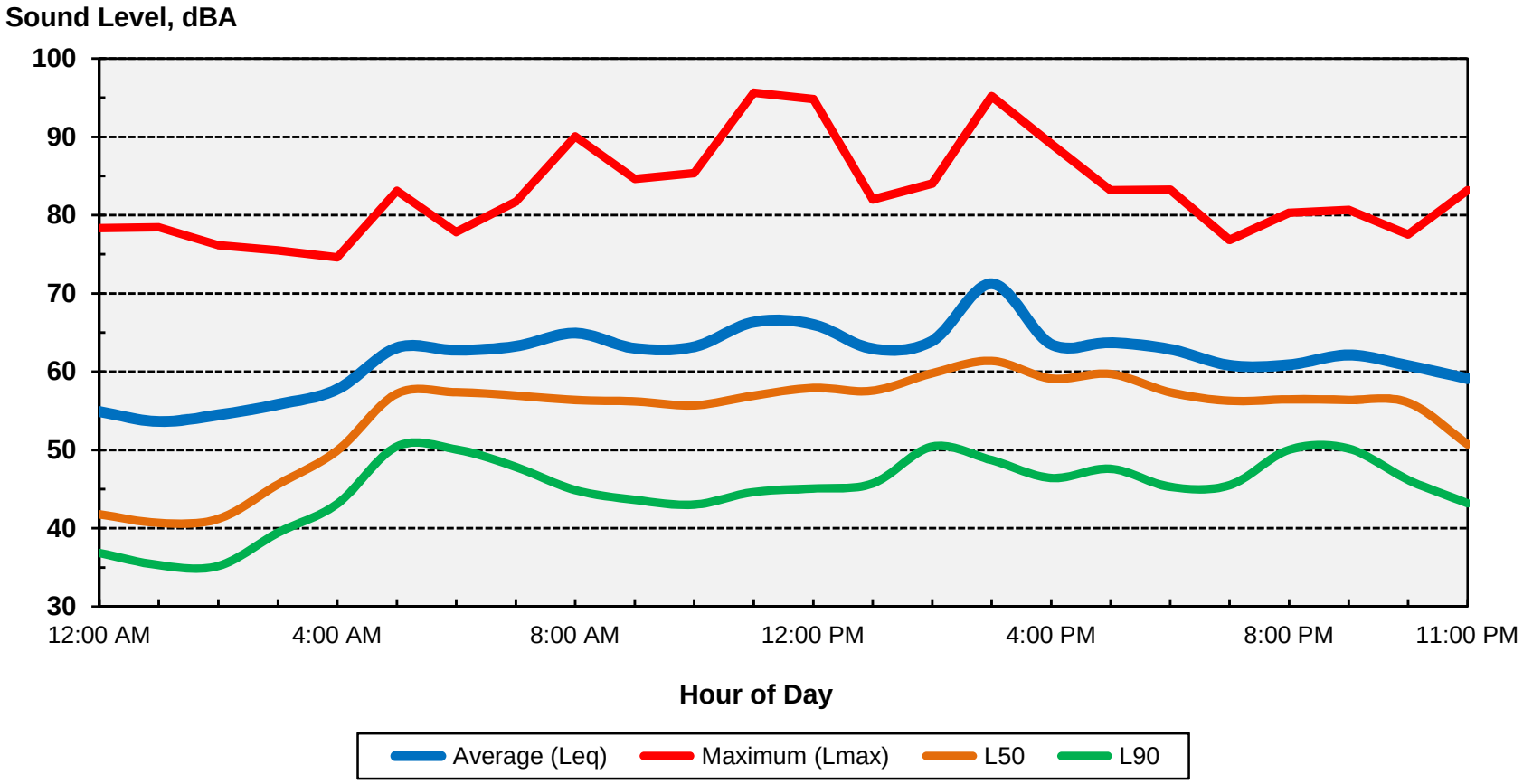
Appendix C-1
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Friday, June 19, 2015



Ldn: 67 dB

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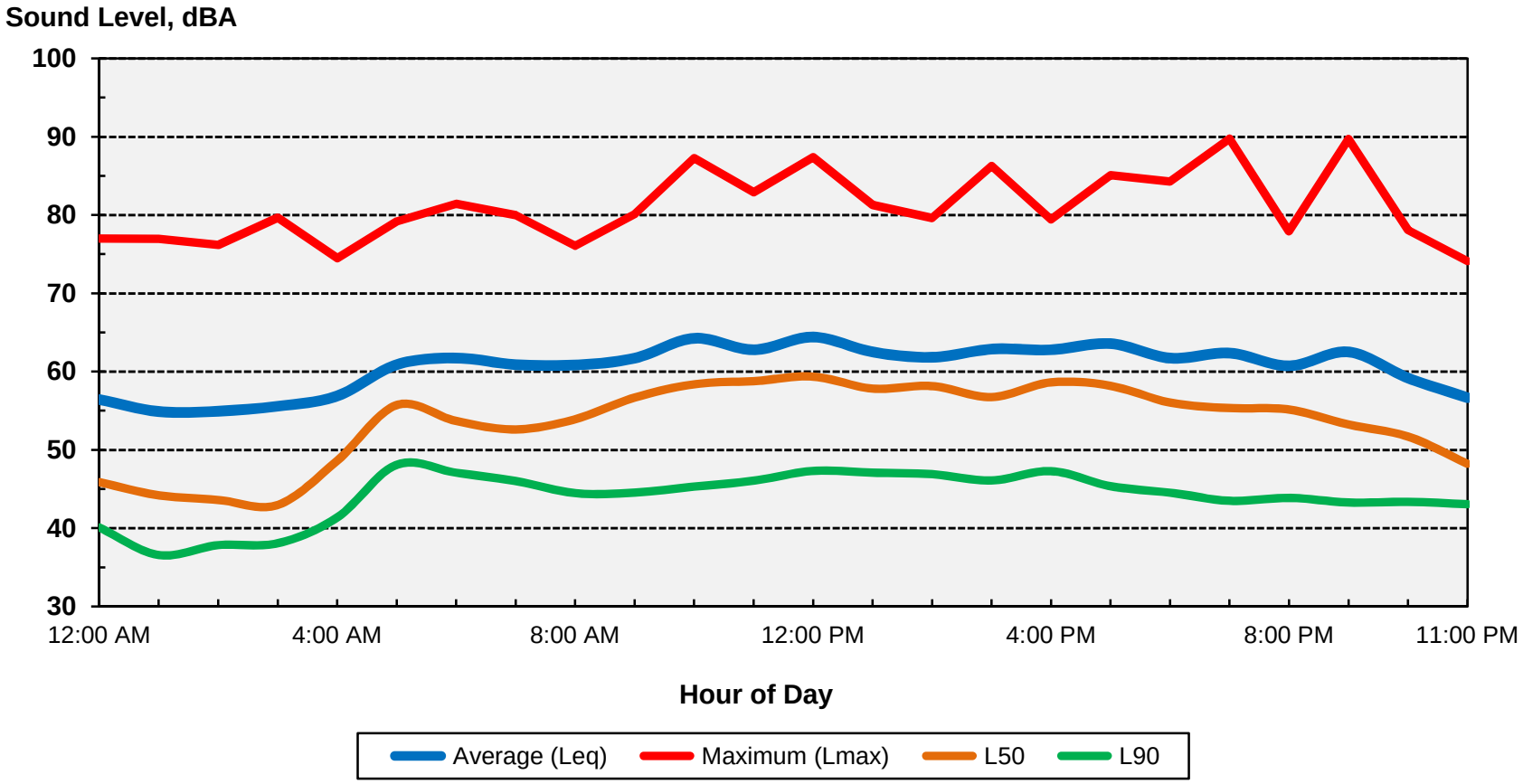
Appendix C-2
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Saturday, June 20, 2015



Ldn: 66 dB

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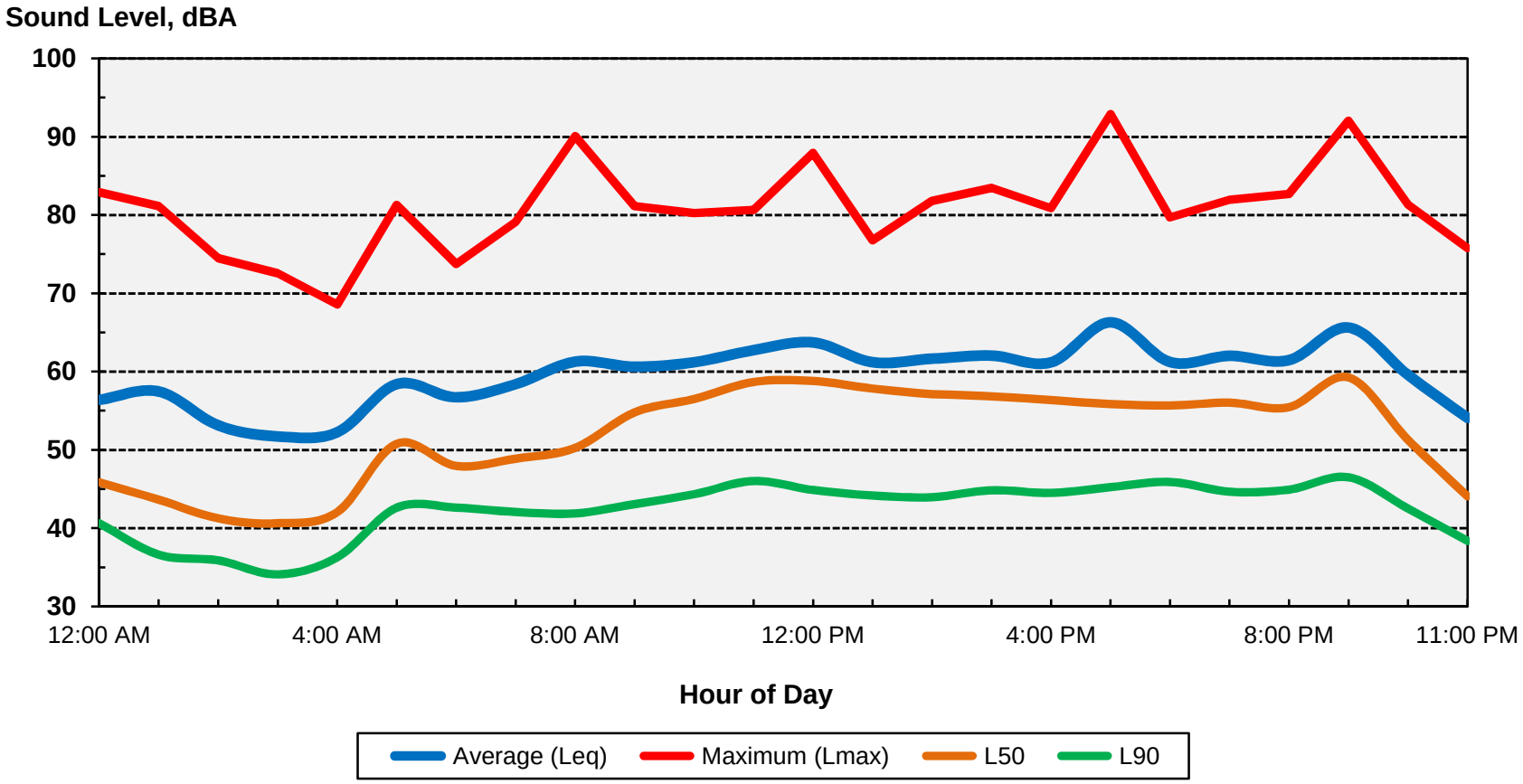
Appendix C-3
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 1
Sunday, June 21, 2015



Ldn: 64 dB

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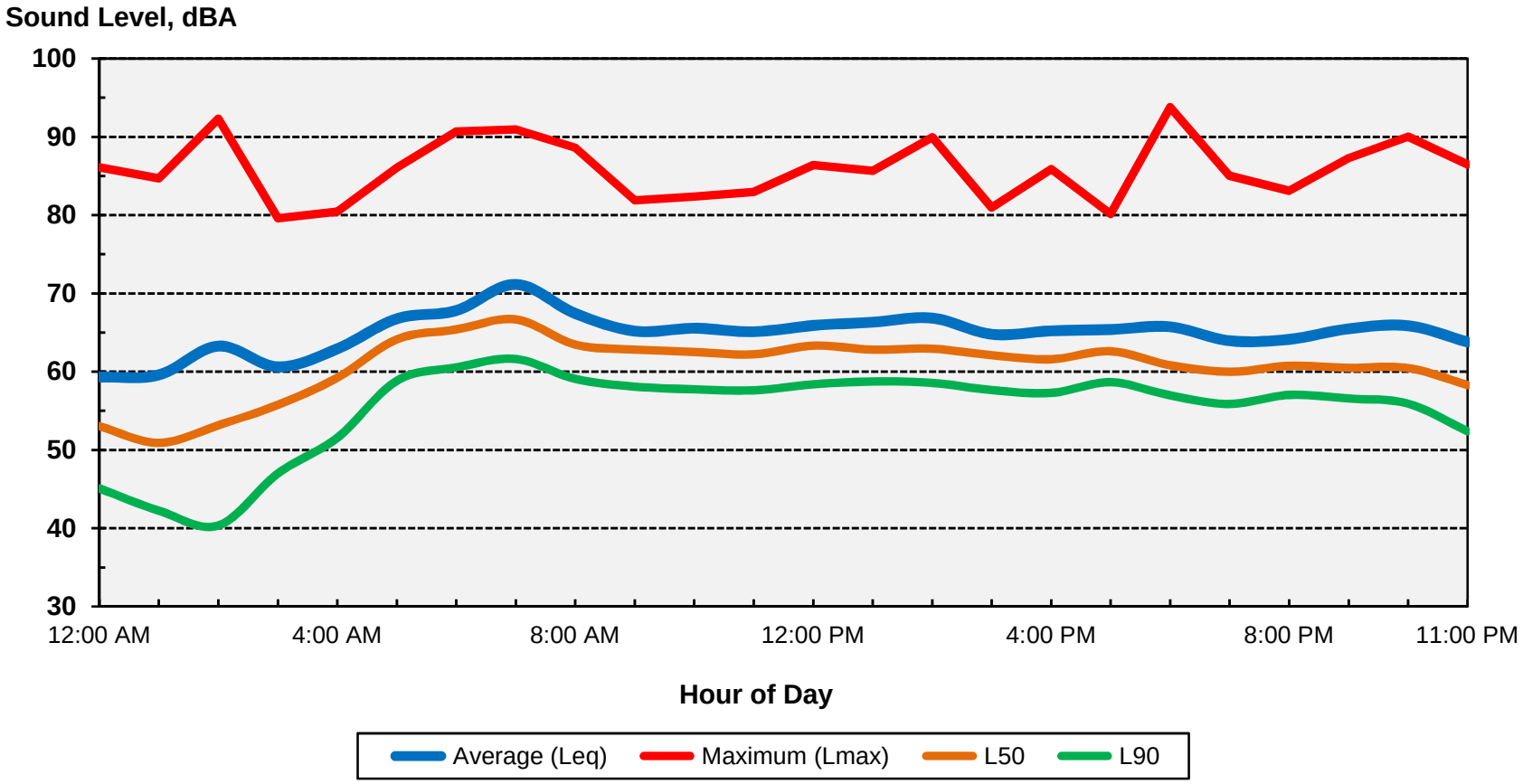
Appendix C-4
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Friday, June 19, 2015



Ldn: 71 dB

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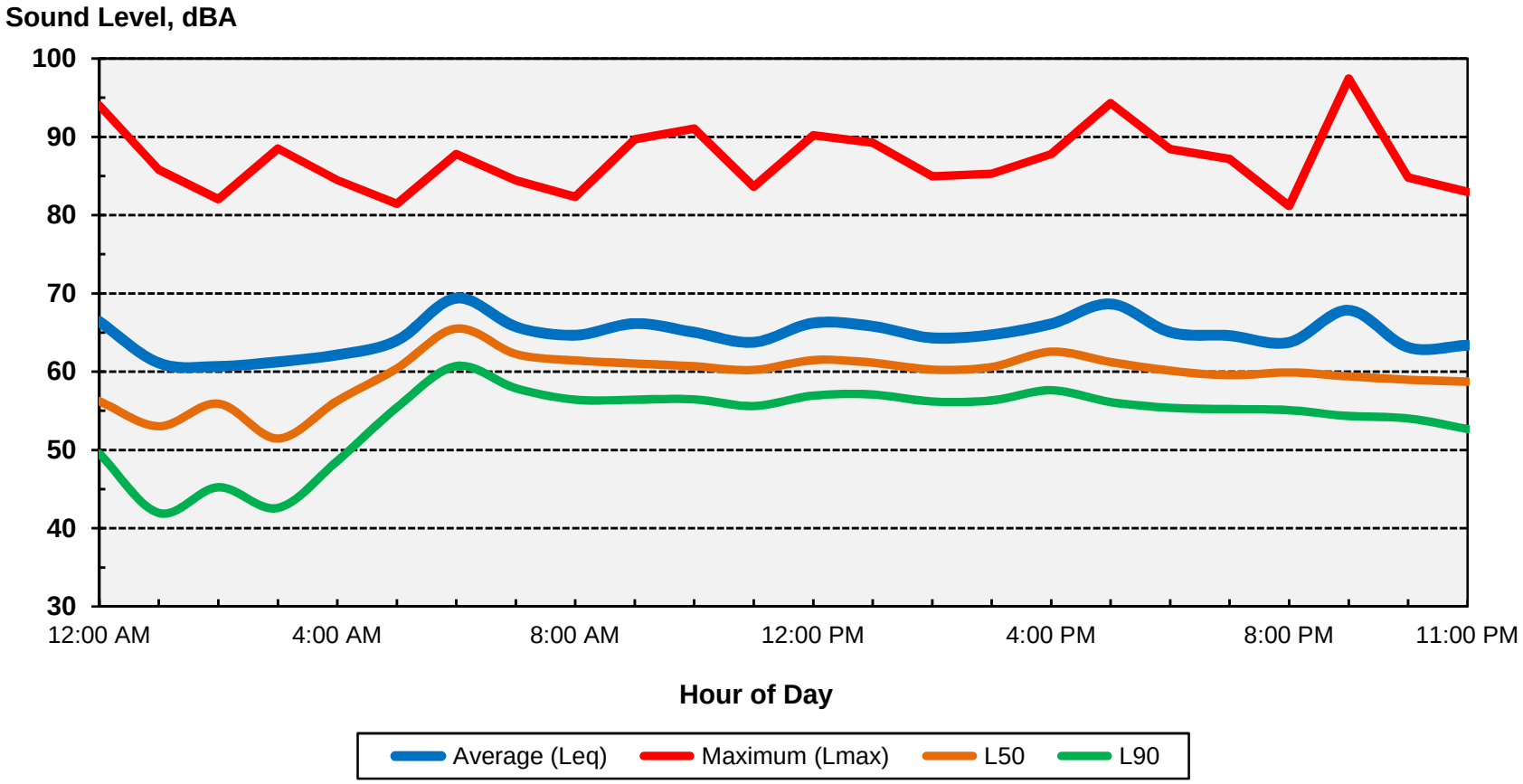
Appendix C-5
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Saturday, June 20, 2015



Ldn: 71 dB

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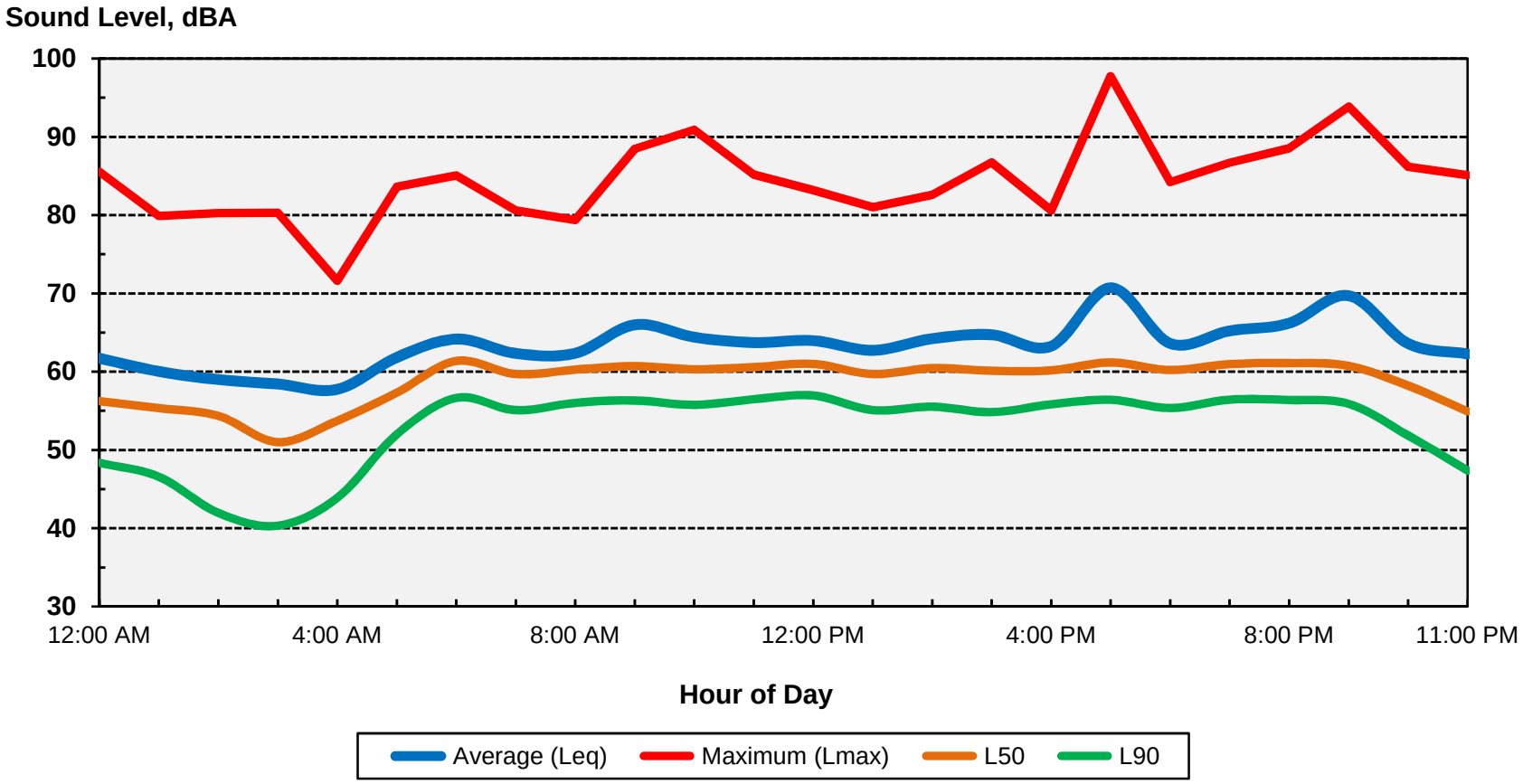
Appendix C-6
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 2
Sunday, June 21, 2015



Ldn: 69 dB

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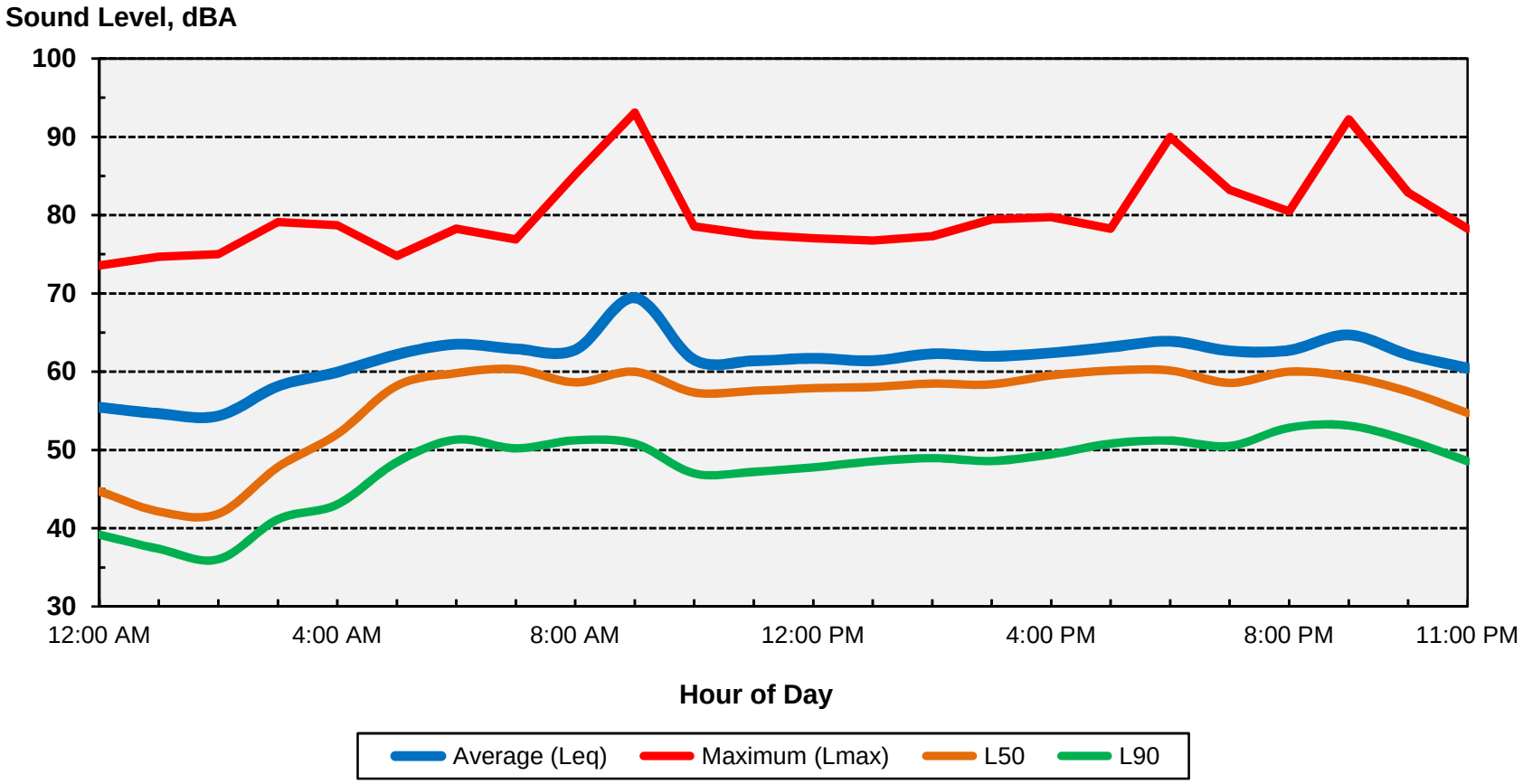
Appendix C-7
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Friday, June 19, 2015



Ldn: 67 dB

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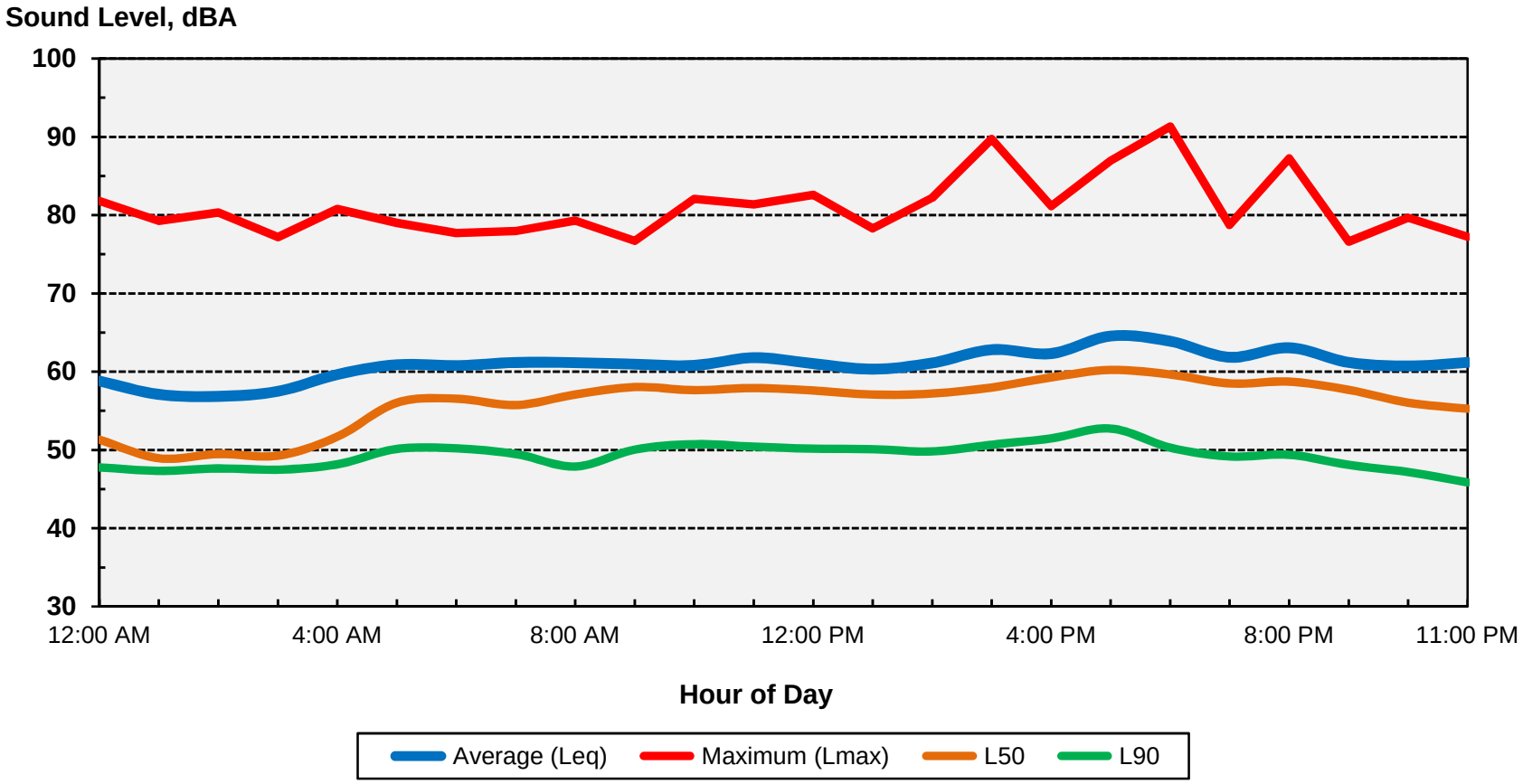
Appendix C-8
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Saturday, June 20, 2015



Ldn: 66 dB

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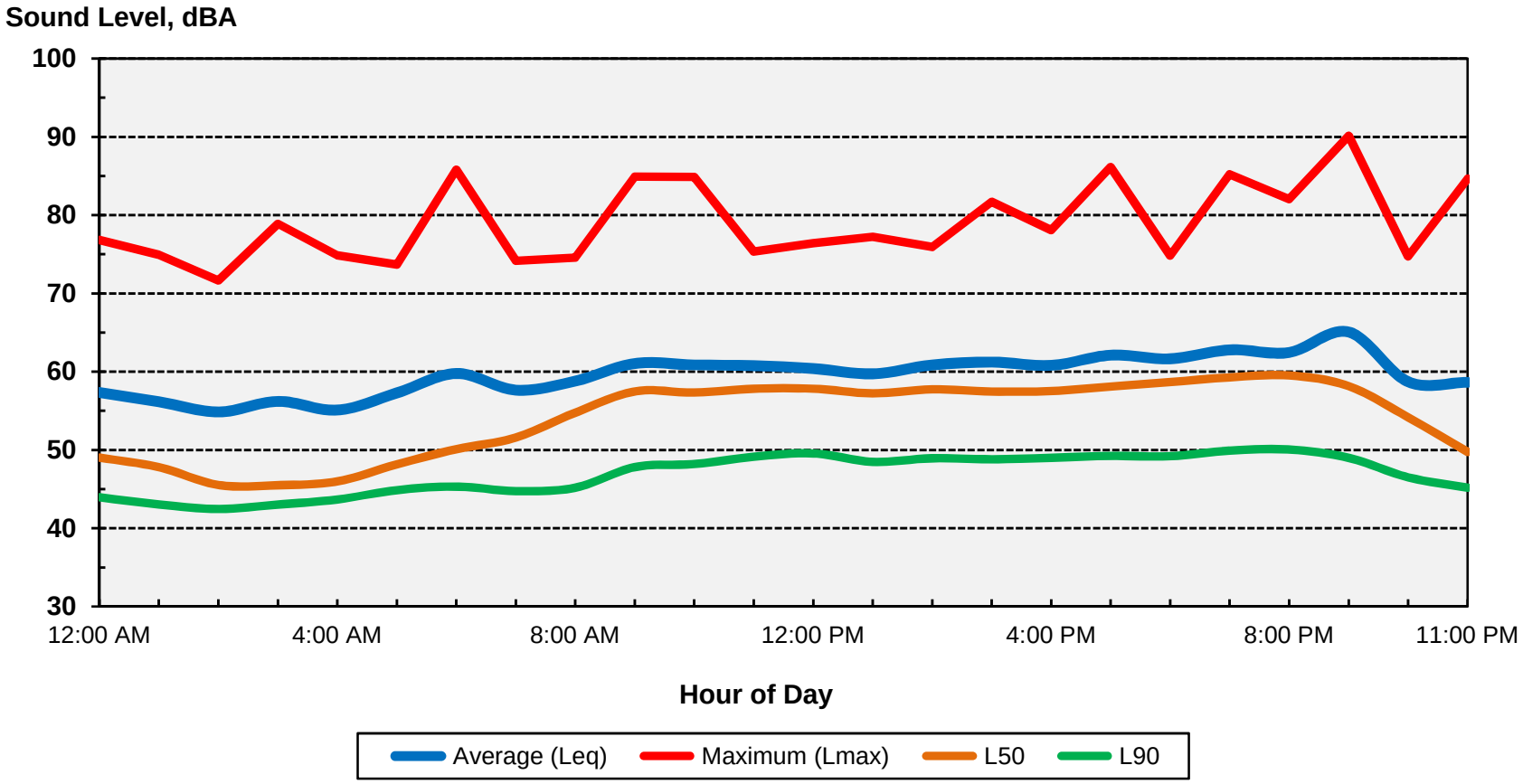
Appendix C-9
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 3
Sunday, June 21, 2015



Ldn: 65 dB

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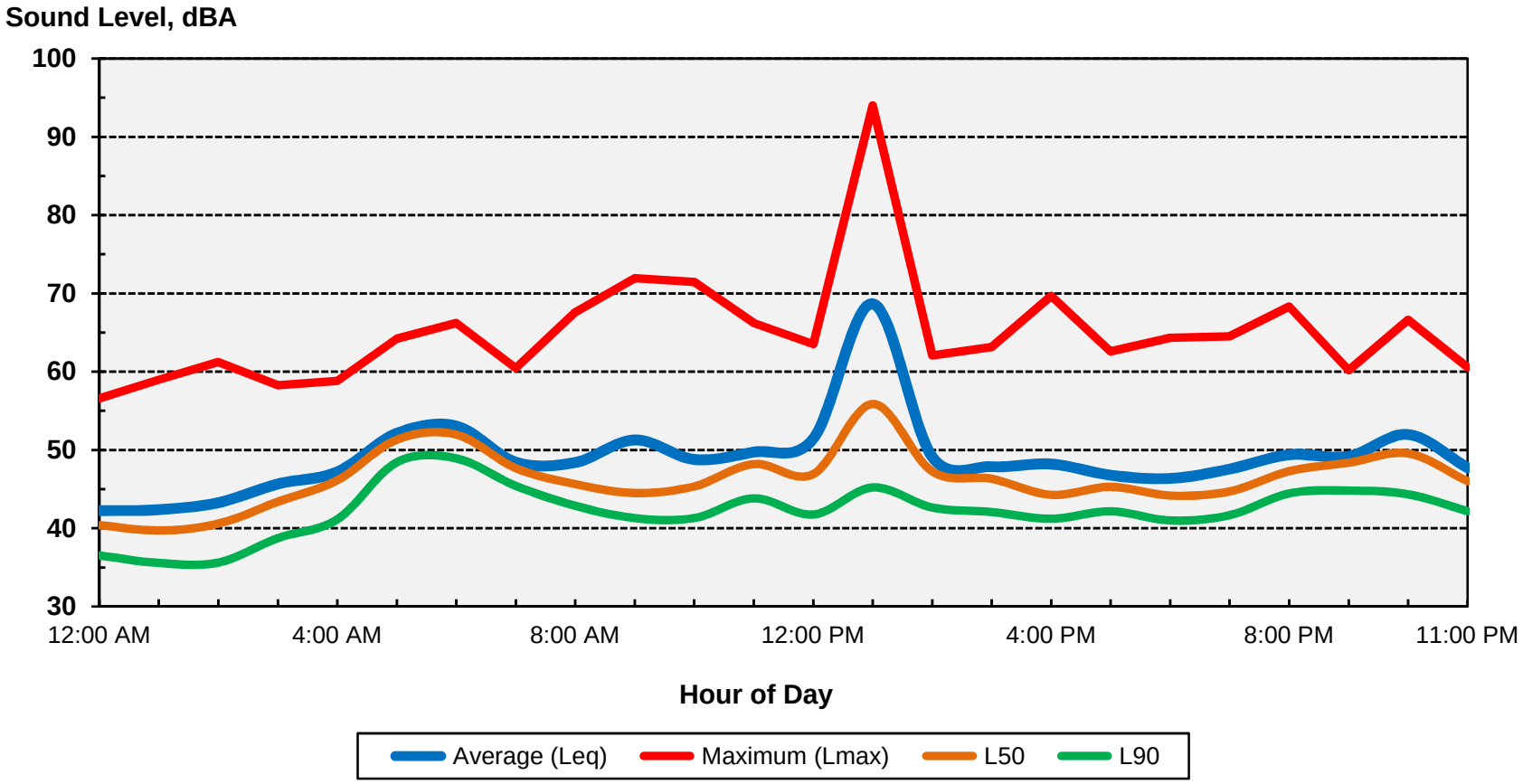
Appendix C-10
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Friday, June 19, 2015



Ldn: 58 dB

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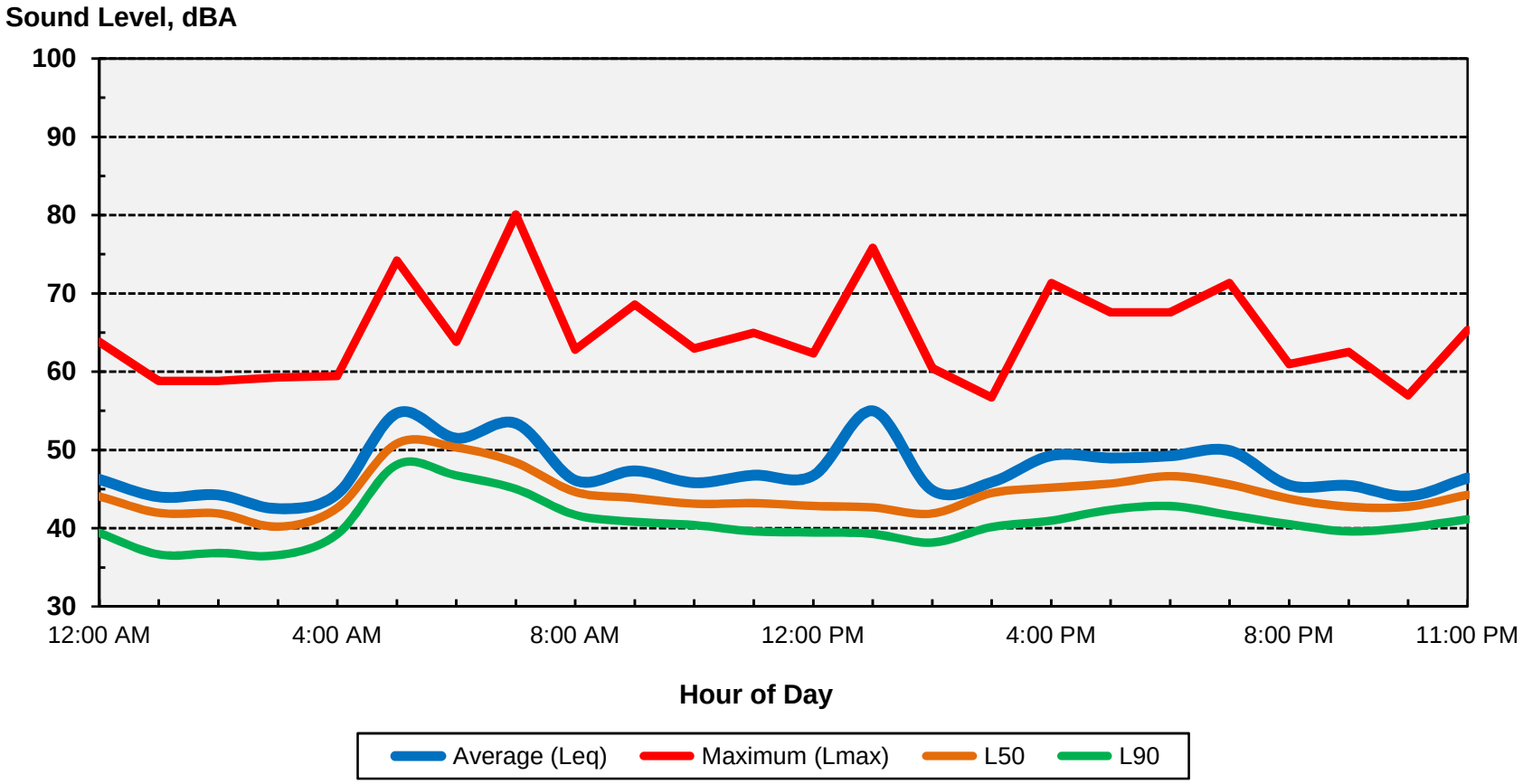
Appendix C-11
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Saturday, June 20, 2015



Ldn: 55 dB

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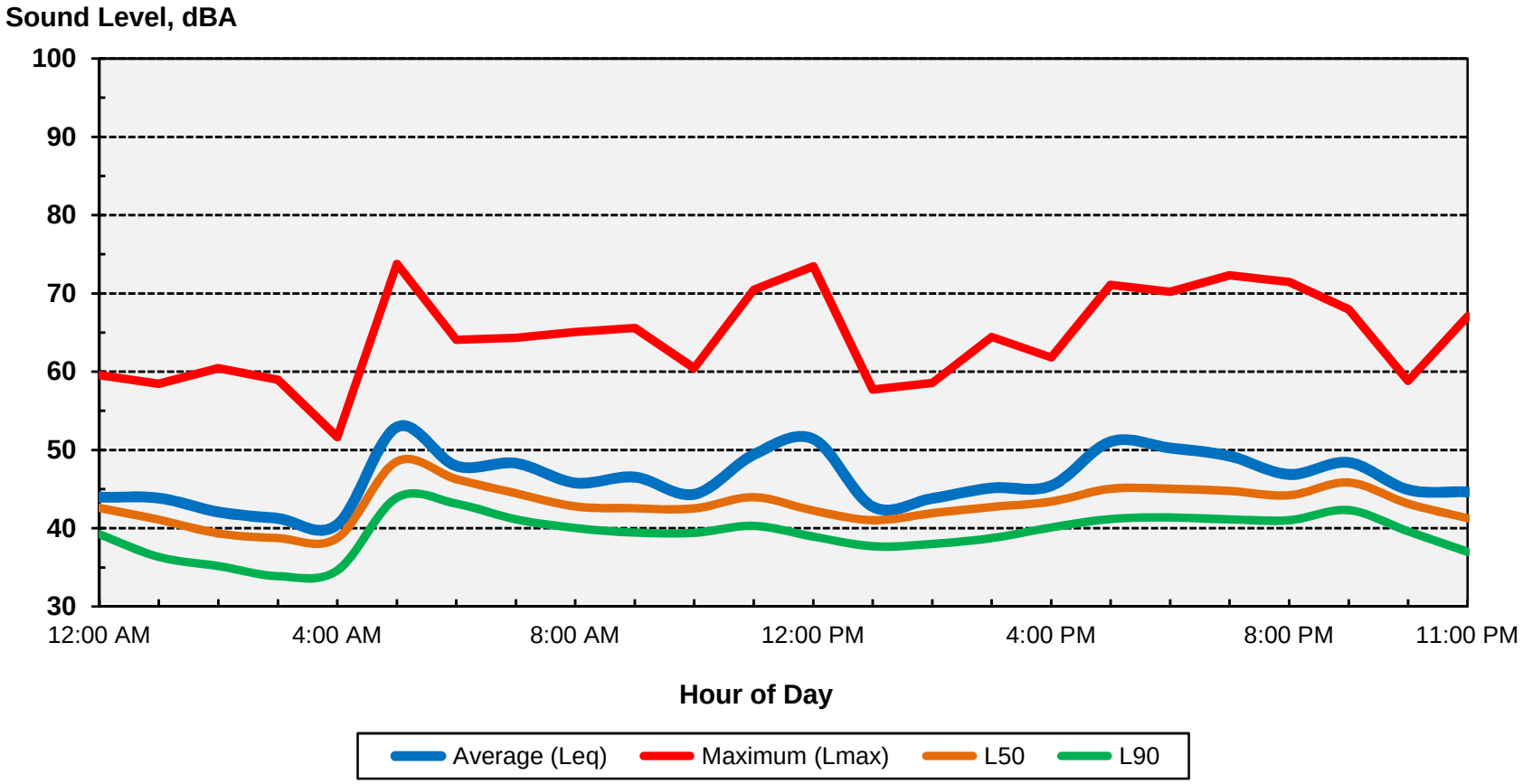
Appendix C-12
2015-129 The Fruit Yard Project
Ambient Noise Monitoring Results - Site 4
Sunday, June 21, 2015



Ldn: 53 dB

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Appendix D

Event Simulation and Noise Monitoring Photos
The Fruit Yard Project - Stanislaus County, California

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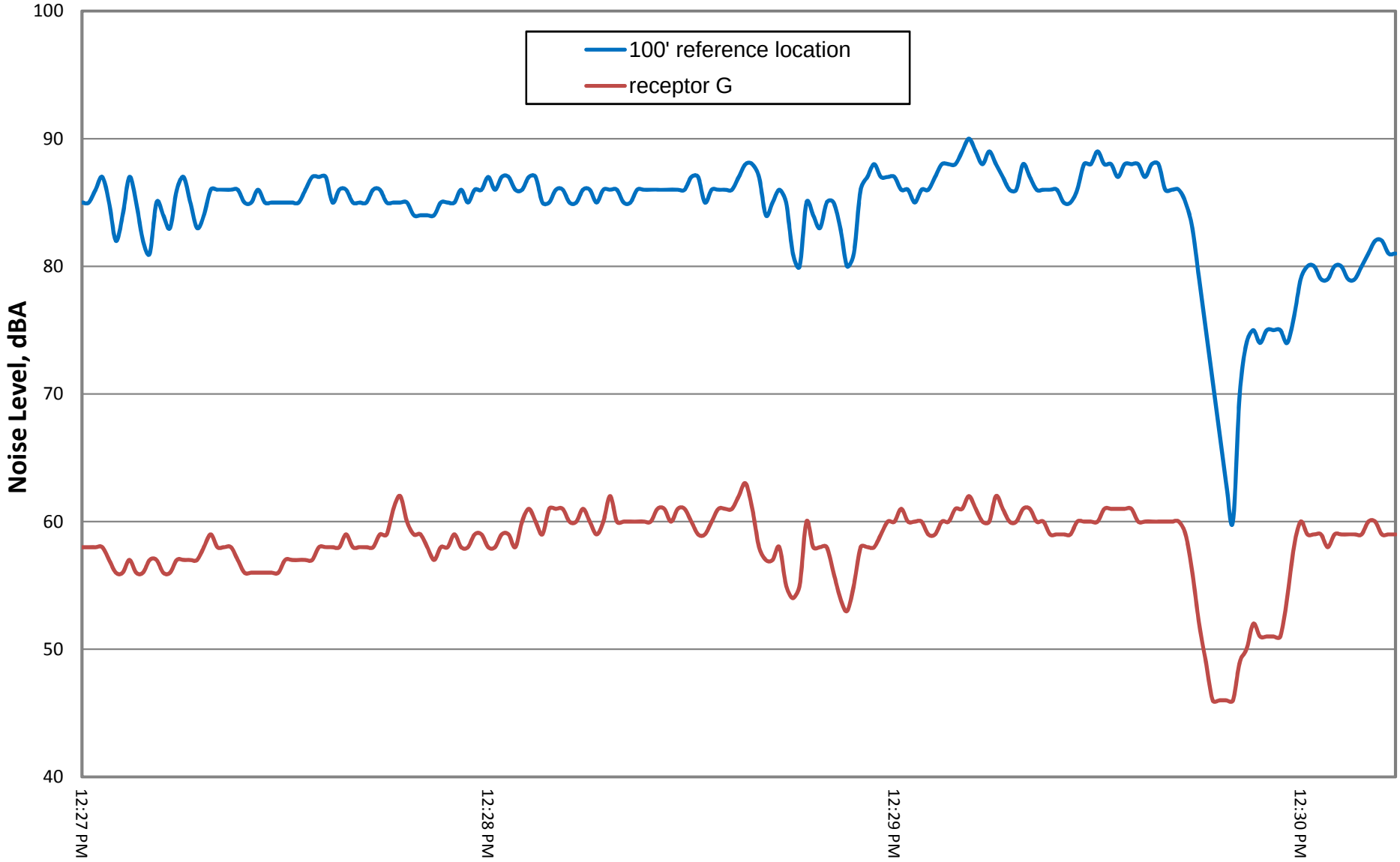
Appendix E-1
Measured Noise Levels Directly Behind Ampitheater Berm
The Fruit Yard Amphitehater Simulation - June 18, 2015



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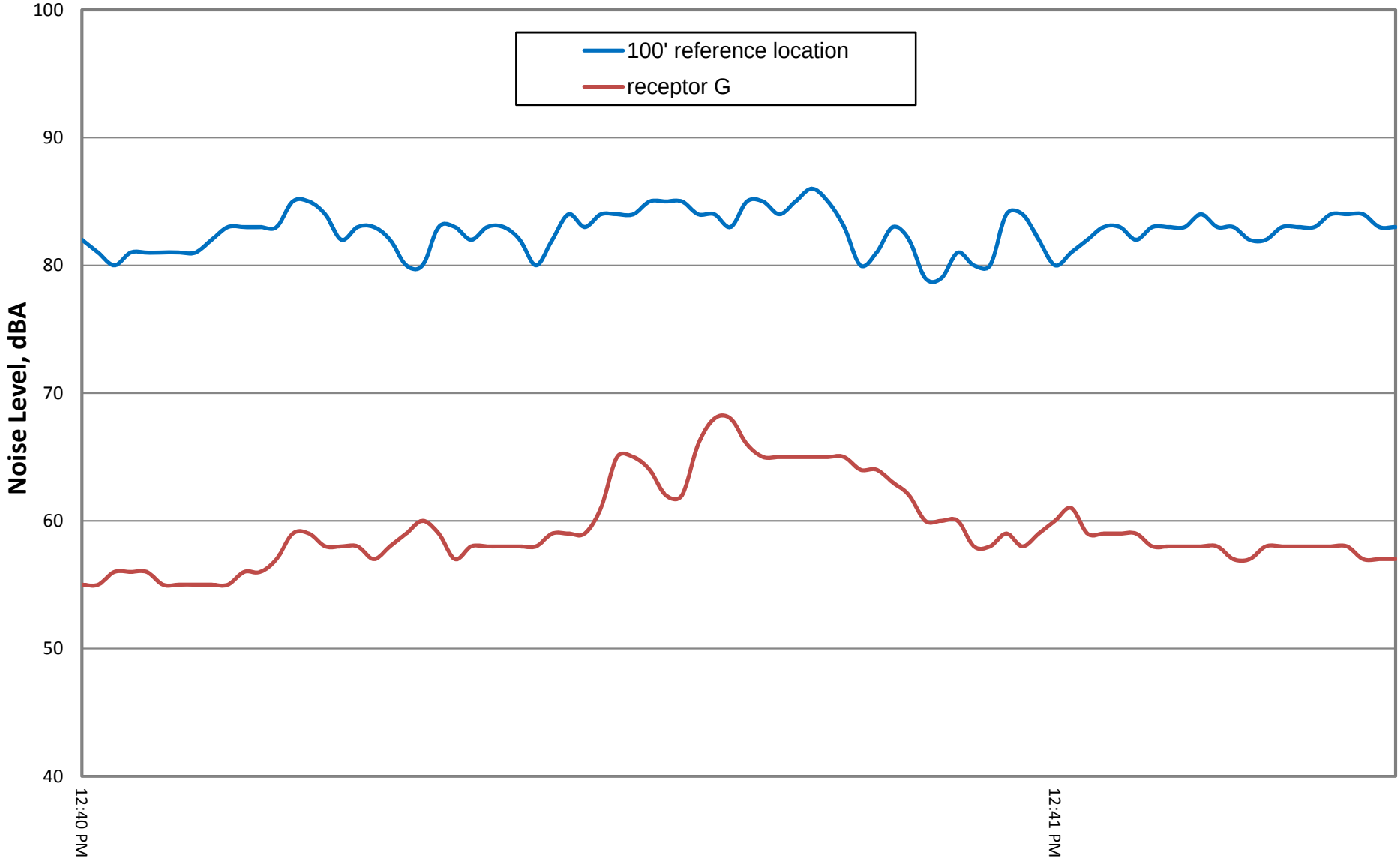
Appendix E-2
Measured Noise Levels at Receptor G (see Figure 1)
The Fruit Yard Event Ampitheater Simulation - June 18, 2015



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