

EL DORADO COUNTY PLANNING & BUILDING DEPARTMENT

2850 Fairlane Court, Placerville, CA 95667 Phone (530) 621-5355, Fax (530) 642-0508

Date: January 5, 2022

To: Planning Commissioners

From: Matthew Aselage, Assistant Planner

Subject: Appeal Filed, DR-A21-0004, of Staff Level Approval of Design Review Permit, DR20-0009 (Bean Barn Drive-Thru Coffee Shop)

Recommendation

Based on analysis of Design Review Permit, DR20-0009, staff recommends the Planning Commission deny the Appeal and uphold the Staff Level approval of Design Review Permit DR20-0009.

Alternative Action

Grant the appeal by Jim Dillingham (DR-A21-0004), deny Design Review Permit, DR20-0009, and instruct staff to return with Findings for Denial.

Background

A Design Review Permit, DR20-0009, was submitted on December 14, 2020 for a request to allow the construction and operation of a new 360-square-foot commercial structure to be used as a drive-thru Bean Barn coffee shop on a currently vacant property zoned for commercial use. The project includes a garbage and storage enclosure and associated improvements for landscaping, lighting, and parking. The 0.61-acre property is located on the southeast corner at the intersection of Cameron Park Drive and Mira Loma Drive in the Cameron Park Community Region. The parcel is identified as Assessor's Parcel Number (APN) 083-132-001, has a Zoning Designation of Limited Commercial within the Design Review Community Combining Zone (CL-DC), and a General Plan land use designation of Commercial (C). The CL-DC zone allows for drive-thru and beverage/retail sales uses by right on this parcel, subject to design review. In accordance with the California Environmental Quality Act (CEQA) Guidelines, the project was found to be Categorically Exempt from CEQA pursuant to Section 15303 (New Construction or Conversion of Small Structures).

The project was processed in accordance with the authorizations of the El Dorado County Zoning Code Section 130.52.030 (Design Review Permit), and tentatively approved, subject to the standards found in Title 130, Article 5, Section 130.50.040 (General Review Procedure), as a Staff Level Review with Public Notice. As stated in the Public Notice, the decision to approve the project may be appealed to the Planning Commission by filing an appeal application and applicable fees to the County of El Dorado Planning and Building Department within the 10-

working-day appeal period; starting on date of approval December 8, 2021 ending at 5pm on December 22, 2021.

Appeal Filed

On December 22, 2021 an appeal was timely filed by Jim Dillingham. Concerns expressed by Mr. Dillingham include stormwater runoff, traffic generation and circulation, frontage improvements, on-site improvements, completion of a rare plant survey, future development, and noticing of Cameron Park Design Review Committee (CPDRC) meetings. Pursuant to Zoning Code 130.52.090 - Appeals, a Planning Director-Staff Level decision is appealable to the Planning Commission. The appeal, DR-A21-0004, is scheduled for the January 27, 2022 Planning Commission meeting.

Staff Response

<u>Stormwater:</u> The appellant requested that the project address current onsite drainage and meet stormwater capture requirements. During the Technical Advisory Committee (TAC) review, comments concerning stormwater drainage were submitted by Amy Phillips, County Storm Water Coordinator, on February 23, 2021. The project has been conditioned to comply with the requirements of the State of California Phase II Municipal Separate Storm Sewer System (MS4) Permit of which the County's post construction water quality requirements follow those outlined in MS4 Permit Section E.12.

Traffic/Circulation and Frontage Improvements: The appellant requested that the traffic study evaluate project-related effects on westbound wait time at the intersection of Mira Loma Drive and Cameron Park Drive and potential traffic spillage of the queuing line onto Mira Loma Drive. The project was required to submit a Traffic Impact Analysis or Study (TIA/S). A TIA was completed by KD Anderson & Associates on December 14, 2020 (attached). The inclusion of a new traffic signal requires the project result in traffic increases that would raise Level of Service (LOS) impacts to the next, more impactful LOS threshold. Based upon El Dorado County Department of Transportation's (DOT) review of the TIA, the Bean Barn would increase the delay at the westbound (Mira Loma) approach from the existing 39.9 seconds to 46.1 seconds. Including additional traffic associated with Bean Barn operations, the LOS would remain at the existing LOS E. More specifically, the delay and volume threshold is met only for the peak hour times of day which typically include increased traffic such as rush hour. However, the normal eight-hour and four-hour warrants have not yet been met. Additionally, the project includes an excess of space which will allow approximately nine vehicles to queue on site. The project has been conditioned to enter into a deferred frontage agreement with the DOT for improvements along Cameron Park Drive and Mira Loma Drive. These improvements will include asphalt concrete dike on Mira Loma Drive and portland cement concrete curb, gutter, and sidewalk on Cameron Park Drive.

<u>Onsite Improvements</u>: The project includes limited drive-thru building attached signage as well as one (1) freestanding sign near the intersection between Mira Loma Drive and Cameron Park Drive. There will be a company art piece on one side of the drive-thru window and a menu board on the other side of the drive-thru window. These are the only proposed signs associated with the project. As menu boards are allowed by right up to a maximum sign area of 60-square-feet, with no individual sign being greater than 30-square-feet of sign area. The two (2) drive-thru signs proposed do not exceed these development standards. The proposed freestanding sign will include a total area – including sign area and base support – of 50-square-feet. As the maximum sign area allowed along the primary frontage for a single establishment within the CL

zone district is 50-square-feet, this proposed sign is compliant with applicable development standards. Additionally, the drive-thru sign area does not count towards the 50-square-foot maximum.

The project will include outdoor lighting which has been conditioned to not result in additional off-site glare impacts. Given site plan changes resulting from CPDRC comments, exact locations of lighting will be included within the building permit submission. Outdoor lighting will be reviewed for compliance during the plan check process.

<u>Rare Plant Survey</u>: The appellant requested that the project materials include a rare plant survey and that the project comply with rare plant requirements. A Botanical Survey Report (BSR) was completed on August 18, 2020 by Sycamore Environmental Consultants, Inc. (attached). Per the BSR, no special status plant species were found on the project site during a botanical survey conducted on July 20, 2020. The BSR indicates that the site has been leveled at least once since 2002 (18 years ago). As such, the BSR did not indicate that any mitigation was required. Because the site is located within the County's Rare Plant Mitigation Area 1, the project would be subject to payment of the appropriate in lieu fee.

<u>Future Development:</u> The appellant requested that any proposed commercial uses other than the Bean Barn be included in the evaluation. Initial project plans included a future commercial pad. That feature was removed from the requested entitlement by the applicant. Any development sought that is outside the scope of the project as described in the Staff Report and associated exhibits would require an application for a revision to this Design Review Permit (Design Review Permit, DR20-0009).

<u>Cameron Park Design Review Committee Meetings:</u> The appellant expressed disappointment that he had not been invited to the CPDRC meeting when the project was on their agenda. The CPDRC website identifies that the committee meets every fourth Monday of each month at Fire Station #89 in Cameron Park. In addition to maintaining regularly scheduled meetings, the CPDRC meeting agendas are posted at least a week in advance of each meeting. Individual meeting notices are not mailed prior to CPDRC meetings; however, interested parties are able to sign up for an email subscription via the CPDRC website to receive agendas automatically.

Staff Conclusion

Planning staff reviewed the application for a Design Review Permit (DR20-0009) and determined it to be in conformance with established County regulations and Design Review considerations including stormwater runoff, traffic generation and circulation, frontage improvements, on-site improvements, completion of a rare plant survey, future development, and noticing of CPDRC meetings. The project has been sufficiently reviewed pursuant to the County's Design Review Permit requirements, CEQA, and has been conditioned to conform to various agency and departmental requirements, as well as to address the CPDRC's comments. Based on this analysis, staff recommends the Planning Commission deny the Appeal and uphold the Staff Level approval.

Enclosures: (135 pages total)

Appeal Form, DR-A21-0004 (4 pages) Botanical Survey Report (39 pages) Traffic Impact Analysis (92 pages)

File Number:	DR-AZI	-0004	Receipt No.:	F11003
Date Receive	d: 12/20/2	150	Amount: <u></u>	239.00
		a parter a t	CODA	
	(For more	APPEAL information, see Section 1:	30.52.090 of the Zoning Ordinar	ce)
Appeals mus	be submitted to	the Planning Depa	rtment with appropriate	appeal fee. Please see
fee schedule	or contact the Pl	lanning Department	for appeal fee informat	ion.
APPELLANT	JIM D	Dillighan	<u></u>	
ADDRESS	3389	Mira Lom	a Dri	
DAYTIME TE	LEPHONE	530 677-0	0900	
A letter from t	ne Appellant aut	horizing the Agent to	act in his/her behalf m	ust be submitted with this
appeal.	705 7			
AGENT	·····			
ADDRESS		a a a		
	EPHONE		an an a'	9
APPEAL BEI	NG MADE TO:	Board of Su	pervisors	ing Commission
APPEAL BEIN ACTION BEIN application, <u>de</u> If appealing co Desig <u>GIVEN</u> <u>Commun</u> <u>Lunprove</u> <u>Commun</u> <u>Lunprove</u> <u>SID</u>	NG MADE TO: NG APPEALED Ential of an applic ponditions of appr M review to neight to neight to neight auby des ements ements ements ements ements	Board of Su (Please specify th cation, <u>conditions</u> of roval, please attach w <u>conditions</u> of <u>boring</u> <u>boring</u> <u>boring</u> <u>boring</u> <u>conditions</u> <u>boring</u> <u>boring</u> <u>conditions</u> <u>boring</u> <u>boring</u> <u>boring</u> <u>boring</u> <u>conditions</u>	pervisors Plan ne action being appeal approval, etc.; <u>and</u> spec- copy of conditions and <u>huithout</u> <u>parties</u> , <u>Also</u> <u>bare</u> with <u>laudscape</u> ;	ing Commission ed, i.e., <u>approval</u> of an ecific reasons for appeal. specify appeal.) <u>roper Adibication</u> <u>regoutes</u> <u>echain all</u> <u>standovels</u> <u>lighting</u> , signag



Bean Barn Appeal Follow-Up

jdillingham@dz-engineering.com <jdillingham@dz-engineering.com> Tue, Dec 28, 2021 at 12:24 PM To: Matthew Aselage <matthew.aselage@edcgov.us> Cc: Dave Spiegelberg <dave.spiegelberg@edcgov.us>, Dani Dillingham <ddillingham@dz-engineering.com>

Hi Mathew,

Thank you for checking in.

The reason for my appeal is to make sure the design accounts for design review athletics for both the small shack and the future proposed office building. Also it needs to address the current drainage problems on the lot plus comply with the storage requirements for storm water capture so the current drainage mess does not become worse. It is a mess in from of that property every time it storms. Because I have had to comply with the rare plant requirements on my projects and this project falls into the rare plant survey requirements I would expect this survey to be completed and reviewed by the county similar to what happens to all commercial lots and for me also it has been residential lots. I would also like the traffic study to account for the traffic line and see if it would spill out onto the road creating a dangerous situation at the intersection. I would also like to have the traffic study analyze the effects of the project on traffic turning left onto Cameron Park drive from Mira Loma going North. I think this would show the longest wait time at the intersection. I can wait there for a good 5 minutes at times to turn left to go towards Green Valley Road.

I would expect to see site improvements that included sidewalk curb and gutter plus lighting and a signage that follows sign guidelines and is reviewed by design review. These are standard items for a commercial development. If the future office building is part of the approval I expect this to go to the planning commission for final approval instead of the pathway its currently on. This is a significant corner and should be properly vetted to make sure the development improves the location with a properly designed site.

Let me know if you can share the proposed design documents with me so I can see if these items have been addressed. If I had been invited to the design review for the project I would have brought up all these above concerns. I wish I did not have to do this appeal process but I feel like I was blindsided by the rush to administratively approve this.

Thanks,

Jim Dillingham, P.E. D&Z Engineering 3389 Mira Loma Drive Cameron Park, CA 95682 530-677-0900 www.dz-engineering.com

[Quoted text hidden]

WARNING: This email and any attachments may contain private, confidential, and privileged material for the sole use of the intended recipient. Any unauthorized review, copying, or distribution of this email (or any attachments) by other than the intended recipient is

strictly prohibited. If you are not the intended recipient, please contact the sender immediately and permanently delete the original and any copies of this email and any attachments.

	Cash Regi County of	ster Receipt of El Dorado	Rece	<u>Receipt Number</u> E11203	
DE	SCRIPTION	ACCOUNT	QTY	PAID	
ProjectTRAK				\$239.00	
DR-A21-0004	Address: 3408 MIRA LOMA DR	APN: 083132001		\$239.00	
APPEALS FE	ES			\$239.00	
ALL APPEALS		3720200 0240	0	\$239.00	
TOTAL FEES PAID	BY RECEIPT:E11203		ALCONT OF	\$239.00	

Date Paid: Wednesday, December 22, 2021

Paid By: Jim Dillingham

Cashier: EPRS

Pay Method: ONLINE CREDIT 49537S 564417002

You can check the status of your case/permit/project using our online portal etrakit https://edc-trk.aspgov.com/etrakit/

Your local Fire District may have its' own series of inspection requirements for your permit/project. Please contact them for further information. Fire District inspections (where required) must be approved prior to calling for a frame and final inspection through the building department.

Due to the large number of structures destroyed in the Caldor Fire, it is anticipated that there will be a large number of applications for building permits in the burn area after fire debris and hazardous materials have been cleaned up. Building permits in the Caldor Fire area will not be issued until after a property has been cleared of fire debris and hazardous materials as a result of the Caldor Fire. Even if a property has been cleared of fire debris and hazardous materials or never had any fire debris and hazardous materials, it does not mean that there are no other health hazards or dangers on the property, including dangers resulting from fire-damaged or hazard trees. Property owners and residents must do their own investigation to determine whether there are any other health hazards or dangers on the property. The issuance of a building permit for the property does not accomplish this task. A building permit is a ministerial action requiring only limited review by the County to ensure that the structure meets all applicable building standards. In most zones, an individual is allowed by right to construct a residence after receiving a building permit that only requires conformity to building standards. The building permit is issued based on information supplied by the applicant without independent investigation by the County of the property or potential health hazards or dangers. Given the limited scope of enforcement, it is not possible for the County to identify potential health hazards or dangers that are not directly associated with the permitted structure. The applicant is in a position to inspect the property, identify potential health hazards or dangers.



Botanical Survey Report for Bean Barn 3 Project El Dorado County, CA <u>. 200 DCO 14 FH 3:</u> (10

RECEIVED PLANNIEG DEPARTMENT



FILE COPY

Prepared by:

Sycamore Environmental Consultants, Inc. 6355 Riverside Blvd., Suite C Sacramento, CA 95831-1143 Phone: 916/ 427-0703 Contact: R. John Little, Ph.D.

Prepared for:

Ms. Angela Copeland PO Box 632 Diamond Springs, CA 95619 Phone: 530/ 919-1069

18 August 2020

ĥ

Botanical Survey Report for Bean Barn 3 Project El Dorado County, CA

Table of Contents

SU	MN	1ARY OF FINDINGS AND CONCLUSIONS	1
I.	IN	TRODUCTION	1
	А. В. С. D. Е.	Purpose of Report Project Location Project Applicant Project Engineer Project Description	1 1 1 1
П.	ST	UDY METHODS	5
	A. B. C. D. E. F.	Studies Conducted	5 5 6 6 6 6 6 6 8
III.	BIG	OLOGICAL RESOURCES IN STUDY AREA	9
	А. В. С.	Wetlands and Waters of the U.S Determination of Special-Status Species and Communities in the Study Area Evaluation of Special-Status Plants	9 9 0
IV.	LI	FERATURE CITED 1	4
v.	PR	EPARERS	5

Figures

Figure 1. Project Location Map	2
Figure 2. Aerial Photo	3
Figure 3. Soils Map	4
Figure 4. Botanical Resources Map	7

Tables

Table 1.	USGS Quads Evaluated for the Bean Barn 3 Project	5
Table 2.	Special-status Plant Species	9

Appendices

Appendix A.	Database Queries (USFWS; CNDDB; CNPS)
Appendix B.	Plant Species Observed
Appendix C.	Photographs

20068 Bean Bam 3 Botanical Report Final docx 8/18/2020 Sycamore Environmental Consultants. Inc.

i

SUMMARY OF FINDINGS AND CONCLUSIONS

The 0.61-acre, Bean Barn 3 Project occurs in Cameron Park, El Dorado County, CA, at the SE corner of Cameron Park Drive and Mira Loma Drive. The Project engineer provided the study area boundary. This area was used as the Biological Study Area (BSA).

The BSA occurs in El Dorado County Rare Plant Mitigation Area 1, which includes areas of gabbro soils that may support Pine Hill plants. Protocol botanical surveys were conducted 20 July 2020. No special-status plant species were found in the BSA during the survey.

No sensitive biological communities occur in the BSA. Four oak trees occur in the BSA. The Applicant has stated that the Project will not result in oak tree removal. Sixty-five species were identified in the BSA; 22 (34%) native and 43 (66%) nonnative.

I. INTRODUCTION

A. Purpose of Report

This Botanical Survey Report responds to the Applicant's request to conduct a botanical survey of the Project site. This report does not analyze impacts or propose mitigation measures.

B. Project Location

The 0.61-acre BSA is located in unincorporated El Dorado County on the Shingle Springs USGS topographic quad. Figure 1 is a Project Location Map based on the USGS quad (T10N, R9E, Section 33). Figure 2 is an aerial photograph of the BSA and the surrounding area, with nearby roads labeled. The Project is assessor's parcel number (APN) 083-132-001. The BSA is in the Upper Cosumnes River Watershed (Hydrologic Unit Code 18040013. Its centroid is 38° 41' 4.55" north, 120° 59' 7.11" west (1983 NAD, UTM Zone 10 North). The BSA occurs on gabbro soils of the Rescue soils series (RfC). Figure 3 shows the BSA location on a soils map.

C. Project Applicant

Ms. Angela Copeland PO Box 632 Diamond Springs, CA 95619 Phone: 530-919-1069

D. Project Engineer

Lebeck Engineering, Inc. 3430 Robin Lane, Bldg. # 2 Cameron Park, CA 95682 Office: (530) 677-4080

E. Project Description

The Applicant intends to create a drive-through coffee shop.



20068BeanBarn3_Fig1LocationMap.mxd



20068BeanBarn3_Fig2AenalPhoto.mxd



Botanical Survey Report Bean Barn 3 Project El Dorado County, CA

II. STUDY METHODS

A. Studies Conducted

An evaluation of biological resources was conducted to determine whether any special-status plant or wildlife species, their habitat, or sensitive habitats occur in the BSA. Data on known special-status species and habitats in the area were obtained from state and federal agencies. A field survey was conducted to determine the habitats present. The field survey and a review of the biology of evaluated species and habitats were used to determine special-status species and sensitive habitats that could occur in the BSA.

Special-status species evaluated in this Report are species listed (or candidate or proposed) under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by CDFW, or that are California Rare Plant Rank (CRPR) 1 or 2 (CNPS 2020). This is consistent with special-status species definitions in the El Dorado County General Plan EIR (2004b). Bisbee Peak rush-rose, although a California Rare Plant Rank 3 plant, is included because it is regulated by El Dorado County ordinance (Chapter 17.71).

Special-status natural communities include waters, wetlands, riparian communities, any natural community ranked S1, S2, or S3 by CDFW (2019a), and any community identified as sensitive in the El Dorado County General Plan (2018).

B. Literature and Database Review

Sycamore Environmental obtained an online list from USFWS that identifies federal-listed species and sensitive habitats that could potentially occur in or be affected by a project in the BSA. The California Natural Diversity Database (CNDDB) and the CNPS Inventory were queried for the Shingle Springs quad and eight surrounding USGS quads to determine known records of special-status species that occur in the vicinity of the BSA. The results of these three database queries are in Appendix A. Table 1 lists the nine USGS quads evaluated.

Pilot Hill	Coloma	Garden Valley	
Clarksville	Shingle Springs	Placerville	
Folsom SE	Latrobe	Fiddletown	

Table 1. USGS Quads Evaluated for the Bean Barn 3 Project.

Standard references used for the biology and taxonomy of plants included Baldwin et al., eds. (2012). On-line references included CNPS (2020); CalPhotos (2020); Consortium of California Herbaria (CCH 2020); Jepson eFlora (2020); and Flora of North America (FNA 1993+). References pertaining to natural communities included CDFW (2019b).

Two special-status species lists produced by CDFW were also reviewed: 1) Special Vascular Plants, Bryophytes, and Lichens List (CDFW, January 2020a); and 2) State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW, January 2020b).

C. Field Survey Methods

1. Survey Dates and Personnel

R. John Little, Ph.D., Botanist/Biologist, conducted a botanical survey of the BSA on 20 July 2020. Photographs are in Appendix C.

2. Weather Conditions

Historic average precipitation for the nearby Placerville gauge from 1 October through 30 June is 38.13 inches (CDEC 2020). From 1 October 2019 through 30 June 2020 the Placerville gauge reported 24.95 inches of precipitation. Precipitation preceding the survey was 65% of normal at the nearby Placerville Gauge for the period of 1 October 2020 to 30 June 2020. The BSA had below normal hydrologic conditions prior to the survey.

3. Botanical Survey

The botanical survey followed survey guidelines of USFWS (2000), CDFW (2018), and CNPS (2001). Except for chaparral sedge (*Carex xerophila*) and Red Hills soaproot (*Chlorogalum grandiflorum*), the 2020 survey was conducted during the published blooming period of special-status species with potential to occur in the BSA. Due to its growth habit, chaparral sedge is easily identified without flowers. No *Chlorogalum* species occur in the BSA. The published blooming times of all other species evaluated state that blooming occurs through July or August. Many annual herbaceous plants and grasses in the BSA were dried out, but were able to be identified based on morphological characters.

The botanical survey was floristic, meaning that every plant taxon found was identified to the taxonomic level necessary to determine rarity and listing status. Plant species observed were either identified on-site or collected and identified later with a microscope and dichotomous keys in Baldwin et al. (2012) and/or Jepson eFlora (2020). Approximately 5 person-hours were spent in the field during the 20 July 2020 survey of the 0.61-acre BSA. An additional 2 hours were spent keying plants collected on-site. A list of vascular plants observed is in Appendix B. Scientific nomenclature follows Baldwin et al. (2012) or Jepson eFlora (2020).

D. Mapping

A Trimble Nomad 5, handheld GPS unit coupled to a sub-meter accurate R-1 receiver was used to identify project boundaries. A digital topographic survey of the legal parcel boundary was provided by the Project engineer. GPS data were exported to ArcMap and aligned with the BSA boundary based on common control points taken on existing infrastructure in the engineer's digital topographic survey data. The aerial photograph used as the base for Figure 4 was also aligned based on GPS control points collected in the field. Biological community boundaries were identified based on field notes and aerial photographs. The aerial photo for Figure 4, dated 7 November 2019, WV02 Vivid Maxar Imagery, was downloaded from ESRI ArcGIS World Imagery Basemap layer service.

E. Problems Encountered and Limitations That May Influence Results

No problems were encountered that would influence the results.



Botanical Survey Report Bean Barn 3 Project El Dorado County, CA

F. The Existing Level of Disturbance

Based on Google historical photos, the site has been leveled at least since 2002 (18 years ago). Client's realtor reported the site was leveled at least 30 years ago (pers. comm. A. Copeland). A narrow band of vegetation 5-10 ft wide along the eastern property boundary is all that remains of native vegetation previously on-site, except for a 30 inch dbh Valley oak near the northern border of the BSA, south of Mira Loma Drive. The eastern property boundary is on average over 10 ft higher than the center of the BSA. The adjacent property south of the BSA is also over 10 ft higher than the center of the BSA. These elevation differences are due to the parcel being leveled. To help support the higher ground south of the BSA and to keep it from slumping into the BSA, the western half of the southern BSA boundary is shored up with a block retaining wall and the northern half with a wood retaining wall. Most of the BSA is periodically disced to remove weeds.

III. BIOLOGICAL RESOURCES IN STUDY AREA

A. Wetlands and Waters of the U.S.

No potential wetlands or waters of the U.S. were observed in the BSA.

B. Determination of Special-Status Species and Communities in the Study Area

Special-status species for which suitable habitat is present in the BSA are listed in Table 2. The BSA is not in the El Dorado County Important Biological Corridor (IBC) or Ecological Preserve overlays (El Dorado County 2004a). The BSA is not in the USFWS recommended preserve area for the gabbro soil (Pine Hill) plants (USFWS August 2002). There are no special-status natural communities in the BSA.

Special-Status Species	Common Name	Federal Status ^a	State Status ^a	Source ^b	Habitat Present?/ Species Observed?
Balsamorhiza macrolepis var. macrolepis	Big-scale balsamroot		/ 1B.3	2	Yes/ No
Calystegia stebbinsii	Stebbins' morning-glory	E	E/ 1B.1	1, 2	Yes/ No
Calystegia vanzuukiae	Van Zuuk's morning- glory		/ 1B.3	2	Yes/ No
Carex xerophila	Chaparral sedge		/ 1B.2	2	Yes/ No
Ceanothus roderickii	Pine Hill ceanothus	E	R/ 1B.1	1, 2	Yes/ No
Chlorogalum grandiflorum	Red Hills soaproot		/ 1B.2	2	Yes/ No
Crocanthemum suffrutescens	Bisbee Peak rush-rose		/ 3.2	2	Yes/ No
Fremontodendron decumbens	Pine Hill flannelbush	Е	R/ 1B.2	1,2	Yes/ No
Galium californicum ssp. sierrae	El Dorado bedstraw	E	R/ 1B.2	1, 2	Yes/ No
Packera layneae	Layne's butterweed	Т	R/ 1B.2	1, 2	Yes/ No
Viburnum ellipticum	Oval-leaved viburnum		/ 2B.3	2	Yes/ No
Wyethia reticulata	El Dorado County mule ears		/ 1B.2	2	Yes/ No

Table 2	Special-status	Plant	Snecies	with	Potential	Habitat	in the	BSA
1 auto 2.	opecial-status	Fiam	species	with	rotennai	ilaunai	III UIC	DOM

^a <u>Status</u>: E = Endangered; T = Threatened; P = Proposed; C = Candidate; R = California Rare; * = Possibly extinct; SSC = CDFW Species of Special Concern; FP = CDFW Fully Protected; Prot = CDFW Protected; CH = Critical habitat designated.

<u>CNPS Rare Plant Rank</u>: 1A = Presumed Extinct in CA; 1B = Rare or Endangered (R/E) in CA and elsewhere; 2 = R/E in CA and more common elsewhere; 3 = Need more information; 4 = Plants of limited distribution; 0.1 = Seriously endangered in CA; 0.2 = Fairly endangered in CA; 0.3 = Not very endangered in CA.

^b <u>Source:</u> 1 = USFWS letter: 2 = CNDDB

Botanical Survey Report Bean Barn 3 Project El Dorado County, CA

C. Evaluation of Special-Status Plants

The BSA is in El Dorado County Rare Plant Mitigation Area 1. Mitigation Areas 0 and 1 include areas of gabbro soils that may support Pine Hill plants. The eight Pine Hill plants are Stebbins' morning-glory, Pine Hill ceanothus, Red Hills soaproot, Pine Hill flannelbush, El Dorado bedstraw, Bisbee Peak rush-rose, Layne's butterweed, and El Dorado County mule ears. None of these species were found in the BSA.

Big-scale balsamroot (Balsamorhiza macrolepis; syn. Balsamorhiza m. var. macrolepis)

HABITAT AND BIOLOGY: A perennial herb found in chaparral, cismontane woodland, and valley and foothill grassland, sometimes on serpentine soils, from 295 to 5,100 feet. Blooms March through June (CNPS 2020); March through July (Jepson eFlora 2020).

RANGE: This species is endemic to California. Known from Alameda, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Shasta, Solano, Sonoma, Tehama, and Tuolumne counties (CNPS 2020).

KNOWN RECORDS: There is one CNDDB record for big-scale balsamroot in the nine-quad area surrounding the BSA. The closest (Occurrence #14), is about 10.4 miles NW of the BSA on the Pilot quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for big-scale balsamroot.

DISCUSSION: Big-scale balsamroot was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

Stebbins' morning-glory (Calystegia stebbinsii)

HABITAT AND BIOLOGY: A perennial rhizomatous herb found in serpentine or gabbroic soils in chaparral openings and cismontane woodland from 600 to 2,400 feet elevation. Blooms April through July (CNPS 2020; Jepson eFlora 2020).

RANGE: This species is endemic to CA. Known from El Dorado and Nevada counties (CNPS 2020). **KNOWN RECORDS:** There are 8 CNDDB records for Stebbins' morning-glory in the nine-quad area surrounding the BSA. The closest (Occurrence #6), is about 0.4 mile SE of the BSA.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for Stebbins' morning-glory.

DISCUSSION: Stebbins' morning-glory was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

Van Zuuk's morning-glory (Calystegia vanzuukiae)

HABITAT AND BIOLOGY: A perennial rhizomatous herb found in serpentine or gabbroic soils in chaparral and cismontane woodland from 1,640 to 3,870 feet elevation. This species is probably a stabilized hybrid between *C. stebbinsii* and *C. occidentalis* ssp. *occidentalis* (CNPS 2020). Blooms May through August (CNPS 2020).

RANGE: This species is endemic to CA. Known only from El Dorado and Placer counties (CNPS 2020).

KNOWN RECORDS: There is one CNDDB record of Van Zuuk's morning-glory in the nine-quad area surrounding the BSA. The closest (Occurrence #1), is about 15.7 miles NE of the BSA on the Garden Valley quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for Van Zuuk's morning-glory. The known range of Van Zuuk's morning-glory does not extend into Cameron Park.

DISCUSSION: Van Zuuk's morning-glory was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

20068 Bean Barn 3 Botanical Report Final docx 8/18/2020 Sycamore Environmental Consultants, Inc.

Chaparral sedge (*Carex xerophila*)

HABITAT AND BIOLOGY: Chaparral sedge is a perennial, cespitose herb found on serpentine and gabbro soils in chaparral, cismontane woodland, and lower montane coniferous forest. Occurs in uplands in full sun to partial shade, in open forest or chaparral from 1,475 to 2,525 feet (Zika et al. 2014; CNPS 2020). Blooms March through June (CNPS 2020; Jepson eFlora 2020).

RANGE: This species is endemic to CA. Known from Butte, El Dorado, Nevada, and Yuba counties (CNPS 2020).

KNOWN RECORDS: There are seven CNDDB records of chaparral sedge in the nine-quad area surrounding the BSA. The closest (Occurrence #3), is about 0.8 mile NE of the BSA on the Shingle Springs quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for chaparral sedge.

DISCUSSION: Chaparral sedge was not found during the July 2020 botanical survey. Although the published blooming date for this species is March-June, this species is a perennial plant and would have been detected during the survey based on persistent, distinctive foliage.

Pine Hill ceanothus (Ceanothus roderickii)

HABITAT AND BIOLOGY: A low-growing, perennial, evergreen shrub found in serpentine or gabbroic soils in chaparral and cismontane woodland from 800 to 3,600 feet. Blooms April through June (CNPS 2020); March through June (Jepson eFlora 2020). Pine Hill ceanothus is an evergreen shrub that is evident and identifiable year-round.

RANGE: This species is endemic to CA. Known only from El Dorado County (CNPS 2020).

KNOWN RECORDS: There are nine CNDDB records for Pine Hill ceanothus in the nine-quad area surrounding the BSA. The closest (Occurrence #1), is about 0.1 mile SE of the BSA on the Shingle Springs quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for Pine Hill ceanothus. DISCUSSION: Pine Hill ceanothus was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

Red Hills soaproot (Chlorogalum grandiflorum)

HABITAT AND BIOLOGY: A perennial bulbiferous herb found in serpentine, gabbroic, and other soils in chaparral, cismontane woodland, and lower montane coniferous forest from 800 to 4,100 feet. Blooms May through June (CNPS 2020; Jepson eFlora 2020).

RANGE: This species is endemic to CA. Known from Amador, Butte, Calaveras, El Dorado, Placer, and Tuolumne counties (CNPS 2020).

KNOWN RECORDS: There are 14 CNDDB records for Red Hills soaproot in the nine-quad area surrounding the BSA. The closest (Occurrence #33), is about 0.2 mile SE of the BSA on the Shingle Springs quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for Red Hills soaproot.

DISCUSSION: Red Hills soaproot was not found during the July 2020 botanical survey. Although the published blooming date for this species is May-June, this species is a perennial plant that would have been detected during the survey based on persistent, distinctive inflorescences.

Bisbee Peak rush-rose (Crocanthemum suffrutescens)

HABITAT AND BIOLOGY: An evergreen shrub found in chaparral from 250 to 2,200 feet. Often found on gabbroic or lone soils; often in burned or disturbed areas in chaparral. Blooms April through August (CNPS 2020); April through June (Jepson eFlora 2020).

RANGE: This species is endemic to CA. Known from Amador, Calaveras, and El Dorado counties (CNPS 2020).

KNOWN RECORDS: There are 16 CNDDB records for Bisbee Peak rush-rose in the nine-quad area surrounding the BSA. The closest (Occurrence #22), is about 0.1 mile east of the BSA.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for Bisbee Peak rush-rose.

DISCUSSION: Bisbee Peak rush-rose was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

Pine Hill flannelbush (Fremontodendron decumbens)

HABITAT AND BIOLOGY: An evergreen shrub found in rocky areas of serpentine or gabbroic soils in chaparral and cismontane woodland from 1,400 to 2,500 feet. Blooms April through July (CNPS 2020; Jepson eFlora 2020). Pine Hill flannelbush is a perennial evergreen shrub that is evident and identifiable year-round.

RANGE: This species is endemic to CA. Known from El Dorado, Nevada, and Yuba counties (CNPS 2020.

KNOWN RECORDS: There are seven CNDDB records for Pine Hill flannelbush in the nine-quad area surrounding the BSA. The closest (Occurrence #12), is about 1.7 miles north of the BSA on the Shingle Spring quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for Pine Hill flannelbush.

DISCUSSION: Pine Hill flannelbush was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

El Dorado bedstraw (Galium californicum ssp. sierrae)

HABITAT AND BIOLOGY: A low-growing, perennial herb found in gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 300 to 1,900 feet elevation. Blooms May through June (CNPS 2020); March through July (Jepson eFlora 2020). El Dorado bedstraw is more likely to be found under oak trees and in oak leaf litter, particularly of black oak (BLM 2010).

RANGE: This species is endemic to CA. Known only from El Dorado County (CNPS 2020).

KNOWN RECORDS: There are 17 CNDDB records for El Dorado bedstraw in the nine-quad area surrounding the BSA. The closest (Occurrence #8), is about 0.8 mile east of the BSA on the Shingle Springs quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for El Dorado bedstraw.

DISCUSSION: El Dorado bedstraw was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

Layne's Butterweed (Packera layneae; syn. Senecio layneae)

HABITAT AND BIOLOGY: A perennial herb found in rocky areas with serpentine or gabbroic soils in chaparral and cismontane woodland from 650 to 3,560 feet elevation. Blooms April through August (CNPS 2020); April through June (Jepson eFlora 2020).

RANGE: This species is endemic to CA. Known from El Dorado, Placer, Tuolumne, and Yuba counties (CNPS 2020).

KNOWN RECORDS: There are 36 CNDDB records for Layne's butterweed in the nine-quad area surrounding the BSA. The closest (Occurrence #2), is 0.04 mile NW of the BSA on the Shingle Springs quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for Layne's butterweed.

DISCUSSION: Layne's butterweed was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

Oval-leaved viburnum (Viburnum ellipticum)

HABITAT AND BIOLOGY: Oval-leaved viburnum is a deciduous shrub found in chaparral, cismontane woodland, and lower montane coniferous forest from 705 to 4,590 feet. It is generally found on north-facing slopes (Baldwin et al. 2012). Blooms May through June (CNPS 2020); June through August (Jepson eFlora 2020).

RANGE: Alameda, Contra Costa, El Dorado, Fresno, Glenn, Humboldt, Lake, Mendocino, Mariposa, Napa, Placer, Shasta, Solano, Sonoma, and Tehama counties (CNPS 2020). Also occurs in Oregon and Washington.

KNOWN RECORDS: There is one CNDDB record for oval-leaved viburnum in the nine-quad area surrounding the BSA. The closest (Occurrence #5), is based on two collections, one in 1900 and the other in 1901. This locations is about 9.6 miles NE of the BSA on the Placerville quad. This is the only CNDDB record for oval-leaved viburnum in El Dorado County.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for oval-leaved viburnum.

DISCUSSION: Oval-leaved viburnum was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

El Dorado County mule ears (Wyethia reticulata)

HABITAT AND BIOLOGY: A perennial rhizomatous herb found in clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest from 600 to 2,060 feet. Blooms April through August (CNPS 2020); May through August (Jepson eFlora 2020).

RANGE: This species is endemic to CA. Known from El Dorado and Yuba counties (CNPS 2020).

KNOWN RECORDS: There are 25 CNDDB records for El Dorado County mule ears in the nine-quad area surrounding the BSA. The closest (Occurrence #1) from 2016, is about 0.14 mile SE of the BSA on the Shingle Springs quad.

HABITAT PRESENT IN THE BSA: The BSA provides habitat for El Dorado County mule ears. DISCUSSION: El Dorado County mule ears was not found during the July 2020 botanical survey conducted during the evident and identifiable period.

IV. LITERATURE CITED

- Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, eds. 2012. The Jepson manual: Vascular plants of California, 2nd Ed. University of California Press, Berkeley, CA.
- Bureau of Land Management (BLM). 30 April 2010. Pine Hill Preserve 2010 rare plant surveys final report. Prepared for the U.S. Fish and Wildlife Service by Graciela Hinshaw, Preserve Manager.
- California Data Exchange Center (CDEC). 2020. Real-Time and historic average precipitation data from the Placerville Gauge (PCV). California Department of Water Resources, Sacramento, CA. http://cdec.water.ca.gov/cgi-progs/staMeta?station_id=PCV [accessed July 2020].
- California Department of Fish and Wildlife (CDFW). 20 March 2018 (2018). Protocols for surveying and evaluating impacts to special status native plant populations and sensitive natural communities. California Natural Resources Agency; CA Department of Fish and Wildlife.
- California Department of Fish and Wildlife (CDFW). August 2019a. Natural Diversity Database. Special Animals List. Periodic publication, Sacramento, CA.
- California Department of Fish and Wildlife (CDFW). 2019b (November 8, 2019). California Natural Community List. Natural Heritage Division, CNDDB, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline
- California Department of Fish and Wildlife (CDFW). January 2020a. Special vascular plants, bryophytes, and lichens list. Habitat Conservation Division, CNDDB, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline
- California Department of Fish and Wildlife (CDFW). January 2020b. State and Federally Listed Endangered, Threatened, and Rare Plants of California. Biogeographic Data Branch, CNDDB, Sacramento, CA.
- California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. Dec. 9, 1983; Revised June 2, 2001. https://www.cnps.org/plant-science/field-protocols-guidelines
- California Invasive Plant Council (Cal-IPC). 2020. Invasive plant inventory. California Invasive Plant Council, Berkeley, CA. www.cal-ipc.org [accessed July 2020].
- California Native Plant Society (CNPS). 2020. Rare Plant Program. Inventory of rare and endangered plants (online edition, v8-03 0.39). California Native Plant Society, Sacramento, CA. http://www.rareplants.cnps.org [accessed July 2020].
- CalPhotos. 2020. Plant images: http://calphotos.berkeley.edu/flora/ [accessed July 2020].
- Consortium of California Herbaria (CCH). 2020. Data provided by the Consortium of California Herbaria. https://ucjeps.berkeley.edu/consortium/ [accessed July 2020].
- El Dorado County. Adopted 19 July 2004 (2004a). El Dorado County general plan, a plan for managed growth and open roads; a plan for quality neighborhoods and traffic relief. El Dorado County Planning Department, Placerville, CA.
- El Dorado County. January 2004, Certified 19 July 2004 (2004b). El Dorado County general plan, final environmental impact report (EIR). Resolution No. 234-2004, State Clearinghouse No. 2001082030. Prepared by EDAW.
- El Dorado County. 2018. Adopted 19 July 2004; Amended 25 September 2018. El Dorado County General Plan, a plan for managed growth and open roads; a plan for quality neighborhoods and traffic relief. El Dorado County Planning Department, Placerville, CA.
- Flora of North America Editorial Committee, eds. (FNA). 1993+. Flora of North America North of Mexico. 30 vols. New York and Oxford. http://floranorthamerica.org/
- Jepson eFlora 2020. Online version of Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, eds. 2012. The Jepson manual: Vascular plants of California, 2nd ed. University of California Press, Berkeley, CA. http://ucjeps.berkeley.edu/eflora/. Accessed July 2020.
- U.S. Fish and Wildlife Service (USFWS). 2000. Guidelines for conducting and reporting botanical inventories for federally listed, proposed and candidate plants. Sacramento Fish & Wildlife Office, Sacramento, CA.
- U.S. Fish and Wildlife Service (USFWS). 30 August 2002. Recovery plan for gabbro soil plants of the Central Sierra Nevada Foothills. Portland, OR.

20068 Bean Barn 3 Botanical Report Final docx 8/18/2020 Sycamore Environmental Consultants, Inc.

Zika, P. F., L. P. Janeway, and B. L. Wilson. 2014. *Carex xerophila* (Cyperaceae), a new sedge from the chaparral of Northern California. Madroño 61:3(299-307).

V. PREPARERS

R. John Little, Ph.D. Botany, Claremont Graduate School, Claremont, CA. Over 30 years' experience managing and conducting environmental projects involving impact assessment and preparation of numerous NEPA/CEQA compliance documents, Biological Assessments, and Caltrans Natural Environmental Studies. Experience includes conducting special-status plant and wildlife species surveys, jurisdictional wetland delineations, general biological surveys, permitting and biological report preparation. Dr. Little is a trained wetland delineator and an ESA certified Senior Ecologist. He holds a California Department of Fish and Wildlife Rare, Threatened and Endangered Plant Voucher Collecting Permit (2081(a)-16-021-V), and is an authorized individual on the CDFW Scientific Collecting Permit (SC-7617).

Responsibilities: Botanical survey, plant identification, report preparation.

Aramis Respall, GIS Analyst/ CAD Operator. Over 20 years' experience in drafting and spatial analysis using AutoCAD map and ArcGIS for public and private projects. He prepares figures for biological and permitting documents such as project location maps, aerial photograph exhibits, biological resource maps, CNDDB proximity maps, wetlands/waters delineation maps, impact analysis maps, tree location maps and other supporting graphics. Mr. Respall provides geospatial analysis and support for projects involving geodesy, hydrology, watershed studies, project impact analysis, CNDDB species, and critical habitat and mitigation information. Primary experience evolved from conventional surveying and civil engineering practices to advanced GPS and GIS based technology.

Responsibilities: Figure preparation and spatial analysis.



Botanical Survey Report Bean Barn 3 Project El Dorado County, CA

APPENDIX A.

Database Queries (USFWS; CNDDB; CNPS)

20068 Bean Barn 3 Botanical Report Final docx 8/18/2020 Sycamore Environmental Consultants. Inc.

7/27/2020

IPaC

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.



Local office

Sacramento Fish And Wildlife Office

▶ (916) 414-6600
▶ (916) 414-6713

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Amphibians

NAME

STATUS

https://ecos.fws.gov/ipac/location/ZQ3CQW2HZFHQPND2VOIWC7ACNE/resources

7/27/2020		IPaC: Explore Location	(
California Red-legg There is final crit the critical habita <u>https://ecos.fws.</u> g	ged Frog Rana draytoni ical habitat for this species at. gov/ecp/species/2891	ii 5. Your location is outside	Threatened
Fishes			
NAME			STATUS
Delta Smelt Hypor There is final crit the critical habita <u>https://ecos.fws.</u> g	mesus transpacificus ical habitat for this species it. <u>30v/ecp/species/321</u>	s. Your location is outside	Threatened
Flowering F	Plants		
NAME			STATUS
El Dorado Bedstra No critical habitat <u>https://ecos.fws.g</u>	W Galium californicum t has been designated for gov/ecp/species/5209	ssp. sierrae this species.	Endangered
Layne's Butterwee No critical habitat <u>https://ecos.fws.</u> g	d Senecio layneae t has been designated for t gov/ecp/species/4062	this species.	Threatened
Pine Hill Ceanothu	s Ceanothus roderickii	te est	Endangered
No critical habitat https://ecos.fws.g	t has been designated for t <u>;ov/ecp/species/3293</u>	this species.	
Pine Hill Flannelbu decumbens	sh Fremontodendron o	californicum ssp.	Endangered
No critical habitat https://ecos.fws.g	: has been designated for t <u>ov/ecp/species/4818</u>	his species.	
Stebbins' Morning- No critical habitat <u>https://ecos.fws.g</u>	glory Calystegia stebbi has been designated for t ov/ecp/species/3991	nsii his species.	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

https://ecos.fws.gov/ipac/location/ZQ3CQW2HZFHQPND2VOIWC7ACNE/resources

IPaC: Explore Location

7/27/2020

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act^{1} and the Bald and Golden Eagle Protection Act^{2} .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

1. The Migratory Birds Treaty Act of 1918.

2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/
 http://www.fws.gov/birds/management/managed-species/
- Measures for avoiding and minimizing impacts to birds <u>http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php</u>
- Nationwide conservation measures for birds <u>http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf</u>

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds</u> of <u>Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found <u>below</u>.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE.

7/2	710	020
112	112	020

IPaC: Explore Location

"BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Breeds Jan 1 to Aug 31

Breeds Jan 1 to Jul 31

Breeds Jan 1 to Aug 3

Breeds Mar 20 to Sep 20

Breeds Apr 1 to Jul 20

Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <u>https://ecos.fws.gov/ecp/species/1626</u>

California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9464</u>

Lewis's Woodpecker Melanerpes lewis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408

Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <u>https://ecos.fws.gov/ecp/species/9410</u>

 Oak Titmouse
 Baeolophus inornatus
 Breeds Mar 15 to Jul 15

 This is a Bird of Conservation Concern (BCC) throughout its range in
 the continental USA and Alaska.

 https://ecos.fws.gov/ecp/species/9656
 https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus Breeds elsewhere This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/8002</u>

https://ecos.fws.gov/ipac/location/ZQ3CQW2HZFHQPND2VOIWC7ACNE/resources

5/12

7/27/2020	(IPaC: Explore Location	н (^С
Song Sparrow M This is a Bird of Conservation R	elospiza melodia Conservation Concern (BC egions (BCRs) in the contin	CC) only in particular Bird nental USA	Breeds Feb 20 to Sep 5
Spotted Towhee This is a Bird of Conservation R <u>https://ecos.fws</u>	Pipilo maculatus cleme Conservation Concern (BC egions (BCRs) in the contin <u>sgov/ecp/species/4243</u>	entae IC) only in particular Bird nental USA	Breeds Apr 15 to Jul 20
Wrentit Chamae This is a Bird of the continental	a fasciata Conservation Concern (BC USA and Alaska.	IC) throughout its range in	Breeds Mar 15 to Aug 10
Yellow-billed Mag This is a Bird of the continental <u>https://ecos.fws</u>	spie Pica nuttalli Conservation Concern (BC USA and Alaska. .gov/ecp/species/9726	C) throughout its range in	Breeds Apr 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

https://ecos.fws.gov/ipac/location/ZQ3CQW2HZFHQPND2VOIWC7ACNE/resources

7/27/2020

IPaC: Explore Location

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

				🏽 proba	bility of	presence	e br	eeding se	eason	survey e	ffort – no data		
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
Bald Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential		1 4 ∰	• + + +	+ + + *				<u> </u>	а ф т-ф	4 • • • P • 1	4 4	111	
susceptibilities in offshore areas from certain types of development or activities.)	$\langle \langle \langle \rangle$	Ç	X										
California Thrasher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)		* •	v-4 ∔-1-	• * *****		.)		one specific care	4-1-1-4-	of the off of	-}}}-	-4-4- 1 -	
Golden Eagle Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)	* + + +	1 04 4 04	ter for de l	-માન્ય - નિય્લોક	6 I - 16 A	β. and an order	-* ~ 4 4	an at chose	at of success	ale soo sile ale	++++		

https://ecos.fws.gov/ipac/location/ZQ3CQW2HZFHQPND2VOIWC7ACNE/resources

7/27/2020		IPaC: Explore Location
Lawrence's Goldfinch BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	∔┼┼┋ ┵┤┾┾ ╹╂╪┞ ╹╂╄╉ ┖┋╪	$\left(\frac{1}{2}\right)^{\frac{1}{2}} = \left(\frac{1}{2}\right)^{\frac{1}{2}} + \left($
Lewis's Woodpecker BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++ ****	gen an an an afrike an an afrike of an an afrike of an an an afrike of a de an an afrike of a de afrike of a de
Nuttall's Woodpecker BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)		
Oak Titmouse BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)		
Rufous Hummingbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)		·····
Song Sparrow BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)	十十十十 王麗十十 ・トナナ 一 麗都麗華	事·事· ·································
Spotted Towhee BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)		

https://ecos.fws.gov/ipac/location/ZQ3CQW2HZFHQPND2VOIWC7ACNE/resources

8/12

7/27/2020					IPaC: Expl	ore Locatio	on (
Wrentit BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	∔∰++	∔ ¶ ∰ <u>†</u> -	• + 4			un un de la	- 1.4	ા અને ગામ્લી	goone of engles	to to a 🏦	4 1 4
Yellow-billed Magpie BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)				 -#+#							

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

<u>Nationwide Conservation Measures</u> describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. <u>Additional measures</u> and/or <u>permits</u> may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC</u>) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network</u> (<u>AKN</u>). The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>AKN Phenology Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen</u> <u>science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

7/27/2020

IPaC: Explore Location

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: <u>The Cornell Lab of Ornithology All About Birds Bird Guide</u>, or (if you are unsuccessful in locating the bird of interest there), the <u>Cornell Lab of Ornithology Neotropical Birds</u> guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS</u> <u>Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf</u> project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam</u> <u>Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to

https://ecos.fws.gov/ipac/location/ZQ3CQW2HZFHQPND2VOIWC7ACNE/resources

10/12

7/27/2020

IPaC: Explore Location

confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of</u> Engineers District.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the <u>NWI map</u> to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.
7/27/2020

IPaC: Explore Location

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

TFOR



Selected Elements by Scientific Name California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria:

: Quad IS (Pilot Hill (3812171) OR Coloma (3812078) OR Clarksville (3812161) OR Shingle Springs (3812068) OR Placerville (3812067) OR Folsom SE (3812151) OR Latrobe (3812058) OR Fiddletown (3812057))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter gentilis	ABNKC12060	None	None	G5	S3	SSC
northern goshawk						
Agelaius tricolor	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
tricolored blackbird						
Allium jepsonii	PMLIL022V0	None	None	G2	S2	1B.2
Jepson's onion						
Ammodramus savannarum	ABPBXA0020	None	None	G5	S3	SSC
grasshopper sparrow						
Andrena blennospermatis	IIHYM35030	None	None	G2	S2	
Blennosperma vernal pool andrenid bee						
Antrozous pallidus	AMACC10010	None	None	G5	S3	SSC
pallid bat						
Aquila chrysaetos	ABNKC22010	None	None	G5	S3	FP
golden eagle						
Arctostaphylos nissenana	PDERI040V0	None	None	G1	S1	1B.2
Nissenan manzanita						
Ardea alba	ABNGA04040	None	None	G5	S4	
great egret						
Ardea herodias	ABNGA04010	None	None	G5	S4	
great blue heron						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Atractelmis wawona	IICOL58010	None	None	G3	S1S2	
Wawona riffle beetle						
Balsamorhiza macrolepis	PDAST11061	None	None	G2	S2	1B.2
big-scale balsamroot						
Banksula californica	ILARA14020	None	None	GH	SH	
Alabaster Cave harvestman						
Bombus occidentalis	IIHYM24250	None	Candidate Endangered	G2G3	S1	
western bumble bee			2.1.60.1.gol 00			
Branchinecta lynchi	ICBRA03030	Threatened	None	G3	S3	
vernal pool fairy shrimp						
Buteo regalis	ABNKC19120	None	None	G4	S3S4	WL
terruginous hawk						
Buteo swainsoni	ABNKC19070	None	Threatened	G5	83	
Swainson's nawk						

Commercial Version -- Dated July, 3 2020 -- Biogeographic Data Branch Report Printed on Monday, July 27, 2020 Page 1 of 3 Information Expires 1/3/2021



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



						Rare Plant Rank/CDFW
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
Calystegia stebbinsii	PDCON040H0	Endangered	Endangered	G1	S1	1B.1
Stebbins' morning-glory						
Calystegia vanzuukiae	PDCON040Q0	None	None	G2Q	S2	1B.3
Van Zuuk's morning-glory						
Carex cyrtostachya Sierra arching sedge	PMCYP03M00	None	None	G2	S2	1B.2
Carex xerophila chaparral sedge	PMCYP03M60	None	None	G2	S2	1B.2
Ceanothus roderickii Pine Hill ceanothus	PDRHA04190	Endangered	Rare	G1	S1	1B.1
Central Valley Drainage Hardhead/Squawfish Stream Central Valley Drainage Hardhead/Squawfish Stream	CARA2443CA	None	None	GNR	SNR	
Chlorogalum grandiflorum Red Hills soaproot	PMLIL0G020	None	None	G3	S3	1B.2
Clarkia biloba ssp. brandegeeae Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
Cosumnoperla hypocrena Cosumnes stripetail	IIPLE23020	None	None	G2	S2	
Crocanthemum suffrutescens	PDCIS020F0	None	None	G2?Q	S2?	3.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
<i>Eryngium pinnatisectum</i> Tuolumne button-celery	PDAPI0Z0P0	None	None	G2	S2	1B.2
Fremontodendron decumbens Pine Hill flannelbush	PDSTE03030	Endangered	Rare	G1	S1	1B.2
Galium californicum ssp. sierrae El Dorado bedstraw	PDRUB0N0E7	Endangered	Rare	G5T1	S1	1B.2
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Horkelia parryi Parry's horkelia	PDROS0W0C0	None	None	G2	S2	1B.2
Hydrochara rickseckeri Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G5	S3S4	

Commercial Version -- Dated July, 3 2020 -- Biogeographic Data Branch Report Printed on Monday, July 27, 2020 Page 2 of 3 Information Expires 1/3/2021



Selected Elements by Scientific Name California Department of Fish and Wildlife California Natural Diversity Database



Spanias	Element Code	Endoral Status	State Status	Global Bank	Stato Bank	Rare Plant Rank/CDFW
Jatarallus jamaiconsis coturniculus	ARNME03041	None	Threatened	G3G4T1	State Kank	FP
California black rail	ABIUME00041	None	medicined	000411	01	
Myotis vumanensis	AMACC01020	None	None	G5	S4	
Yuma mvotis	111010001020	Hone	110110			
Oncorhynchus mykiss irideus pop 11	AFCHA0209K	Threatened	None	G5T2O	S2	
steelhead - Central Valley DPS						
Packera layneae	PDAST8H1V0	Threatened	Rare	G2	S2	1B.2
Layne's ragwort						
Pekania pennanti	AMAJF01021	None	Threatened	G5T2T3Q	S2S3	SSC
fisher - West Coast DPS						
Phrynosoma blainvillii	ARACF12100	None	None	G3G4	S3S4	SSC
coast horned lizard						
Rana boylii	AAABH01050	None	Endangered	G3	S3	SSC
foothill yellow-legged frog						
Rana draytonii	AAABH01022	Threatened	None	G2G3	S2S3	SSC
California red-legged frog						
Riparia riparia	ABPAU08010	None	Threatened	G5	S2	
bank swallow						
Sagittaria sanfordii	PMALI040Q0	None	None	G3	S3	1B.2
Sanford's arrowhead						
Spea hammondii	AAABF02020	None	None	G3	S3	SSC
western spadefoot						
Thamnophis gigas	ARADB36150	Threatened	Threatened	G2	S2	
giant gartersnake						
Viburnum ellipticum	PDCPR07080	None	None	G4G5	S3?	2B.3
oval-leaved viburnum						
Wyethia reticulata	PDAST9X0D0	None	None	G2	S2	1B.2
El Dorado County mule ears						

Record Count: 53

CNPS Inventory Results



*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

30 matches found. Click on scientific name for details

Search Criteria

Found in Quads 3812171, 3812078, 3812077, 3812161, 3812068, 3812067, 3812151 3812058 and 3812057;

a Modify Search Criteria Export to Excel Modify Columns 2 Modify Sort Display Photos

Scientific Name	Common Name	Family	y Lifeform Bl		CA Rare Plant Rank	State Rank	Global Rank
<u>Allium jepsonii</u>	Jepson's onion	Alliaceae	perennial bulbiferous herb	Apr-Aug	1B.2	S2	G2
<u>Allium sanbornii var.</u> congdonii	Congdon's onion	Alliaceae	perennial bulbiferous herb	Apr-Jul	4.3	S3	G4T3
<u>Allium sanbornii var.</u> sanbornii	Sanborn's onion	Alliaceae	perennial bulbiferous herb	May-Sep	4.2	S3S4	G4T3T4
<u>Arctostaphylos mewukka</u> <u>ssp. truei</u>	True's manzanita	Ericaceae	Ericaceae perennial evergreen Feb		4.2	S3	G4?T3
<u>Arctostaphylos</u> <u>nissenana</u>	Nissenan manzanita	Ericaceae	perennial evergreen shrub	Feb- Mar(Jun)	1B.2	S1	G1
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
Calandrinia breweri	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar- Jun	4.2	S4	G4
Calystegia stebbinsii	Stebbins' morning- glory	Convolvulaceae	perennial rhizomatous herb	Apr-Jul	1B.1	S1	G1
<u>Calystegia vanzuukiae</u>	Van Zuuk's morning-glory	Convolvulaceae	perennial rhizomatous herb	May-Aug	1B.3	S2	G2Q
Carex cyrtostachya	Sierra arching sedge	Cyperaceae	perennial herb	May-Aug	1B.2	S2	G2
Carex xerophila	chaparral sedge	Cyperaceae	perennial herb	Mar-Jun	1B.2	S2	G2
Ceanothus fresnensis	Fresno ceanothus	Rhamnaceae	perennial evergreen shrub	May-Jul	4.3	S4	G4
<u>Ceanothus roderickii</u>	Pine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Apr-Jun	1B.1	S1	G1
<u>Chlorogalum</u> g <u>randiflorum</u>	Red Hills soaproot	Agavaceae	perennial bulbiferous herb	May-Jun	1B.2	S3	G3
<u>Clarkia biloba ssp.</u> <u>brandegeeae</u>	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2	S4	G4G5T4
	streambank spring	Montiaceae	annual herb	Feb-May	4.2	S3	G5T3

7/27/2020	(Ct	NPS Inventory Results				
<u>Claytonia parviflora ssp.</u> g <u>randiflora</u>	beauty						
<u>Crocanthemum</u> <u>suffrutescens</u>	Bisbee Peak rush- rose	Cistaceae	perennial evergreen shrub	Apr-Aug	3.2	S2?	G2?Q
<u>Delphinium hansenii ssp.</u> <u>ewanianum</u>	Ewan's larkspur	Ranunculaceae	perennial herb	Mar-May	4.2	S 3	G4T3
Erigeron miser	starved daisy	Asteraceae	perennial herb	Jun-Oct	1B.3	S3?	G3?
<u>Eriophyllum jepsonii</u>	Jepson's woolly sunflower	Asteraceae	perennial herb	Apr-Jun	4.3	S3	G3
Eryngium pinnatisectum	Tuolumne button- celery	Apiaceae	annual / perennial herb	May-Aug	1B.2	S2	G2
<u>Fremontodendron</u> <u>decumbens</u>	Pine Hill flannelbush	Malvaceae	perennial evergreen shrub	Apr-Jul	1B.2	S1	G1
<u>Galium californicum ssp.</u> <u>sierrae</u>	El Dorado bedstraw	Rubiaceae	perennial herb	May-Jun	1B.2	S1	G5T1
<u>Horkelia parryi</u>	Parry's horkelia	Rosaceae	perennial herb	Apr-Sep	1B.2	S2	G2
<u>Lilium humboldtii ssp.</u> humboldtii	Humboldt lily	Liliaceae	perennial bulbiferous herb	May- Jul(Aug)	4.2	S3	G4T3
Packera layneae	Layne's ragwort	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May- Oct(Nov)	1B.2	S3	G3
Trichostema rubisepalum	Hernandez bluecurls	Lamiaceae	annual herb	Jun-Aug	4.3	S4	G4
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5
Wyethia reticulata	El Dorado County mule ears	Asteraceae	perennial herb	Apr-Aug	1B.2	S2	G2

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 27 July 2020].

Search the Inventory Simple Search Advanced Search Glossary

Information About the Inventory

About the Rare Plant Program CNPS Home Page About CNPS Join CNPS

Contributors

<u>The Califora Database</u> <u>The California Lichen Society</u> <u>California Natural Diversity Database</u> <u>The Jepson Flora Project</u> <u>The Consortium of California Herbaria</u> <u>CalPhotos</u>

Questions and Comments rareplants@cnps.org

© Copyright 2010-2018 California Native Plant Society. All rights reserved.

Botanical Survey Report Bean Barn 3 Project El Dorado County, CA

APPENDIX B

Plant and Wildlife Species Observed Bean Barn 3

20 July 2020

Plant Species Observed.

Family	Scientific Name	Common Name	N/I ¹	In Bloom?	Cal-IPC ²
EUDICOTS					
Anacardiaceae	Schinus molle	Pepper tree	1	No	Limited
	Toxicodendron diversilobum	Western poison oak	N	No	
Apiaceae	Daucus carota	Carrot, Queen Anne's lace	1	Yes	
	Torilis arvensis	Tall sock-destroyer	1	No	Moderate
Asteraceae	Artemísia douglasiana	Mugwort	N	No	
	Baccharis pilularis	Coyote brush	N	No	1
	Carduus pycnocephalus ssp. pycnocephalus	Italian thistle	1	No	Moderate
	Centaurea solstitialis	Yellow star-thistle	1	Yes	High
	Chondrilla juncea	Skeleton weed	1	Yes	Moderate
	Eriophyllum lanatum	Common woolly sunflower	N	No	
	Holocarpha virgata ssp. virgata	Tarweed	N	Yes	
	Hypochaeris radicata	Rough cat's-ear	1	No	Moderate
	Lactuca serriola	Prickly lettuce	I	No	
	Logfia gallica (Syn. Filago gallica)	Daggerleaf cottonrose	1	No	
********	Madia elegans	Common madia	N	Yes	
	Silybum marianum	Milk thistle	1	No	
	Sonchus asper ssp. asper	Prickly sow thistle	I	No	
	Tragopogon sp.	Goat's beard, Salsify	1	Yes No	
Boraginaceae	Eriodictvon californicum	California verba santa	N		
Brassicaceae	Hirschfeldia incana	Summer mustard	1	Yes	Moderate
Convolvulaceae	Convolvulus arvensis	Bindweed	I	Yes	
Ericaceae	Arctostaphylos viscida ssp. viscida	Manzanita	N	No	
Euphorbiaceae	Croton setigerus	Turkey-mullein	N	Yes	
Fabaceae	Acmispon americanus var. americanus (Syn. Lotus purshianus)	Deervetch	N	Yes	
	Trifolium hirtum	Rose clover	1	No	Limited
	Vicia sp.	Vetch	1	No	
Fagaceae	Quercus douglasii	Blue oak	N	No	
	Quercus lobata	Valley oak	N	No	
	Quercus wislizeni var. wislizeni	Interior live oak	N	No	
Geraniaceae	Erodium sp. 1	Storksbill, filaree	1	No	
	Erodium sp. 2	Storksbill, filaree	1	No	
Lamiaceae	Salvia rosmarinus	Rosemary	1	No	
Linaceae	Linum bienne	Flax	I	No	
Onagraceae	Epilobium brachycarpum	Willowherb	N	No	
Plantaginaceae	Kickxia spuria	Kickxia	I	No	
	Plantago lanceolata	English plantain	1	No	Limited
Polygonaceae	Rumex crispus	Curly dock	1	No	Limited
Rhamnaceae	Ceanothus cuneatus var. cuneatus	Buckbrush	N	No	
	Ceanothus lemmonii	California-lilac	N	No	
	Rhamnus ilicifolia	Hollyleaf redberry	N	No	
Rosaceae	Heteromeles arbutifolia	Toyon	N	No	
	Pyrus calleryana	Bradford plum	1	No	
Rubiaceae	Galium parisiense	Wall bedstraw	I	No	

Botanical Survey Report Bean Barn 3 Project El Dorado County, CA

MONOCOTS	S				
Cyperaceae	Cyperus sp.	Nutsedge		No	1
Iridaceae	Sisyrinchium bellum	Western blue-eyed-grass	N	No	
Poaceae	Aegilops triuncialis	Barbed goat grass	I	No	High
	Avena sp.	Wild oat	1	No	Moderate
	Brachypodium distachyon	False brome	1	No	Moderate
	Briza minor	Small quaking grass	I	No	
	Bromus diandrus	Ripgut grass	1	No	Moderate
	Bromus hordeaceus	Soft chess	I	No	Limited
	Bromus madritensis	Foxtail chess	1	No	
	Cynodon dactylon	Bermuda grass	1	No	Moderate
	Cynosurus echinatus	Bristly dogtail grass	1	No	Moderate
	Dactylis glomerata	Orchard grass	1	No	Limited
	Elymus caput-medusae (Syn. Taeniatherum caput-medusae)	Medusa head	I	No	High
	Elymus glaucus	Blue or western wild-rye	N	No	
	Festuca perennis (Syn. Lolium perenne)	Rye grass	I	No	Moderate
	Gastridium phleoides	Nit grass	I	No	
	Panicum capillare	Witch grass	N	No	
	Paspalum dilatatum	Dallis grass	1	No	
	Phalaris sp.	Canary grass	Ι	No	
	<i>Stipa</i> sp.	Needle grass	N	No	
Themidaceae	Brodiaea sp.	Brodiaea	N	No	
Typhaceae	<i>Typha</i> sp.	Cattail	N	No	

 1 N = Native to CA; I = Introduced.

² Degree of negative ecological impact (Cal-IPC 2020).

20068 Bean Barn 3 Botanical Report Final docx 8/18/2020 Sycamore Environmental Consultants, Inc.





Botanical Survey Report Bean Barn 3 Project El Dorado County, CA

APPENDIX C.

Photographs

20068 Bean Barn 3 Botanical Report Final docx 8/18/2020 Sycamore Environmental Consultants. Inc.

22-0110 L 45 of 138

Botanical Survey Report Bean Barn 3 Project El Dorado County. CA

2010752020



Photo 1. View north, east of Cameron Park Dr., from SW property corner. Mira Loma Drive in background (below trees). Mostly weedy species in this photo. 20 July 2020



Photo 3. Detail of block wall shown in Photo 2. Rosemary plants cascading down face of wall. 20 July 2020







Photo 4. View west from near SE property corner. 20 July

Photo 2. View east from near SW corner along southern

of photo growing in gaps in the block wall. 20 July 2020

property boundary; nonnative Rosemary plants on right side

Photo 6. View SE toward native vegetation on east boundary. Nonnative yellow star-thistle in foreground. 20 July 2020

Appendix C Photos.docx

C-1

TRAFFIC IMPACT ANALYSIS

FOR

BEAN BARN COFFEE Cameron Park, El Dorado County CA

Prepared For:

BEAN BARN INC. P.O. Box 6323 Diamond Springs, CA 95619

Prepared By:

KDAnderson & Associates, Inc.

3853 Taylor Road, Suite G Loomis, California 95650 (916) 660-1555



December 15, 2020

7365-01

0 Bean Barn Coffee TIA.rpt

TRAFFIC IMPACT ANALYSIS FOR Cameron Park, El Dorado County CA

LABLE OF CONTENTS

87	VPPPPPPPPPPPPP
<i>L</i> 7	KEFERENCES
97	EINDINGS / DEEICIENCIES / IW6BOAEWENLS
12	ON-SITE TRANSPORTATION REVIEW
17	CUMULATIVE IMPACTS (2040)
81	EXISTING PLUS PROJECT TRAFFIC IMPACTS
\$1 71	Trip Distribution & Assignment
74	PROJECT CHARACTERISTICS
01 9 5 5 5 5	Study Area Study Area Roadways and Intersections. Alternative Transportation Modes Analysis Criteria Existing Traffic Conditions.
S	EXISTING SETTING
с I	Study Purpose and Objectives Project Description
I	INTRODUCTION
İ	EXECUTIVE SUMMARY

TRAFFIC IMPACT ANALYSIS FOR BEAN BARN COFFEE Cameron Park, El Dorado County CA

EXECUTIVE SUMMARY

• **Project Description.** This study evaluates the traffic impacts associated with the construction of a coffee kiosk off of Cameron Park Drive in Cameron Park. The project is located in the southeast quadrant of the Cameron Park Drive / Mira Loma Drive intersection. Access to the site will be a single driveway located on Mira Loma Drive about 160 feet east of Cameron Park Drive. The coffee kiosk is projected to generate approximately 121 a.m. peak hour trips and 30 p.m. peak hour trips. After accounting for pass-by trips the site will generate 21 new a.m. peak hour trips and 5 new p.m. peak hour trips.

The traffic study included the following analysis scenarios:

- 1. Existing Traffic Conditions
- 2. Existing Plus Project Conditions for Bean Barn Coffee Kiosk

The project is consistent with current general plan land use and zoning conditions; therefore, a future 2040 analysis was not conducted.

• Existing Setting. The study areas addressed traffic conditions at three existing intersections. Due to Covid-19 conditions, traffic volumes are generally lower than pre-Covid19 conditions. Therefore, intersection turning movements were developed through data collected by *Streetlight Data* and adjusted based on County ADT counts conducted in 2019 when school was in session.

Intersections

All intersections operate within acceptable El Dorado County LOS thresholds.

Queues

Under current conditions queues at the Cameron Park Drive / Mira Loma Drive intersection are maintained in each turn lane.

• **Existing Plus Project Impacts.** The operation of the proposed project will increase the volume of traffic on the study area circulation system.

Vehicle Miles Traveled

The proposed project is a drive-through coffee kiosk. Based on the location of the site the location provides a proximate location relative to residents and businesses in the Cameron Park area. The drive-through kiosk allows customers in this area better accessibility to the specific use, i.e. a drive-through coffee shop. As noted in the *Technical Advisory on Evaluating*

Transportation Impacts in CEQA locally-serving retail projects are presumed to have a less than significant transportation impact.

Intersections

All intersections will operate within acceptable El Dorado County LOS thresholds. The following mitigations are noted:

- The project shall contribute its fair share to the cost of regional circulation improvements via the existing countywide traffic impact mitigation (TIM) fee program.
- The following on-site mitigation should be constructed:
 - Landscaping along the project frontage should be limited to vegetation no higher than 2 feet to provide adequate visibility along Mira Loma Drive.
 - Tree limbs and bushes should be cut back or removed as practicable between the project driveway and the Point Loma Commercial Center driveway a minimum of 15 feet from edge of travel way along Mira Loma Drive.

Queues

Under Existing plus Project conditions, all queues at the Cameron Park Drive / Meder Road intersection will continue to queue within their respective turn lanes.

TRAFFIC IMPACT ANALYSIS FOR BEAN BARN COFFEE Cameron Park, El Dorado County CA

INTRODUCTION

Study Purpose and Objectives

This study evaluates the traffic impacts associated with the construction of a coffee kiosk project off of Cameron Park Drive in Cameron Park. The project is located in the southeast quadrant of the Cameron Park Drive / Mira Loma Drive intersection. Project access will be from Mira Loma Drive.

The 2018 CEQA Guidelines Update includes new and revised provisions for analyzing the significance of transportation impacts. Specifically, CEQA Guidelines section 15064.3 was adopted, effective December 28, 2018, and states that Vehicle Miles Travelled for land use projects "exceeding an applicable threshold of significance may indicate a significant impact." (14 CCR § 15064.3, subd. (b)(1).). This new metric took effect state-wide July 1, 2020. As a result of this new section, the significance threshold for transportation impacts in both CEQA Guidelines section 15064 and Appendix G (Environmental Checklist Form) are described in terms of VMT rather than LOS.

A project must still be evaluated individually and cumulatively to determine whether the project is consistent with the local agency's General Plan. The project was evaluated under an Existing condition. The project is consistent with the El Dorado County General Plan which identifies the project site within a commercial land use. The site is zoned Commercial, Limited and is consistent with the zoning.

The Level of Service (LOS) analysis was evaluated for General Plan consistency and to identify feasible improvements to meet the General Plan Vehicle LOS Standards. Vehicle LOS is used to identify potential improvement projects that may be included in conditions of approval for the project entitlements.

The scope of this traffic analysis has been identified through consideration of El Dorado County traffic study guidelines in consultation with El Dorado County Long Range Planning (LRP). In addition to VMT analysis, this study addresses the following scenarios for LOS analysis:

- 1. Existing Traffic Conditions
- 2. Existing Plus Project Conditions

The objective of this study is to identify those roads and street intersections that may be impacted by development of each project based on El Dorado County significance criteria. Figure 1 presents a map of the vicinity.

Project Description

The Bean Barn Coffee project will construct a drive-through coffee kiosk in the southeast quadrant of the Cameron Park Drive / Mira Loma Drive intersection. The project will have access from Mira Loma Drive, just west of the Point Loma Commercial center driveway. The site is vacant, and the project will construct a 360 square foot coffee kiosk on the west side of the site, away from the proposed driveway. One driveway is proposed and will allow counterclockwise traffic flow around the kiosk. In addition, the site includes five parking spaces which would allow some walk-up sales. Figure 2 presents the proposed site plan.



KD Anderson & Associates, Inc.Transportation Engineers7365-01 RA12/14/2020

VICINITY MAP

figure 1

22-0110 L 53 of 138



KD Anderson & Associates, Inc.Transportation Engineers7365-01 RA12/14/2020

SITE PLAN

EXISTING SETTING

Study Area

This study addresses traffic conditions at three existing intersections in Cameron Park, El Dorado County. The text that follows describes the facilities included in this analysis. The quality of traffic flow is typically governed by the operation of major intersections and the daily volume of traffic along the roadways. The study locations include:

Study Area Roadways and Intersections

The **Cameron Park Drive / Virada Road intersection** provides access between Green Valley Drive and US 50. The intersection is a tee with the stem, Virada Road, heading east. The intersection is about 750 feet north of the project location. The intersection is stop controlled along Virada Road. Each approach consists of single lanes.

The **Cameron Park Drive / Mira Loma Drive intersection** is a four-way intersection adjacent to the project site. The intersection is unsignalized with stop control along the Mira Loma Drive legs. The Cameron Park Drive approaches include a shared through-right lane and dedicated left turn lanes.

The **Cameron Park Drive / Meder Road intersection** is a major intersection along Cameron Park Drive and provides access between Green Valley Drive and US 50 north to south, and between Cameron Park Drive and Ponderosa Drive, west to east. The tee intersection is about ½ mile south of the project site. The intersection is signalized and provides a dedicated left turn lane and through lane along southbound Cameron Park Drive. Northbound Cameron Drive consists of a through lane and a right turn lane while Meder Road consists of a left turn and right turn lanes.

Alternative Transportation Modes

Public Transit

El Dorado County Transit Authority (EDCTA) operates buses throughout El Dorado County. In the vicinity of the site, the Cameron Park / Shingle Springs loop, Route 40, operates every hour from 6:30 a.m. to 7:20 p.m. Monday through Friday. This route also provides transfers to the Route 50 Express and the Sacramento Commuter at Cambridge Road Park and Ride. The route operates in both directions along Cameron Park Drive with stops northbound at Point Loma Commercial Center and stops southbound at Meder Road.

Non-Motorized Transportation

The available facilities for bicycles and pedestrians in the area of the project were inventoried.

Sidewalks / Trails. Due to the rural nature of Cameron Park Drive sidewalk is not present along either side of Cameron Park Drive, nor along Mira Loma Drive. The closest sidewalk is at the La Canada Drive intersection north of the site and Palmer Drive to the south.

Bicycle Facilities. Few designated bicycle routes currently exist throughout El Dorado County due to the rural nature of the county. Bicycle lanes are discontinuous along Cameron Park Drive with bike lanes available from Palmer Drive north to Hacienda Road. To the north bike lanes are present beginning about 850 feet south of La Canada Drive and continue to Maple Drive.

Analysis Criteria

Vehicle Miles Traveled. In the El Dorado County Traffic Impact Study Guidelines, the impact of a project on LOS is an important factor in determining whether a project has a significant impact. However, recent changes to CEQA have changed how lead agencies use LOS in determining whether a project has a significant impact on transportation. As noted in the California Governor's Office of Planning and Research (OPR) document Technical Advisory on Evaluating Transportation Impacts in CEQA (California Governor's Office of Planning and Research 2018),

"Senate Bill 743 (Steinberg, 2013), which was codified in Public Resources Code section 21099, required changes to the guidelines implementing CEQA (CEQA Guidelines) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts... OPR has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the CEQA Guidelines that identify vehicle miles traveled (VMT) as the most appropriate metric to evaluate a project's transportation impacts. With the California Natural Resources Agency's certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by "level of service" and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)"

Notably, the *El Dorado County Traffic Impact Study Guidelines* were prepared before the recent changes to CEQA due to Senate Bill 743 (Steinberg 2013). As a result, the County guidelines specify use of LOS in determining whether a project has a significant impact. Consistent with the approach described in the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA*, LOS will not be used in this traffic impact study as a basis for identifying significant impacts. Rather, the methods, assumptions and significance thresholds presented in the County guideline will be used to determine whether the project is consistent or inconsistent with General Plan policies on LOS, and whether the magnitude of inconsistency should be considered significant or less than significant.

Certain types of projects as identified in statute, the CEQA Guidelines, or in OPR's Technical Advisory are presumed to have a less than significant impact on VMT and therefore a less than significant impact on transportation. Generally, the identified projects contribute to efficient land use patterns enabling higher levels of walking, cycling, and transit as well as lower average trip length. These projects include, for example, projects in transit priority areas, projects consisting of residential infill or those located in low VMT areas.

Caltrans references OPR's December 2018 *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which identifies projects and areas presumed to have a less than significant transportation impact. Those include:

- 1. Residential, office, or retail projects within a Transit Priority Area, where a project is within a ¹/₂ mile of an existing or planned major transit stop or an existing stop along a high-quality transit corridor.
 - a. A major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (Pub. Resources Code, § 21064.3).
 - b. A high-quality transit corridor is defined as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (Pub. Resources Code, § 21155).
- 2. An area pre-screened by an agency as having low residential or office VMT:
 - a. An area where existing residential projects exhibit VMT per capita 15 percent or more below city or regional average.
 - b. An area where existing office projects exhibit VMT per capita 15 percent or more below regional average.
- 3. Residential projects composed of 100 percent or near-100 percent affordable housing located in any infill location. Additionally, per OPR's Technical Advisory, "Lead agencies may develop their own presumption of less than significant impact for residential projects (or residential portions of mixed use projects) containing a particular amount of affordable housing, based on local circumstances and evidence. Furthermore, a project which includes any affordable residential units may factor the effect of the affordability on VMT into the assessment of VMT generated by those units."
- 4. A locally-serving retail project (such a project typically reduces vehicle travel by providing a more proximate shopping destination, i.e., better accessibility).
- 5. Mixed-use projects composed entirely of the above low-VMT project types.
- 6. In any area of the state, absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact.

However, a land use project near transit may have a significant impact on VMT if it:

- 1. Has a floor area ratio less than 0.75.
- 2. Includes more parking than required by the local permitting agency.
- 3. Is inconsistent with the region's Sustainable Communities Strategy (i.e., development is outside region's development footprint, or in area specified as open space).
- 4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

In very limited situations, analysis or mitigation may be appropriate in low VMT areas to address specific multimodal access management issues directly caused by the project such as issues related to line of sight caused by the placement of a driveway. These situations are to be determined based on the details of development proposals and their setting and will be addressed in future guidance.

Should a project not meet the minimum screening thresholds, a VMT analysis should be conducted. The OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* (California Governor's Office of Planning and Research 2018) identifies a threshold of 15 percent below the baseline for determining the significance of VMT impacts associated with residential and office land use developments. Locally-serving retail projects, such as a project that reduces vehicle travel by providing a more proximate shopping destination, i.e., better accessibility is considered to have a less than significant transportation impact.

General Plan Policy Consistency Level of Service Methodology. *Level of Service Analysis* has been employed to provide a basis for describing existing traffic conditions and for evaluating whether deficiencies exist within the local roadway network. Level of Service measures the *quality* of traffic flow and is represented by letter designations from "A" to "F", with a grade of "A" referring to the best conditions, and "F" representing the worst conditions. The guidelines and analyses used for this report follow El Dorado County standards.

Local agencies adopt minimum Level of Service standards for their facilities. The analysis techniques presented in the *Highway Capacity Manual* were used to calculate Level of Service and to provide a basis for describing existing traffic conditions and evaluating deficiencies in the roadway network. The *HCM* 6th *Edition* methodology was used to analyze all intersections.

Intersections. Various software programs have been developed to assist in calculating intersection Level of Service, and the level of sophistication of each program responds to factors that affect the overall flow of traffic. Synchro software was used for intersection analysis. Signal timing plans provided by El Dorado County were used in the Synchro analysis.

The intersection Levels of Service presented in this analysis are based on the weighted average total delay per vehicle for the intersection as a whole at signalized intersections and at locations controlled by all-way stops. The average delay experienced by motorists yielding the right of way is the basis for identification of Level of Service at locations controlled by side street stop signs. Applicable Level of Service thresholds based on average delay are shown in Table 1.

El Dorado County General Plan Intersection Thresholds of Significance. El Dorado County identifies LOS 'E' as the acceptable Level of Service on roadways and state highways within the unincorporated areas of the County in the Community Regions and LOS D in the Rural Centers and Rural Regions except as specified in the General Plan. Cameron Park is identified as a Community Region.

An intersection is considered to be deficient under El Dorado County guidelines if the project causes an intersection to change from LOS E to LOS F. Worsening of conditions at facilities already operating at unacceptable levels of service is also considered a deficiency. The County's General Plan Policy TC-Xe defines worsen as any of the following conditions:

- a. a 2% increase in traffic during the a.m. peak hour, p.m. peak hour or daily trips, or
- b. the addition of 100 or more daily trips, or
- c. the addition of 10 or more trips during the a.m. peak hour or the p.m. peak hour.

At the time of approval of a tentative map for a single family residential subdivision of five or more parcels that worsens (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element based on existing traffic plus traffic generated from the development plus forecasted traffic growth at 10-years from project submittal; or (2) ensure the commencement of construction of the necessary road improvements are included in the County's 10-year CIP.

For all other discretionary projects that worsen (defined as a project that triggers Policy TC-Xe [A] or [B] or [C]) traffic on the County road system, the County shall do one of the following: (1) condition the project to construct all road improvements necessary to maintain or attain Level of Service standards detailed in this Transportation and Circulation Element; or (2) ensure the construction of the necessary road improvements are included in the County's 20-year CIP.

County policy notes that impacts to Caltrans facilities shall use Caltrans LOS standards and significance thresholds. Caltrans uses LOS E as the significance threshold on freeway facilities in this area of El Dorado County.

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 sec/veh and \leq 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and \leq 55.0 sec	Long traffic delays. Delay > 25 sec/veh and \leq 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.
Sources: Hig	hway Capacity Manual 6 th Edition, Tran	nsportation Research Board (TRB)	

TABLE 1LEVEL OF SERVICE DEFINITIONS

Traffic Signal Warrants. The extent to which existing or projected traffic volumes may justify signalization at un-signalized intersections has been determined based on consideration of traffic signal warrant presented in the *Manual of Uniform Traffic Control Devices*, 2014. For this analysis, the volume thresholds associated with Warrant 3 (Peak Hour Volume) have been assessed.

Existing Traffic Conditions

Due to the Covid-19 pandemic, travel patterns have been affected downward due to work and school closures. Intersection turning movements (ITM) are therefore, generally lower than usual traffic counts. ITM's were developed based on data analytics provided from *Streetlight Data*. *Streetlight Data* uses "Big-Data" derived travel pattern analytics against publicly available traffic movement ratios derived from traffic counts to project current ITM's. 2019 daily traffic volume

data in the project vicinity that was provided by El Dorado County was reviewed and compared to 2019 *Streetlight Data* in the same locations. Where appropriate, ITM's were adjusted based on the relative ADT proportions. The peak hours used for this study occurred between 7:00 and 8:00 a.m. and 5:00 to 6:00 p.m.

Intersection Levels of Service. The intersection turning movements developed through *Streetlight Data* are presented in Figure 3. Table 2 summarizes current operating Levels of Service at the study area intersections for each time period. All study intersections operate at acceptable Levels of Service, at LOS E or better, during the a.m. and p.m. peak hours. Additionally, a peak hour warrant analysis was conducted for the two unsignalized intersections. The Cameron Park Drive / Mira Loma Drive intersection currently meets the peak hour signal warrant in the p.m. peak hour, meeting both delay and volume segments of Warrant 3. However, while it meets the peak hour signal warrant, the intersection operates acceptably.

		AM P	eak Hour	PM Pe	eak Hour	Peak Hour
Location	Control	LOS	Average Delay	LOS	Average Delay	Traffic Signal Warrant Met?
1. Cameron Park Dr / Virada Rd						
SB Left	WB Stop	А	8.0	А	9.1	No
WB		С	15.3	С	19.0	
2. Cameron Park Drive / Mira Loma Drive						
NB Left	ED / WD	А	8.6	А	8.4	
SB Left		А	7.8	А	9.5	Yes*
EB	Stop	В	14.3	С	20.3	
WB		С	18.7	Е	39.9	
3. Cameron Park Drive / Meder Road	Signal	А	3.3	А	3.9	N/A

 TABLE 2

 EXISTING PEAK HOUR LEVELS OF SERVICE AT INTERSECTIONS

* meets delay and volume warrants in p.m. peak hour.

Intersection Queues. Table 3 presents information regarding current peak period queuing in turn lanes at the signalized study intersection. The available storage is presented along with current peak hour traffic volumes and the 95th percentile queue length.

The 95th percentile queues indicate that vehicles can store within each lane without spillback into a through lane. The longest queue occurs in the westbound left turn lane with a 107-foot queue in the p.m. peak hour. This turn lane is the extension of the westbound lane along Meder Road approaching the intersection.



KD Anderson & **Associates, Inc.** Transportation Engineers

7365-01 RA 12/14/2020

figure 3

22-0110 L 62 of 138

VPH	Queue (feet)	VPH	Queue (feet)
113	95	96	93
80	26	206	38
175	104	148	107
71	25	98	33
_	175 71	175 104 71 25	175 104 148 71 25 98

 TABLE 3

 EXISTING PEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

PROJECT CHARACTERISTICS

The development of this project will attract traffic to the project site. The amount of additional traffic on a particular section of the street network is dependent upon two factors:

- <u>Trip Generation</u>, the number of new trips generated by the project, and
- <u>Trip Distribution and Assignment</u>, the specific routes that the new traffic takes.

Trip Generation

Trip generation is determined by identifying the type and size of land use being developed. Recognized sources of trip generation data may then be used to calculate the total number of trip ends resulting from the day to day operation of the businesses in the project.

The trip generation for this project was calculated using trip generation rates published in the *Trip Generation Manual* (Institute of Transportation Engineers, 10th Edition, 2017). The project will construct a 360 square foot coffee kiosk for drive-through traffic. The kiosk will serve customers through a single driveway with counterclockwise movement through the site.

Table 4 displays the daily, a.m. peak hour, and p.m. peak hour trip generation for the proposed project. Trips generated by retail commercial projects fit into two categories. Some trips will be made by patrons who would not otherwise be on the local street system and who go out of their way to reach the site. These are "new" trips. Other trips will be made by patrons who are already in the roadway network and stop by the site as part of a trip made for another purpose. These "pass-by" trips do not add traffic to the overall system.

ITE research has suggested typical "pass-by" percentages for various land uses. The ITE *Trip Generation Handbook, 3rd Edition* was used to determine pass-by rates.

After accounting for pass-by trip reductions, the commercial project is expected to generate 122 'new' daily trips, 21 'new' a.m. peak hour trips and 5 'new' p.m. peak hour trips.

TABLE 4TRIP GENERATION

				Trips Per Unit					
	Unit			AM Peak Hour			PN	I Peak H	our
Land Use	Quantity	Size	Daily	In	Out	Total	In	Out	Total
Coffee / Donut Drive Thru / No Indoor Seating	KSF	0.36	2,000.00	50%	50%	337.04	50%	50%	83.33
Coffee / Donut Drive Thru Seating (LU 938)	720	61	61	121	15	15	30		
	Sub-Total	Trips	720	61	61	121	15	15	30
			Pass-By	Trips					
Coffee / Donut Drive Thru Seating (LU 938) – 83% A	Coffee / Donut Drive Thru / No Indoor Seating (LU 938) $- 83\%$ AM, PM, Daily(598)(50)(101)(12)(12)(2)					(25)			
То	tal Pass-By	Trips	(598)	(50)	(50)	(101)	(12)	(12)	(25)
	Net New	Trips	122	10	10	21	3	3	5

KSF – thousand square feet

Numbers may not match due to rounding

Trip Distribution & Assignment

The distribution of project traffic was determined based on review of existing traffic counts and the travel patterns in the area relative to the land use. Table 5 presents the projected trip distribution. Traffic generated by the project is shown in Figure 4. This traffic was added to existing peak hour volumes based on the distribution percentages. Figure 5 displays the Existing plus Project generated traffic anticipated for each study intersection in both a.m. and p.m. peak hours.

Direction	Distribution
North on Cameron Park Dr	40%
East on Mira Loma Dr	10%
South on Cameron Park Dr	30%
East on Meder Rd	20%
Total	100%

TABLE 5PROJECT TRIP DISTRIBUTION



KD Anderson & **Associates, Inc.** Transportation Engineers

7365-01 RA 12/14/2020

figure 4

22-0110 L 66 of 138



KD Anderson & Associates, Inc. Transportation Engineers

Transportation Engineer 7365-01 RA 12/14/2020

figure 5

22-0110 L 67 of 138

EXISTING PLUS PROJECT TRAFFIC IMPACTS

Vehicle Miles Traveled. The proposed project is a drive-through coffee kiosk. Based on the location of the site the location provides a proximate location relative to residents in the Cameron Park Drive area, as well as the surrounding local businesses. The drive-through kiosk allows customers in this area better accessibility to the specific use, i.e. a drive-through coffee shop. As noted in the *Technical Advisory on Evaluating Transportation Impacts in CEQA* locally-serving retail projects are presumed to have a less than significant transportation impact.

Intersection Levels of Service. Intersection Levels of Service were calculated and used as the basis for evaluating General Plan Consistency. Table 6 displays the peak hour Levels of Service at each study intersection and compares the existing Levels of Service with those accompanying the project. All intersections will continue to operate above the minimum El Dorado County standard (i.e., LOS E). The Cameron Park Drive / Mira Loma Drive intersection will continue to meet both delay and volume segments of Warrant 3 in the p.m. peak hour. It will also meet the volume portion of the warrant in the a.m. peak hour. While it meets the peak hour signal warrant, as noted under Existing Conditions, the intersection will continue to operate acceptably.

Intersection Queues. Table 7 identifies peak period queues with the addition of project trips. The queues in each of the turn lanes will continue to be queued within the existing pockets.

TABLE 6PEAK HOUR INTERSECTION LEVELS OF SERVICEEXISTING PLUS PROJECT CONDITIONS

		AM Peak Hour			PM Peak Hour				Peak Hour	
		Existing		Ex Plus Project		Existing		Ex Plus Project		Traffic
										Signal
	~		Average		Average		Average		Average	Warrant
Location	Control	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	Met?
1. Cameron Park Dr / Virada Rd										
SB Left	WB Stop	Α	8.0	А	8.0	А	9.1	А	9.1	No
WB		С	15.3	С	15.4	С	19.0	С	19.1	
2. Cameron Park Drive / Mira Loma Drive										
NB Left	EB / WB Stop	Α	8.6	А	8.5	А	8.4	А	8.4	
SB Left		Α	7.8	А	7.9	А	9.5	А	9.5	Yes*
EB		В	14.3	В	14.7	С	20.3	С	20.8	
WB		С	18.7	С	28.2	Е	39.9	Е	46.1	
3. Cameron Park Drive / Meder Road	Signal	Α	3.3	Α	3.4	А	3.9	Α	3.9	N/A
4. Mira Loma Drive / Driveway										
NB	NB Stop			В	10.0			А	9.9	No†
WB Left				Α	7.4			А	7.6	

* meets delay and volume warrant in p.m. peak hour and volume warrant in a.m. peak hour

† insignificant volume departing site to warrant signal

TABLE 7EXISTING PLUS PROJECTPEAK HOUR QUEUES AT SIGNALIZED INTERSECTIONS

		AM Peak Hour		PM Peak Hour	
Location	Length (feet)	VPH	Queue (feet)	VPH	Queue (feet)
1. Cameron Park Drive / Meder Road					
SB left	260	115	96	97	94
NB right	220	80	26	206	38
WB left	155*	175	104	148	107
WB right	155	73	25	99	33
* through lane from Meder Road					

CUMULATIVE IMPACTS (2040)

The analysis of the long range 2040 cumulative condition is intended to consider the impact of this project within the context of buildout of the General Plan circulation element occurring in 2040. This project is consistent with the General Plan which identifies the land for commercial use, and the Zoning Map which identifies the area as Commercial, Limited. Therefore, due to this consistency, a Cumulative analysis is not required.

ON-SITE TRANSPORTATION REVIEW

An on-site review of the facilities was conducted based on the County's TIS Guidelines.

Accident Review of Local Roadways. SWITRS collision data in the project location was reviewed for the three-year period 2017 through 2019. In the vicinity of the project, within 300 feet of the Cameron Park Drive / Mira Loma Drive intersection. Seven crashes were identified in this time period. Of these, three occurred within 50 feet or within the intersection while three occurred 100 feet or more outside of the intersection on Cameron Park Drive; the seventh crash occurred along Mira Loma Drive 300 feet west of the Cameron Park Drive intersection.

A review of the three crashes occurring in the vicinity of the intersection does not indicate a recurrence of a specific type of collision as the primary collision factors included failure to yield after stopping, a broadside crash and a sideswipe. The crashes outside of the intersection include two hit objects, one being a DDUI and a broadside crash while performing a U-turn. The crash on the west side of Mira Loma Drive was categorized as an unsafe turn.

Site Circulation / Driveway Locations / Driveway Throat Depth. One driveway is proposed for the site and will be located at the far east side of the parcel. Full access will be provided, and the kiosk is situated consistent with County standards having the drive-through situated at the rear of the site, relative to the driveway. Customers will enter the site and proceed in counterclockwise movement around the perimeter. As this site contains only the drive-through coffee kiosk there is no internal site circulation other than customers entering and exiting.

El Dorado County Parking and Loading Standards identifies requirements for fast food restaurants with drive-through facilities; it is assumed that coffee kiosks would follow the same requirements. Drive-through facilities are to be located at the back of a parcel with the stacking lane physically separated from other on-site circulation. This allows any possible overflow of the stacking lane to be contained on the site. A minimum of four cars per drive-through window in addition to the car receiving service is required.

As noted earlier, the kiosk is situated at the back of the site, along the Cameron Park Drive frontage, but allowing vehicles to circulate between the kiosk and the property line. The location of the kiosk is shifted slightly south, allowing queuing on site to be maximized. The kiosk is situated to allow about nine vehicles to queue. The driveway provides a throat depth of about 50 feet; however, additional queueing is available on-site between the throat and the kiosk.

Parking and Drive-Through Requirements. Parking requirements were reviewed to determine needed parking due to the zoning code and requirements relative to projected parking demand. The County does not have a parking requirement specific to this land use. Instead, the "Restaurant and Brewpub" Use Type was used. This land use identifies that there should be one parking stall for every 250 square feet of Gross Floor Area (GFA). Under this condition and the 360 square foot kiosk, two parking stalls are required. The project layout identifies five parking stalls along the south side of the site. This will allow staffing of the kiosk to be maintained and could allow some customers to walk up and order.

Sight Distance. Sight distance was analyzed for the driveway. Available sight distance was evaluated using the standards documented in the Caltrans <u>*Highway Design Manual*</u> (HDM). Based on the locations of the driveways "**Minimum Stopping Sight** Distance" (MSSD) and "**Corner Sight Distance**" (CSD) was considered. These criteria are documented in Tables 201.1 and 405.1A of the HDM.

The speed limit along Mira Loma Drive is posted at 25 miles per hour (mph). A 35-mph speed, 10 mph over the posted speed, was used to establish sight distance conditions for Mira Loma Drive traffic. Point Loma Commercial Center is adjacent to the project. The commercial center has a driveway access along Mira Loma Drive with the centerline of the driveway about 50 feet east of the project's east property line. Visibility of outbound Point Loma Center vehicles was reviewed to determine whether adequate visibility is available between motorists on both driveways. The Cameron Park Drive intersection is about 160 feet to the west. Sight distance to the west was considered using turning speeds used in analyzing level of service. Left turns were assumed to be made at 15 mph while right runs were issued at 9 mph. Figure 6 presents the sight lines from the approximate driveway location while Table 8 presents the corresponding MSSD, CSD and available sight distance for each of the criteria. Figure 6 also presents the line of sight for motorists exiting both the coffee kiosk and the Point Loma Commercial Center with vehicles stopped at both locations.

Location	MSSD	CSD	Available
Looking East on Mira Loma Dr	250'	385'	400'
(35 mph)			
Looking to SB left turn lane on Cameron Park Dr	100'	165'	190'
(15 mph)			
Looking to NB right turn lane on Cameron Park Dr	50'	100'	160'
(9 mph)			

TABLE 8SIGHT DISTANCE CRITERIA


KD Anderson & Associates, Inc. Transportation Engineers

7365-01 RA 12/14/2020

SIGHT DISTANCE

figure 6

22-0110 L 73 of 138

All distances should be confirmed during preparation of the site civil engineering plan set. To maintain adequate sight distance the lines of sight should be kept clear, without any landscaping materials over 2 feet in height. Signage should also be placed outside of the sight triangles where practicable. Tree limbs and bushes should be cut back or removed as practicable between the project driveway and the Point Loma Commercial Center driveway a minimum of 15 feet from edge of travel way along Mira Loma Drive.

On-Site Truck Loading Demand. The County requires an analysis of truck loading when the number of service calls exceed 10 trucks per day. The project may result in a truck delivery on an infrequent basis. Given the size of the kiosk the anticipated truck would likely be a single unit type. The number of deliveries would be less than 10 trucks per day; therefore, an analysis of truck loading is not required.

While the truck loading will not be met the site will have a truck deliver supplies to the site. The delivery truck is a single-unit truck, 30 feet long. An *AutoTurn* assessment was conducted to confirm that the movements interior to the site can be completed. Figure 7 presents the evaluation showing trucks able to enter the site, parking and then existing. To exit the site, the vehicle will need to back up and then turn to avoid overtopping the curbs or encroaching within the parking spaces. The drive-through lane will not be affected by the backing movement.



AUTO TURN ASSESSMENT SU-30 TRUCK

KD Anderson & Associates, Inc. Transportation Engineers 7365-01 RA 12/14/2020

figure 7

22-0110 L 75 of 138

FINDINGS / DEFICIENCIES / IMPROVEMENTS

The preceding analysis has identified project deficiencies that may occur without improvements to the roadway system. The text that follows identifies a strategy for implementing any improvements. Recommendations are identified for facilities that have deficiencies in the roadway network without the project. If the project causes a deficiency, improvements are identified for the facility.

Existing Conditions

Intersections

All intersections operate within acceptable El Dorado County LOS thresholds.

Queues

Under current conditions all queues at the Cameron Park Drive / Meder Road intersection are maintained within their respective turn lanes.

Existing Plus Project Impacts

Intersections

All intersections will operate within acceptable El Dorado County LOS thresholds. The following mitigations are noted:

- The project shall contribute its fair share to the cost of regional circulation improvements via the existing countywide traffic impact mitigation (TIM) fee program.
- The following on-site mitigation should be constructed:
 - Landscaping along the project frontage should be limited to vegetation no higher than 2 feet to provide adequate visibility along Mira Loma Drive.
 - Tree limbs and bushes should be cut back or removed as practicable between the project driveway and the Point Loma Commercial Center driveway a minimum of 15 feet from edge of travel way along Mira Loma Drive.

Queues

Under Existing plus Project conditions, all queues at the Cameron Park Drive / Meder Road intersection will continue to queue within their respective turn lanes.

REFERENCES

- 1. Transportation Research Board, Highway Capacity Manual, 2000 and 6th Edition
- 2. Caltrans Highway Design Manual, 2020
- 3. California Manual of Uniform Traffic Control Devices, 2014
- Institute of Transportation Engineers. 2017. *Trip Generation*, 10th Edition. Washington, D.C.
 Trip Generation Handbook, Institute of Transportation Engineers, 3rd Edition, 2017

APPENDICES

Day Type 1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS - CAMERON PARK DR / MEDER RD

				Meder WB Inbound			Park Dr No	rthbound s/c	Meder Inb	Park Dr Sou	thbound n/c	Meder Inb	
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	
Day Part													Total
0: All Day (12am-12am)	-	-	-	1,787	-	1,008	-	4,747	1,753	1,026	4,913	-	15,234
1: 6am (6am-7am)	-	-	-	58	-	52	-	65	148	271	223	-	817
2: 7am (7am-8am)	-	-	-	173	-	70	-	200	75	106	415	-	1,039
3: 8am (8am-9am)	-	-	-	108	-	32	-	201	46	27	306	-	720
4: 3pm (3pm-4pm)	-	-	-	148	-	79	-	422	148	67	363	-	1,227
5: 4pm (4pm-5pm)	-	-	-	118	-	59	-	476	165	83	369	-	1,270
6: 5pm (5pm-6pm)	-	-	-	140	-	97	-	539	193	90	428	-	1,487
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

	Meder WB Inbound						Park Dr No	rthbound s/o	o Meder Inb	Park Dr Sou	thbound n/o	Meder Inb
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right
Day Part												
0: All Day (12am-12am)	-	-	-	64%	0%	36%	0%	73%	27%	17%	83%	0%
	1						r					
1: 6am (6am-7am)	-	-	-	53%	0%	47%	0%	31%	69%	55%	45%	0%
2: 7am (7am-8am)	-	-	-	71%	0%	29%	0%	73%	27%	20%	80%	0%
3: 8am (8am-9am)	-	-	-	77%	0%	23%	0%	81%	19%	8%	92%	0%
4: 3pm (3pm-4pm)	-	-	-	65%	0%	35%	0%	74%	26%	16%	84%	0%
5: 4pm (4pm-5pm)	-	-	-	67%	0%	33%	0%	74%	26%	18%	82%	0%
6: 5pm (5pm-6pm)	-	-	-	59%	0%	41%	0%	74%	26%	17%	83%	0%
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

Day Type 1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS - CAMERON PARK DR / MIRA LOMA DR

	Mira Loma EB Inbound		Mira	Loma WB In	oound	ark Dr Nortl	nbound s/o M	Mira Loma li	Cam Park D	r NB Inboun	d s/o Virada		
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	
Day Part													Total
0: All Day (12am-12am)	72	25	386	526	33	508	516	5,004	581	582	4,619	73	12,925
1: 6am (6am-7am)	-	-	10	54	-	52	21	100	3	4	440	-	684
2: 7am (7am-8am)	-	-	17	54	-	74	38	227	15	8	445	8	886
3: 8am (8am-9am)	-	7	22	40	-	37	58	165	15	15	254	17	630
4: 3pm (3pm-4pm)	-	7	44	16	6	32	41	471	33	60	323	-	1,033
5: 4pm (4pm-5pm)	9	-	49	30	-	27	52	467	60	81	333	10	1,118
6: 5pm (5pm-6pm)	8	-	25	34	-	37	28	558	83	60	417	-	1,250
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

	Mira Loma EB Inbound		Mira	Loma WB Inl	bound	ark Dr North	bound s/o	vira Loma Ir	Cam Park D	r NB Inboun	d s/o Virada	
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right
Day Part												
0: All Day (12am-12am)	15%	5%	80%	49%	3%	48%	8%	82%	10%	11%	88%	1%
1: 6am (6am-7am)	0%	0%	100%	51%	0%	49%	17%	81%	2%	1%	99%	0%
2: 7am (7am-8am)	0%	0%	100%	42%	0%	58%	14%	81%	5%	2%	97%	2%
3: 8am (8am-9am)	0%	24%	76%	52%	0%	48%	24%	69%	6%	5%	89%	6%
4: 3pm (3pm-4pm)	0%	14%	86%	30%	11%	59%	8%	86%	6%	16%	84%	0%
5: 4pm (4pm-5pm)	16%	0%	84%	53%	0%	47%	9%	81%	10%	19%	79%	2%
6: 5pm (5pm-6pm)	24%	0%	76%	48%	0%	52%	4%	83%	12%	13%	87%	0%
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

Day Type 1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS - CAMERON PARK DR / VIRADA RD

				Vira	ida WB Inbo	und	d Cam Park Dr NB Inbound s/o ViradaCam Park Dr SB Inbound n/o Virad			d n/o Virada			
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	
Day Part													Total
0: All Day (12am-12am)	-	-	-	179	-	146	-	5,420	294	159	5,179	-	11,377
1: 6am (6am-7am)	-	-	-	6	-	3	-	147	1	2	453	-	612
2: 7am (7am-8am)	-	-	-	27	-	15	-	289	15	8	451	-	805
3: 8am (8am-9am)	-	-	-	17	-	7	-	195	9	9	275	-	512
4: 3pm (3pm-4pm)	-	-	-	12	-	7	-	487	28	11	379	-	924
5: 4pm (4pm-5pm)	-	-	-	7	-	14	-	498	27	17	415	-	978
6: 5pm (5pm-6pm)	-	-	-	12	-	19	-	586	34	11	469	-	1,131
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

				Vira	ada WB Inbo	und	Cam Park D	r NB Inboun	d s/o Virada	Cam Park D	r SB Inbound	d n/o Virada
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right
Day Part												
0: All Day (12am-12am)	-	-	-	55%	0%	45%	0%	95%	5%	3%	97%	0%
1: 6am (6am-7am)	-	-		67%	0%	33%	0%	99%	1%	0%	100%	0%
2: 7am (7am-8am)		-		64%	0%	36%	0%	95%	5%	2%	98%	0%
3: 8am (8am-9am)		-		71%	0%	29%	0%	96%	4%	3%	97%	0%
4: 3pm (3pm-4pm)	-	-	-	63%	0%	37%	0%	95%	5%	3%	97%	0%
5: 4pm (4pm-5pm)	-	-	-	33%	0%	67%	0%	95%	5%	4%	96%	0%
6: 5pm (5pm-6pm)	-	-	-	39%	0%	61%	0%	95%	5%	2%	98%	0%
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-		-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-		-
	-	-	-	-	-	-	-		-	-		-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

Day Type 2: TWTh (Tu-Th)

TURNING MOVEMENT COUNTS

	Mira	Mira Loma WB Inbound / Iira Loma east of DW INBOUND WLoma Driveway NB Inbound to Mira											
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	
Day Part													Total
0: All Day (12am-12am)	-	977	139	118	927	-	147	-	160	-	-	-	2,468
1: 6am (6am-7am)	-	4	2	5	97	-	-	-	-	-	-	-	108
2: 7am (7am-8am)	-	13	9	7	104	-	-	-	3	-	-	-	136
3: 8am (8am-9am)	-	31	13	11	56	-	-	-	-	-	-	-	111
4: 9am (9am-10am)	-	23	22	17	58	-	7	-	10	-	-	-	137
5: 3pm (3pm-4pm)	-	93	8	7	56	-	12	-	11	-	-	-	187
6: 4pm (4pm-5pm)	-	120	10	6	50	-	12	-	21	-	-	-	219
7: 5pm (5pm-6pm)	-	138	7	12	53	-	24	-	18	-	-	-	252
8: 6pm (6pm-7pm)	-	88	4	5	54	-	9	-	9	-	-	-	169
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-

	Mira	Mira Loma WB Inbound Mi			ast of DW I	NBOUND W	Loma Drive	way NB Inbo	und to Mira			
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right
Day Part												
0: All Day (12am-12am)	0%	88%	12%	11%	89%	0%	48%	0%	52%	-	-	-
1: 6am (6am-7am)	0%	67%	33%	5%	95%	0%	-	-	-	-	-	-
2: 7am (7am-8am)	0%	59%	41%	6%	94%	0%	0%	0%	100%	-	-	-
3: 8am (8am-9am)	0%	70%	30%	16%	84%	0%	-	-	-	-	-	-
4: 9am (9am-10am)	0%	51%	49%	23%	77%	0%	41%	0%	59%	-	-	-
5: 3pm (3pm-4pm)	0%	92%	8%	11%	89%	0%	52%	0%	48%	-	-	-
6: 4pm (4pm-5pm)	0%	92%	8%	11%	89%	0%	36%	0%	64%	-	-	-
7: 5pm (5pm-6pm)	0%	95%	5%	18%	82%	0%	57%	0%	43%	-	-	-
8: 6pm (6pm-7pm)	0%	96%	4%	8%	92%	0%	50%	0%	50%	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION														
	С	ount Sun	nmary Be	ginning:		March 6,	2019							
Count Static City/Town: Road Name Lanes:	on: e:	1100200 Cameron F Cameron F 2	^p ark Park Drive		Counter ID Mile Post: Location: Direction:	:	72 0.02 100 Ft. N. (NORTHBC	of Robin La n DUND	le					
Date Day Time	10 Sun	11 Mon	12 Tue	6 Wed	7 Thu	8 Fri	9 Sat	Weekly Average	Wk Day Avg.					
100	16	11	19	12	15	14	24	16	14					
200	13	6 4	13	13	11	13	9 11	11	11 5					
400	12	5	3	14	12	9	6	9	9					
500	6	15	21	17	15	15	7	14	17					
600	13	48	43	50	46	38	23	37	45					
700	28	108	107	72	93	100	31	77	96					
800	37	139	186	158	165	170	89	135	164					
900	88	212	226	221	245	230	189	202	227					
1100	203	204	200	200	249	322	247	201	270					
1200	263	358	415	392	390	428	389	376	397					
1300	350	470	440	464	426	450	408	430	450					
1400	350	409	429	407	391	474	402	409	422					
1500	346	432	415	423	395	481	351	406	429					
1600	289	491	491	443	467	502	323	429	479					
1700	319	509	527	421	437	496	327	434	478					
1800	280	487	579	468	486	519	320	448	508					
2000	186	224	2/5	205	177	2/17	200	212	220					
2000	100	145	130	<u>203</u> 99	114	168	153	130	131					
2200	69	81	95	74	91	118	91	88	92					
2300	47	30	45	34	39	58	48	43	41					
2400	31	31	27	23	14	34	41	29	26					
Totals	3442	5093	5428	4929	4950	5583	4246	4810	5197					
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00					
AM Count	263	358	415	392	390	428	389	376	397					
PM Peak Hr	1:00	5:00	6:00	6:00	6:00	6:00	1:00	6:00	6:00					
PM Count	350	509	579	468	486	519	408	448	508					

TOTAL ADT: 9,788

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION														
	С	ount Sun	nmary Be	ginning:		March 6,	2019							
Count Statio City/Town: Road Name Lanes:	on: e:	1100200 Cameron F Cameron I 2	Park Park Drive		Counter ID Mile Post: Location: Direction:	:	72 0.02 100 Ft. N. SOUTHBC	of Robin La r DUND	ne					
Date Day Time	10 Sun	11 Mon	12 Tue	6 Wed	7 Thu	8 Fri	9 Sat	Weekly Average	Wk Day Avg.					
100	18	12	13	14	11	11	16	14	12					
200	11	6	8	13	15	11	12	11	11					
300	14	6	5	3	6	3	4	6	5					
400	9	20	6 25	3	8	3	12	6	4					
500 600	9	30 61	30 80	20 53	30 55	66	12	25 49						
700	21	159	129	119	161	134	50	110	140					
800	29	212	197	209	198	219	107	167	207					
900	80	222	292	255	308	261	143	223	268					
1000	143	249	246	270	251	293	211	238	262					
1100	200	290	328	269	301	328	291	287	303					
1200	255	356	350	342	307	364	360	333	344					
1300	286	389	404	3/4	3/2	395	350	367	387					
1400	299	384	349	357	347	434	333	353	373					
1600	263	410	369	350	352	422	317	355	381					
1700	285	406	372	332	372	382	302	350	373					
1800	253	368	455	334	322	384	270	341	373					
1900	172	282	319	243	245	264	205	247	271					
2000	138	200	220	138	141	141	138	159	168					
2100	81	103	96	72	76	100	85	88	89					
2200	/1	08 23	72	53	70	52	00 /0	68	68					
2300	23	21	27	21	22	39	34	27	26					
Totals	2986	4645	4821	4279	4380	4831	3715	4237	4591					
AM Peak Hr	12:00	12:00	12:00	12:00	9:00	12:00	12:00	12:00	12:00					
AM Count	255	356	350	342	308	364	360	333	344					
PM Peak Hr	2:00	4:00	6:00	2:00	1:00	2:00	1:00	2:00	2:00					
PM Count	299	410	455	393	372	434	350	370	391					

TOTAL ADT: 9,788

	EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION														
	С	ount Sun	nmary Be	ginning:		October	25, 2019								
Count Static City/Town: Road Name Lanes:	on: e:	1100200 Cameron P Cameron F 2	'ark 'ark Drive		Counter ID Mile Post: Location: Direction:	:	62 0.02 100 Ft. N. NORTHBC	of Robin Lan DUND	Ie						
Date	27	28	29	30	31	25	26	Weekly	Wk Day						
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.						
100	19	5	19	13	20	22	22	17	16						
200	10	6	8	11	8	12	11	9	9						
300	12	4	6	7	6	12	6	8	7						
400	2	4	8	/	5	5	5	5	6						
500	10	19	25	17	19	24	0 25	17	21						
700	27	121	100	12/	47	120	20	40	122						
800	79	173	195	208	200	177	86	160	191						
900	219	208	261	247	249	258	196	234	245						
1000	220	280	280	305	267	300	306	280	286						
1100	268	306	376	306	319	386	440	343	339						
1200	319	422	443	432	452	486	488	435	447						
1300	333	451	555	518	534	532	496	488	518						
1400	293	401	536	500	470	515	455	453	484						
1500	270	451	474	500	505	529	448	454	492						
1600	216	431	509	527	498	557	427	452	504						
1/00	199	469	527	507	552	499	345	443	511						
1800	194	434	521 310	518 291	510 202	489 294	350	433	490 340						
2000	132	173	230	228	171	304	400	100	১ ৭ ৬ ১৭৩						
2100	45	94	126	128	102	167	75	105	123						
2200	18	72	55	82	83	132	40	69	85						
2300	16	20	33	51	48	62	35	38	43						
2400	9	21	20	15	24	32	24	21	22						
Totals	2984	4972	5673	5687	5533	6069	4885	5115	5587						
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00						
AM Count	319	422	443	432	452	486	488	435	447						
PM Peak Hr	1:00	5:00	1:00	4:00	5:00	4:00	1:00	1:00	1:00						
PM Count	333	469	555	527	552	557	496	488	518						

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION														
	С	ount Sun	nmary Be	ginning:		October	25, 2019							
Count Statio City/Town: Road Name Lanes:	on: e:	1100200 Cameron F Cameron I 2	Park Park Drive		Counter ID Mile Post: Location: Direction:	:	62 0.02 100 Ft. N. SOUTHBC	of Robin Lar DUND	ne					
Date Day Time	27 Sun	28 Mon	29 Tue	30 Wed	31 Thu	25 Fri	26 Sat	Weekly Average	Wk Day Avg.					
100	28	12	7	11	11	10	20	14	10					
200	10	2	7	8	13	12	9	9	8					
300	8	5	10	11	9	5	6	8	8					
400	6	3	9	7	7	10	5	7	7					
500 600	5	0 45	44 81	40 87	40 80	33 80	25	20 58	35 75					
700	12	117	138	151	143	141	41	106	138					
800	59	146	214	189	189	220	84	157	192					
900	110	165	286	304	290	297	190	235	268					
1000	184	200	317	309	313	333	282	277	294					
1100	199	236	337	334	306	374	378	309	317					
1200	236	330	385	391	337	408	437	361	370					
1300	233	366	435	465	450	417	410	397	427					
1400	199	372	424	401	423	420	358	384	418					
1600	167	359	417	414	425	514	332	375	426					
1700	189	400	374	430	379	411	286	353	399					
1800	153	344	356	396	311	366	263	313	355					
1900	100	277	304	271	217	311	262	249	276					
2000	72	158	190	166	126	192	130	148	166					
2100	49	81	// 50	90	140	116	84	91	101					
2200	30 16	40	50 35	47	07 30	79	/2	00 30	02 12					
2400	10	20	22	21	38	33	25	25	28					
Totals	2270	4087	4931	5120	4826	5292	4174	4386	4851					
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00					
AM Count	236	330	385	391	337	408	437	361	370					
PM Peak Hr	1:00	5:00	1:00	3:00	1:00	4:00	2:00	1:00	3:00					
PM Count	233	400	435	466	450	514	416	397	429					

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	С	ount Sun	nmary Be	ginning:		October	25, 2019					
Count Static City/Town: Road Name Lanes:	on: e:	1200200 Cameron F Cameron F 2	^p ark Park Drive		Counter ID Mile Post: Location: Direction:	:	62 0.16 100 Ft. N. NORTHBC	of Coach Ln DUND				
Date	27	28	29	30	31	25	26	Weekly	Wk Day			
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.			
100	60	12	45	52	53	42	108	53	41			
200	24	11	24	36	34	31	50	30	27			
300	28	7	24	22	32	39	32	26	25			
400	20	14	25	22	20	24	35	23	21			
500 600	23 //3	30	49	44	43	1/6	20		40			
700	100	212	266	314	285	340	142	237	283			
800	230	353	398	413	413	433	232	353	402			
900	496	432	528	539	522	548	433	500	514			
1000	588	572	604	609	586	668	658	612	608			
1100	626	630	721	677	661	758	864	705	689			
1200	640	747	845	842	814	874	970	819	824			
1300	685	871	1066	1072	1000	1030	1000	961	1008			
1400	615	8/2	1078	1033	958	1090	1046	956	1006			
1500	530	920	1012	1038	1010	1028	970	932	1004			
1700	481	090	1120	1000	1024	1093	794	920	1011			
1800	488	964	1070	1073	1070	993	811	918	1000			
1900	366	876	903	938	788	920	951	820	885			
2000	242	620	642	632	496	730	540	557	624			
2100	160	369	450	400	465	536	274	379	444			
2200	108	232	250	306	333	418	196	263	308			
2300	68	135	145	178	204	276	134	163	188			
2400	46	82	91	98	108	124	86	91	101			
lotals	7189	10902	12520	12524	12116	13228	11314	11399	12258			
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00			
AM Count	640	747	845	842	814	874	970	819	824			
PM Peak Hr	1:00	6:00	5:00	5:00	5:00	4:00	2:00	1:00	5:00			
PM Count	685	964	1120	1079	1075	1093	1046	961	1050			

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	С	ount Sun	nmary Be	ginning:		October	25, 2019					
Count Statio City/Town: Road Name Lanes:	on: e:	1200200 Cameron F Cameron F 2	^P ark Park Drive		Counter ID Mile Post: Location: Direction:	:	62 0.16 100 Ft. N. SOUTHBC	of Coach Ln DUND				
Date Day Time	27 Sun	28 Mon	29 Tue	30 Wed	31 Thu	25 Fri	26 Sat	Weekly Average	Wk Day Avg.			
100	77	20	28	52	49	40	72	48	38			
200	28	14	26	32	32	30	47	30	27			
300	30	20	36	30	34	31	32	30	30			
400	32	23	30	44	43	46	34	36	37			
500 600	30	41	208	100	109	112	/6	84	97			
700	40 94	220	200	232	230	204 426	130	297	200			
800	290	389	615	604	585	635	372	499	566			
900	486	540	788	874	812	840	598	705	771			
1000	684	704	896	840	840	956	840	823	847			
1100	683	751	948	956	858	1010	1082	898	905			
1200	718	960	1127	1099	970	1124	1189	1027	1056			
1300	734	1176	1299	1258	1214	1226	1234	1163	1235			
1400	668	1104	1142	1198	1126	1119	1085	1063	1138			
1500	550	1003	1153	1102	1154	1238	068	1055	1154			
1700	569	1116	1216	1229	1186	1135	764	1003	1176			
1800	516	1079	1175	1164	1047	1151	798	990	1123			
1900	384	946	950	871	710	959	792	802	887			
2000	235	552	582	540	487	666	493	508	565			
2100	178	298	334	323	542	438	312	346	387			
2200	144	187	208	230	328	396	235	247	270			
2300	85	134	98	138	150	213	146	138	147			
Totals	7882	12675	14620	94 14616	14131	15503	12616	13149	14309			
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00			
AIVI Count	/18	960	1127	1099	970	1124	1189	1027	1056			
PM Peak Hr	1:00	1:00	1:00	1:00	1:00	4:00	1:00	1:00	1:00			
PIVI Count	734	11/6	1299	1258	1214	1360	1234	1163	1235			

	EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	С	ount Sun	nmary Be	ginning:		March 6,	2019						
Count Statio City/Town: Road Name Lanes:	on: e:	1600200 Cameron F Cameron F 2	⁹ ark Park Drive		Counter ID Mile Post: Location: Direction:	:	63 0.54 500 Ft. S. (NORTHBC	of Hacienda DUND	Dr.				
Date	10	11	12	6	7	8	9	Weekly	Wk Day				
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.				
100	75	53	46	47	49	49	74	56	49				
200	47	23	17	18	29	29	33	28	23				
300	47	13	16	11	7	14	37	21	12				
400	48	11	7	10	13	17	15	17	12				
500	21	28	22	18	19	20	11	20	21				
	19	00 167	160	167	09 160	164	29	04 140	167				
800	54 74	364	369	333	366	401	90 159	295	367				
900	159	418	463	446	444	449	300	383	444				
1000	318	441	428	399	411	463	426	412	428				
1100	384	511	506	489	465	538	509	486	502				
1200	530	611	618	601	546	634	619	594	602				
1300	658	701	637	690	658	675	662	669	672				
1400	666	669	667	705	695	785	728	702	704				
1500	659	810	752	736	753	869	666	749	784				
1600	691	917	917	856	882	956	725	849	906				
1700	588	1012	1008	934	924	746	697	844	925				
1800	639 500	1065	757	9/4	794	050 701	648 534	857	942				
2000	509 777	546	578	112	/04	538	/30	496	520				
2100	327	407	436	388	391	393	403	392	403				
2200	214	220	303	235	267	296	264	257	264				
2300	130	140	149	143	147	196	215	160	155				
2400	77	81	84	83	87	133	103	93	94				
Totals	7378	10062	10020	9504	9667	9796	8377	9258	9810				
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00				
AM Count	530	611	618	601	546	634	619	594	602				
PM Peak Hr	4:00	6:00	5:00	6:00	6:00	4:00	2:00	6:00	6:00				
PM Count	691	1065	1008	974	1012	956	728	857	942				

	EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	с	ount Sun	nmary Be	ginning:		March 6,	2019						
Count Statio City/Town: Road Name Lanes:	on: e:	1600200 Cameron F Cameron I 2	^p ark Park Drive		Counter ID Mile Post: Location: Direction:	:	63 0.54 500 Ft. S. SOUTHBC	of Hacienda Dr. JUND					
Date Day Time	10 Sun	11 Mon	12 Tue	6 Wed	7 Thu	8 Fri	9 Sat	Weekly Average	Wk Day Avg.				
100	42	28	20	20	25	31	34	29	25				
200	39	22	14	13	17	15	33	22	16				
300	39	17	12	8	14	20	15	18	14				
400	31	31	29	28	27	30	26	29	29				
500	36	90	84	94	83	70	38	71	84				
500 700	58 107	243	230	201 510	204	240	91 190	198	248				
800	107	403 765	490	820	490	493	310	590 648	490				
900	311	740	744	780	717	797	526	659	756				
1000	415	588	646	561	583	654	599	578	606				
1100	573	614	610	605	578	655	636	610	612				
1200	598	679	670	619	641	687	747	663	659				
1300	663	702	621	707	700	708	701	686	688				
1400	649	690	651	628	637	718	621	656	665				
1500	588	695	691	675	647	727	581	658	687				
1600	543	/81 757	799	598	638	/88	591	677	721				
1700	501	101	650	500	635	533	553 553	580	614				
1900	351	554	526	478	517	556	436	488	526				
2000	295	352	376	254	230	355	286	307	313				
2100	229	217	245	193	204	193	245	218	210				
2200	147	131	145	114	153	164	171	146	141				
2300	78	93	100	83	67	123	123	95	93				
2400	55	36	45	45	51	77	73	55	51				
Totals	7068	9951	9918	9336	9443	10035	8229	9140	9737				
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	8:00	12:00	12:00	8:00				
AIVI Count	598	765	808	820	835	807	/4/	663	807				
PM Peak Hr	1:00	4:00	4:00	1:00	1:00	4:00	1:00	1:00	4:00				
PIM Count	663	/81	799	/0/	700	788	701	686	/21				

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	С	ount Sun	nmary Be	ginning:		February	/ 28, 2019)				
Count Static City/Town: Road Name Lanes:	on: e:	1700200 Cameron F Cameron F 2	Park P ark Drive		Counter ID Mile Post: Location: Direction:	:	TLS #2 1.81 200 Ft. S. (SOUTHBC	of Meder Rd. DUND				
Date	3	4	5	6	28	1	2	Weekly	Wk Day			
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.			
100	41	19	19	22	19	20	31	24	20			
200	21	12	7	13	18	16	23	16	13			
300	21	22	16	8	19	16	27	18	16			
400 500	22	76	67	71	20	23	32	56	23 68			
600	44	210	196	180	193	190	80	156	194			
700	89	365	386	399	371	381	113	301	380			
800	174	645	631	652	622	643	223	513	639			
900	292	587	599	603	623	633	337	525	609			
1000	364	459	503	428	456	515	456	454	472			
1100	432	476	479	486	483	530	486	482	491			
1200	407	562	488	493	529	579	530	513	530			
1300	468	583	555	591	606 556	620	512	566	597			
1400	409	569	564	509 662	652	648	507	572	505 619			
1600	337	625	674	530	624	658	463	559	622			
1700	364	622	621	557	587	697	443	556	617			
1800	357	593	537	519	555	695	431	527	580			
1900	294	408	427	417	485	508	316	408	449			
2000	206	227	215	226	246	305	255	240	244			
2100	148	151	159	169	175	217	182	172	174			
2200	97	114	115	98	137	151	163	125	123			
2300	63	53	66	/3	86	102	103	/8	/6			
Z400 Totals	5159	8071	7903	7765	8180	8922	6315	7474	40 8168			
AM Rook Hr	11.00	ଌ୕୶	ଌ୕୶	ຨ∙∩∩	0.00	ୡ୶୲ୠ	12.00	۵۰۵۵	8.00			
AM Count	432	645	631	652	623	643	530	525	639			
PM Peak Hr	1:00	4:00	4:00	3:00	3:00	5:00	1:00	3:00	4:00			
PM Count	468	625	674	662	652	697	512	572	622			

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION													
	С	ount Sun	nmary Be	ginning:		February	/ 28, 2019)					
Count Statio City/Town: Road Name Lanes:	on: e:	1700200 Cameron F Cameron F 2	^p ark Park Drive		Counter ID Mile Post: Location: Direction:	:	TLS #2 1.81 200 Ft. S. (NORTHBC	of Meder Rd. DUND					
Date Day Time	3 Sun	4 Mon	5 Tue	6 Wed	28 Thu	1 Fri	2 Sat	Weekly Average	Wk Day Avg.				
100	65	31	40	41	36	47	56	45	39				
200	29	18	24	17	19	25	33	24	21				
300	27	12	11	6	14	14	30	16	11				
400	13	13	10	13	19	12	15	13	12				
600	22	10	19 60	54	64	59	28	48	57				
700	33	230	237	229	242	224	59	179	232				
800	82	408	378	354	356	402	120	300	380				
900	158	378	388	384	417	430	216	339	399				
1000	221	350	357	325	381	416	289	334	366				
1100	324	387	370	441	393	442	432	398	407				
1200	353	505	544	4/8	452	512	468	473	498				
1300	512 424	583	494 550	588 588	576	611	504	543	582				
1400	476	605	624	600	668	735	513	603	646				
1600	466	732	727	674	716	778	506	657	725				
1700	390	829	821	686	777	807	490	686	784				
1800	394	801	790	755	761	793	487	683	780				
1900	357	596	522	551	591	566	407	513	565				
2000	290	324	361	342	391	399	311	345	363				
2100	212	253	207	284	310	342	211	268	291				
2200	102	104	100	100	210	232	154	165	190				
2400	57	65	55	63	118	119	99	82	84				
Totals	5153	8042	7941	7697	8328	8752	6185	7443	8152				
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00				
AM Count	353	505	544	478	452	512	468	473	498				
PM Peak Hr	1:00	5:00	5:00	6:00	5:00	5:00	2:00	5:00	5:00				
PM Count	512	829	821	/55	111	807	526	686	784				

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	с	ount Sun	nmary Be	ginning:		October	25, 2019					
Count Statio City/Town: Road Name Lanes:	on: e:	1700200 Cameron F Cameron F 2	Park Park Drive		Counter ID Mile Post: Location: Direction:	:	TLS #4 1.81 200 Ft. S. SOUTHBC	of Meder Rd. DUND				
Date	20	21	22	16	17	18	19	Weekly	Wk Day			
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.			
100	59	25	18	14	25	25	55	32	21			
200	33	15	11	20	11	16	29	19	15			
300	18	14	14	15	12	16	16	15	14			
400	25	32	29	19	25	18	23	24	25			
500 600	10	204	218	203	206	102	29	165	205			
700	100	375	383	397	387	379	119	306	384			
800	173	648	683	714	659	620	257	536	665			
900	354	618	623	626	652	639	389	557	632			
1000	419	470	477	562	518	496	471	488	505			
1100	466	451	498	499	467	531	577	498	489			
1200	508	575	538	557	534	546	606	552	550			
1300	476	622	584	568	537	613	555	565	585			
1400	479	627	551	583	5/4	5/4	566	565	582			
1500	449	599	593	592	612	040 717	510	578	620			
1700	444 411	582	593	633	634	628	491	567	614			
1800	395	599	657	611	549	575	449	548	598			
1900	353	445	493	488	475	479	331	438	476			
2000	231	247	274	253	266	337	227	262	275			
2100	158	156	176	193	189	226	220	188	188			
2200	110	107	111	95	137	158	173	127	122			
2300	54	76	64	85	73	148	128	90	89			
2400	38	42	30	39	52	108	88	57	54			
Totals	5813	8182	8335	8453	8322	8747	6887	7820	8408			
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	9:00	12:00	9:00	8:00			
AM Count	508	648	683	714	659	639	606	557	665			
PM Peak Hr	2:00	2:00	4:00	5:00	3:00	4:00	2:00	4:00	4:00			
PM Count	479	627	660	633	663	717	566	590	639			

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION													
	С	ount Sun	nmary Be	ginning:		October	25, 2019						
Count Statio City/Town: Road Name Lanes:	on: e:	1700200 Cameron F Cameron F 2	^P ark Park Drive		Counter ID Mile Post: Location: Direction:	:	TLS #4 1.81 200 Ft. S. (NORTHBC	of Meder Rd. DUND					
Date Day	20 Sun	21 Mon	22 Tue	16 Wed	17 Thu	18 Fri	19 Sat	Weekly Average	Wk Day Avg.				
Time								5	U				
100	73	28	31	40	40	23	74	44	32				
200	45	24	16	13	14	24	34	24	18				
300	27	6	14	15	17	14	21	14	10				
400 500	6	20	10	13	17	14	21	15	13				
600	11	52	61	61	58	58	19	46	58				
700	40	219	239	236	237	227	64	180	232				
800	85	402	399	404	397	392	121	314	399				
900	214	437	415	456	400	385	261	367	419				
1000	267	372	3//	374	398	368	351	358	378				
1200	395	503	437	400 512	400	432	473 531	429	430				
1200	496	588	547	549	543	561	536	546	558				
1400	500	636	557	629	561	586	555	575	594				
1500	456	625	717	638	659	708	550	622	669				
1600	500	683	713	711	659	758	543	652	705				
1700	479	788	819	788	787	785	537	712	793				
1800	489	831	842 602	816	827	827	491	732	829				
2000	302	325	420	423	440	415	40Z 350	382	405				
2100	261	270	331	328	342	343	236	302	323				
2200	156	157	198	177	165	279	228	194	195				
2300	90	103	107	107	115	167	194	126	120				
2400	53	67	50	50	71	118	134	78	71				
Totals	5756	8149	8390	8441	8228	8602	6745	7759	8362				
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00				
AM Count	395	503	466	512	449	497	531	479	485				
PM Peak Hr	2:00	6:00	6:00	6:00	6:00	6:00	2:00	6:00	6:00				
PM Count	500	831	842	816	827	827	555	732	829				

	EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	С	ount Sun	nmary Be	ginning:		March 6,	2019						
Count Static City/Town: Road Name Lanes:	tion: 1800200 Cameron Park le: Cameron Park Drive 2 <u>10 11 12</u>				Counter ID Mile Post: Location: Direction:	:	73 2.39 600 Ft. N. of Mira Loma Dr. NORTHBOUND						
Date	10	11	12	6	7	8	9	Weekly	Wk Day				
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.				
100	56	29	36	28	34	41	50	39	34				
200	31	18	19	13	15	14	19	18	16				
300	31	13	16	15	7	14	31	18	13				
400	45	16	15	12	16	12	13	18	14				
00C 600	21	24 50	12 54	10	15	13 50	25 25	14	51				
700	43	166	184	183	187	182	95	149	180				
800	58	333	342	345	348	334	110	267	340				
900	107	348	385	359	349	395	221	309	367				
1000	206	308	284	266	308	325	318	288	298				
1100	290	330	342	347	335	355	353	336	342				
1200	331	365	353	327	334	390	388	355	354				
1300	402	444	394	448	485	439	417	433	442				
1400	421	407	455	472	423	540	468	456	461				
1600	433	573	555 610	520	568	592 661	302 /18	546	590				
1700	426	665	650	535	576	532	463	550	592				
1800	367	674	629	607	627	586	401	556	625				
1900	304	484	454	436	441	450	357	418	453				
2000	262	325	356	268	289	341	245	298	316				
2100	230	257	267	231	220	241	210	237	243				
2200	133	141	167	123	139	186	161	150	151				
2300	84	90	100	80	99	119	130	100	98				
Z400 Totals	40	6684	6743	45 6268	54 6453	6907	5350	62 6172	6611				
AM Peak Hr	12:00	12:00	9:00 385	9:00 350	9:00	9:00 305	12:00	12:00	9:00 367				
	551	505	505	209	549	595	500	300	507				
PM Peak Hr	4:00	6:00	5:00	6:00	6:00	4:00	2:00	6:00	6:00				
PM Count	457	674	650	607	627	661	468	556	625				

	EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	С	ount Sun	nmary Be	ginning:		March 6,	2019						
Count Statio City/Town: Road Name Lanes:	on: 1800200 Cameron Park e: Cameron Park Drive 2 <u>10 11 12</u>			Counter ID Mile Post: Location: Direction:	:	73 2.39 600 Ft. N. SOUTHBC	of Mira Loma Dr. DUND						
Date Day Time	10 Sun	11 Mon	12 Tue	6 Wed	7 Thu	8 Fri	9 Sat	Weekly Average	Wk Day Avg.				
100	45	22	24	15	20	27	33	27	22				
200	22	14	13	10	13	20	27	17	14				
300	22	10	10	8	8	16	15	13	10				
400	28	17	21	19	17	17	15	19	18				
500	29	58	46	56 120	50	4/	29	45	51 122				
700	69	328	337	376	332	341	112	271	343				
800	111	483	532	519	560	524	189	417	524				
900	195	474	480	457	455	510	329	414	475				
1000	260	320	383	352	398	420	389	360	375				
1100	342	345	377	367	370	394	397	370	371				
1200	412	403	360	366	422	437	462	409	398				
1300	455	459	397	393	433	468	443	435	430				
1400	3/0	406	428	421	405	460	384	411	424				
1600	361	565	595	425	500	612	300	470	539				
1700	363	546	497	451	514	537	398	472	509				
1800	360	462	477	449	470	517	349	441	475				
1900	253	420	421	326	351	397	302	353	383				
2000	235	273	281	208	174	283	229	240	244				
2100	174	191	192	159	151	160	179	172	171				
2200	119	111	131	94	115	144	147	123	119				
2300	60 //3	/1	78 78	03	59 /0	104	68	78	/5 /7				
Totals	4738	6662	6764	6232	6481	7185	5447	6216	6665				
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	8:00	12:00	8:00	8:00				
AIVI Count	412	483	532	519	560	524	462	417	524				
PM Peak Hr	1:00	4:00	4:00	3:00	5:00	4:00	1:00	4:00	4:00				
PIVI Count	455	565	595	536	514	612	443	493	539				

	EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	С	ount Sun	nmary Be	ginning:		October	25, 2019						
Count Statio City/Town: Road Name Lanes:	on: e:	1800200 Cameron F Cameron F 2	^p ark Park Drive		Counter ID Mile Post: Location: Direction:	:	69 2.39 600 Ft. N. of Mira Loma Dr. NORTHBOUND						
Date	27	28	29	30	31	25	26	Weekly	Wk Day				
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.				
100	70	32	23	28	24	39	41	37	29				
200	34	14	16	11	24	20	42	23	17				
300	24	11	7	9	15	13	28	15	11				
400	9	6	16	13	1/	10	24	14	12				
500 600	10	15	17	57	20 57	21	25	10 /1	19				
700	48	114	128	167	166	204	74	129	156				
800	84	227	274	340	340	359	122	249	308				
900	175	255	344	369	386	422	219	310	355				
1000	301	279	302	330	293	333	304	306	307				
1100	297	327	363	347	315	347	393	341	340				
1200	295	344	391	372	396	399	481	383	380				
1300	329	354	481	528	541	474	489	457	476				
1400	250	342	482	4//	434	487	470	420	444				
1500	337	434	530	605 520	5/9	590 645	404	505	549				
1700	200	400	622	615	744	629	433	535	618				
1800	273	531	651	675	728	620	405	555	641				
1900	251	466	486	494	551	545	469	466	508				
2000	197	323	291	332	378	407	319	321	346				
2100	146	214	225	248	340	272	190	234	260				
2200	112	126	145	173	255	332	169	187	206				
2300	64	90	81	104	121	166	134	109	112				
2400	37	53	56	51	79	106	104	69	69				
lotals	3906	5537	6520	6901	7420	7485	5809	6225	6773				
AM Peak Hr	10:00	12:00	12:00	12:00	12:00	9:00	12:00	12:00	12:00				
AM Count	301	344	391	372	396	422	481	383	380				
PM Peak Hr	3:00	6:00	6:00	6:00	5:00	4:00	1:00	6:00	6:00				
PM Count	337	531	651	675	744	645	489	555	641				

	EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION												
	С	ount Sun	nmary Be	ginning:		October	25, 2019						
Count Statio City/Town: Road Name Lanes:	on: e:	: 1800200 Cameron Park Cameron Park Drive 2 2 27 28 29 Sun Man Tuo			Counter ID Mile Post: Location: Direction:	:	69 2.39 600 Ft. N. SOUTHBC	of Mira Loma DUND	a Dr.				
Date Day Time	27 Sun	28 Mon	29 Tue	30 Wed	31 Thu	25 Fri	26 Sat	Weekly Average	Wk Day Avg.				
100	35	15	18	18	18	19	34	22	18				
200	16	9	14	17	16	14	28	16	14				
300	26	8	19	21	9	18	20	17	15				
400	21	18	17	20	26	19	22	20	20				
500 600	23	34 110	48 134	52 156	45	39 147	28	38 117	44				
700	80	221	259	370	362	335	115	249	309				
800	161	318	439	492	518	544	189	380	462				
900	282	334	474	481	448	487	325	404	445				
1000	322	328	408	359	412	419	417	381	385				
1100	335	368	372	383	413	415	516	400	390				
1200	359	378	390	421	410	441	522	417	408				
1300	377	432	450	442	484	478	502	452	457				
1400	294	410 412	440	474 565	483	424 529	404	433	400				
1600	296	479	516	502	512	564	464	476	515				
1700	332	435	492	528	501	643	373	472	520				
1800	272	497	513	509	564	560	372	470	529				
1900	245	382	402	413	419	480	467	401	419				
2000	175	245	294	239	310	340	288	270	286				
2100	133	179	154	152	327	202	195	192	203				
2200	95	108	98	133	2/3	150	1/6	148	152				
2300	32	26	30	36	58	59	74	92 45	91 42				
Totals	4327	5815	6494	6867	7425	7437	6210	6368	6808				
AM Peak Hr	12:00	12:00	9:00	8:00	8:00	8:00	12:00	12:00	8:00				
AM Count	359	378	4/4	492	518	544	522	417	462				
PM Peak Hr	1:00	6:00	4:00	3:00	6:00	5:00	1:00	4:00	6:00				
PM Count	377	497	516	565	564	643	502	476	529				

		DE	EL PARTM	DORAL	DO COU TRANS	NTY PORTA	TION		
	C	ount Sun	nmary Be	ginning:		March 7,	2019		
Count Static City/Town: Road Name Lanes:	on: e:	1900200 Cameron P Cameron F 2	Park Park Drive		Counter ID Mile Post: Location: Direction:	:	69 3.35 200 Ft. S. NORTHBC	of Green Valle	ey Rd.
Date	10 Sup	11 Mon	12 Tuo	13 Wod	7 Thu	8 Eri	9 Sat	Weekly	Wk Day
Time	Sun	IVION	Tue	wed	Thu	FII	581	Average	Avg.
100	29	16	22		25	26	24		22
200	14	8	9		12	8	8		9
300	24	6	8		5	5	16		6
400	21	11 28	11 17		13	6 17	13		10
600	14	77	65		60	61	29		66
700	32	164	183		181	176	97		176
800	54	319	300		341	316	122		319
900	118	332	402		348	341	208		356
1000	197	262	277		259	254	305		263
1100	266	281	253		264	298	310		274
1200	281	332	298		204	309	314		298
1400	307	362	335		327	404	376		357
1500	354	405	421		425	460	273		428
1600	378	434	445		410	455	318		436
1700	314	465	459		431	415	341		443
1800	293	501	431		437	439	305		452
1900	219	351	338		326	322	240		334
2000	191	207	253		202	251	1/3		228
2100	140	107	100		140	175	152		109
2200	53	52	56		53	87	68		62
2400	30	32	36		18	47	44		33
Totals	3752	5285	5240		4997	5337	4179		5215
AM Peak Hr	12:00	9:00	9:00		9:00	9:00	12:00		9:00
AM Count	281	332	402		348	341	314		356
PM Peak Hr	4:00	6:00	5:00		6:00	3:00	2:00		6:00
PM Count	378	501	459		437	460	376		452

TOTAL ADT: 9,957

		DE	EL PARTM	DORAI	DO COU TRANS	NTY PORTA	TION		
	С	ount Sun	nmary Be	ginning:		March 7,	2019		
Count Statio City/Town: Road Name Lanes:	on: e:	1900200 Cameron F Cameron F 2	^P ark Park Drive		Counter ID Mile Post: Location: Direction:	:	69 3.35 200 Ft. S. SOUTHBC	of Green Valle	∍y Rd.
Date Day Time	10 Sun	11 Mon	12 Tue	13 Wed	7 Thu	8 Fri	9 Sat	Weekly Average	Wk Day Avg.
100	31	11	15		23	21	23		18
200	22	9	7		6	12	23		9
300	11	5	8		7	7	7		7
400	13	8	11		6	7	10		8
500 600	24 15		20 57		21 72	29 65	23		50 64
700	41	169	171		167	184	64		173
800	54	282	331		361	342	125		329
900	118	348	351		329	365	188		348
1000	174	223	285		277	292	253		269
1100	235	237	258		233	267	277		249
1200	328	300	249 287		200	305	340		200
1400	259	287	207		276	315	276		294
1500	272	360	368		345	400	277		368
1600	256	434	436		391	482	285		436
1700	287	401	353		390	399	289		386
1800	253	342	337		340	380	255		350
1900	187	295	324		285	293	202		299
2000	181	187	208		147	202	177		180
2200	82	83	85		94	112	96		94
2300	33	54	53		42	97	85		62
2400	25	22	28		26	41	45		29
Totals	3276	4666	4688		4549	5064	3789		4742
AM Peak Hr	12:00	9:00	9:00		8:00	9:00	12:00		9:00
AM Count	262	348	351		361	365	348		348
PM Peak Hr	1:00	4:00	4:00		4:00	4:00	1:00		4:00
PM Count	328	434	436		391	482	310		436

TOTAL ADT: 9,957

		DE	EL PARTM	DORAI	DO COU TRANS	NTY PORTA	TION		
	C	ount Sun	nmary Be	ginning:		October	25, 2019		
Count Statio City/Town: Road Name Lanes:	on: e:	1900200 Cameron F Cameron F 2	Park Park Drive		Counter ID Mile Post: Location: Direction:	:	66 3.35 200 Ft. S. NORTHBC	of Green Val DUND	ley Rd.
Date Dav	27 Sun	28 Mon	29 Tue	30 Wed	31 Thu	25 Fri	26 Sat	Weekly	Wk Day Avg
Time	Gui	Worr	Tue	Wed	ma		Out	Werage	7 Wg.
100	29	10	9	16	15	27	30	19	15
200	15	7	10	10	14	9	16	12	10
300	14	4	7	11	8	10	9	9	8
400	10	3	11	8	11	15	10	8	8
500 600	10	12	22	21	31	15	32	18	20
700	19	40	155	183	180	224	98	141	171
800	80	221	271	307	307	344	135	238	290
900	163	234	294	342	353	375	227	284	320
1000	305	261	281	265	279	265	275	276	270
1100	256	276	279	297	257	284	331	283	279
1200	279	309	329	304	318	326	371	319	317
1300	302	289	377	388	399	354	387	357	361
1400	211	286	374	413	321	379	360	335	355
1500	248	324	419	445	412	448	354	379	410
1600	227	315	419	388	454	4/4	348	375	410
1700	194	328	411	434	485	438	324	3/3	419
1900	186	300	325	4/0	497	41Z 37/	320	300	3440
2000	100	213	211	216	275	295	221	220	242
2100	65	156	163	166	245	197	113	158	185
2200	63	93	88	97	165	216	108	119	132
2300	33	52	45	64	74	103	67	63	68
2400	13	20	27	30	37	58	54	34	34
Totals	3051	4239	5034	5298	5588	5700	4522	4776	5172
AM Peak Hr	10:00	12:00	12:00	9:00	9:00	9:00	12:00	12:00	9:00
AM Count	305	309	329	342	353	375	371	319	320
PM Peak Hr	1:00	6:00	6:00	6:00	6:00	4:00	1:00	6:00	6:00
PM Count	302	368	443	478	497	474	387	385	440

		DE	EL PARTM	DORAI	DO COU TRANS	NTY PORTA ⁻	TION		
	С	ount Sun	nmary Be	ginning:		October	25, 2019		
Count Statio City/Town: Road Name Lanes:	on: e:	1900200 Cameron F Cameron F 2	Park Park Drive		Counter ID Mile Post: Location: Direction:	:	66 3.35 200 Ft. S. SOUTHBC	of Green Val DUND	ley Rd.
Date Day Time	27 Sun	28 Mon	29 Tue	30 Wed	31 Thu	25 Fri	26 Sat	Weekly Average	Wk Day Avg.
100	26	11	18	13	9	9	28	16	12
200	17	7	10	10	6	7	21	11	8
300	19	3	11	18	7	9	20	12	10
400	11	6 15	19	10	12	9 20	/	9 20	9 22
500 600	22	55	62	30 80	20 91	20	29	20	74
700	42	107	137	195	180	172	77	130	158
800	90	182	291	318	352	342	126	243	297
900	180	214	348	344	289	340	231	278	307
1000	208	234	306	251	327	316	282	275	287
1100	273	270	250	275	292	286	348	285	275
1200	270	280	290	329	324	320	385	316	311
1300	201	304	340	345	307	300	340	334	342
1400	243	289	347	427	362	381	323	339	361
1600	245	371	413	353	391	441	353	367	394
1700	267	350	389	386	375	480	317	366	396
1800	216	370	386	387	413	411	277	351	393
1900	193	300	327	314	323	360	290	301	325
2000	148	214	230	188	220	263	198	209	223
2100	114	128	124	137	207	158	1/4	157	163
2200	00 45	93 48	00 40	64	190	80	97	66	63
2400	18	26	16	24	33	33	61	30	26
Totals	3254	4219	4768	4900	5354	5276	4487	4608	4903
AM Peak Hr	11:00	12:00	9:00	9:00	8:00	8:00	12:00	12:00	12:00
AIVI Count	213	280	348	344	352	342	385	316	311
PM Peak Hr	1:00	4:00	4:00	3:00	6:00	5:00	4:00	4:00	5:00
PM Count	281	3/1	413	427	413	480	353	367	396

		DE	EL PARTMI	DORAI	DO COU TRANS	NTY PORTA ⁻	TION		
	С	ount Sum	nmary Be	ginning:		October	25, 2019		
Count Static City/Town: Road Name Lanes:	on: e:	1050135 Cameron P Meder Roa 2	'ark I d		Counter ID Mile Post: Location: Direction:	:	TLS #4 0.04 200 Ft. E. (EASTBOU	of Cameron I ND	Park Dr.
Date	20	21	22	16	17	18	19	Weekly	Wk Day
Day Time	Sun	Mon	lue	Wea	Ihu	Fri	Sat	Average	Avg.
100	23	6	6	11	7	7	16	11	7
200	9	4	3	5	4	8	6	6	5
300	6	1	5	3	3	2	10	4	3
400	4	<u></u> ర	2	2	0 1	5	4	4	4
600	2		12	<u> </u>	۱ و	∠ 10	4 1	∠ 7	۱ و
700	- 6	202	224	. 224	230	223	16	161	221
800	26	201	184	197	183	191	36	145	191
900	50	92	123	183	132	124	84	113	131
1000	85	113	107	106	134	110	102	108	114
1100	111	120	113	118	116	127	135	120	119
1200	106	126	129	147	134	114	160	131	130
1300	156	261	140	173	163	155	155	172	178
1400	159	210	189	198	229	189	1/0	192	203
1600	140	220	200	200	249 216	290	178	231	200
1700	151	200	259	253	223	20-	167	213	237
1800	157	246	286	269	279	229	146	230	262
1900	113	209	207	212	203	186	120	179	203
2000	113	111	151	132	119	165	85	125	136
2100	66	89	94	99	97	117	84	92	99
2200	40	46	66	63	61	101	75	65	67
2300	23	16	34	28	31	68	54	36	35
2400	21	9	11	۲ ۵۵/10	19	53 2007	48 2010	24	20
lotais	1734	2747	2849	2942	2848	2967	2016	2586	2871
AM Peak Hr	11:00	7:00	7:00	7:00	7:00	7:00	12:00	7:00	7:00
AM Count	111	202	224	224	230	223	160	161	221
PM Peak Hr	4:00	1:00	6:00	3:00	6:00	3:00	4:00	3:00	3:00
PM Count	161	261	286	285	279	290	178	231	263

		DE	EL PARTM	DORAI	DO COU TRANS	NTY PORTA	TION		
	С	ount Sun	nmary Be	ginning:		October	25, 2019		
Count Static City/Town: Road Name Lanes:	on: e:	1050135 Cameron F Meder Roa 2	'ark I d		Counter ID Mile Post: Location: Direction:	:	TLS #4 0.04 200 Ft. E. WESTBOU	of Cameron I JND	Park Dr.
Date Day Time	20 Sun	21 Mon	22 Tue	16 Wed	17 Thu	18 Fri	19 Sat	Weekly Average	Wk Day Avg.
100	34	4	4	4	3	3	18	10	4
200	6	4	5	3	3	2	8	4	3
300	9	3	2	4	1	4	3	4	3
400	10	11	6	3	11	4	4	7	7
500 600	2	ZZ 53	10	55	56	10	10	14	18
700	32	180	201	176	190	195	36	144	188
800	47	323	324	325	312	316	93	249	320
900	116	213	217	252	220	250	148	202	230
1000	153	145	171	203	187	182	169	173	178
1100	147	152	153	162	139	165	152	153	154
1200	159	188	167	205	191	164	201	182	183
1300	165	259	204	216	208	205	160	202	218
1400	134	258	262	264	280	233	172	220	200 270
1600	132	202	202	236	197	351	151	240	273
1700	144	189	206	224	205	191	143	186	203
1800	136	197	247	224	180	194	180	194	208
1900	95	117	141	174	152	142	94	131	145
2000	76	62	103	61	94	90	74	80	82
2100	58	30	52	84	69	88	59	63	65
2200	45	27	27	26	49	52	38	38	36
2300	13	4	10	10	10	41 78		22	20
Totals	1865	2955	3056	3198	3121	3314	2140	2807	3129
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	8:00	12:00	8:00	8:00
AM Count	159	323	324	325	312	316	201	249	320
PM Peak Hr	1:00	2:00	4:00	2:00	3:00	4:00	6:00	3:00	3:00
PM Count	165	301	267	264	326	351	180	240	279

		DE	EL PARTM	DORAI	DO COU TRANS	NTY PORTA	TION		
	С	ount Sun	nmary Be	ginning:		October	1, 2019		
Count Static City/Town: Road Name Lanes:	on: e:	1200135 Cameron F Meder Roa 2	Park ad		Counter ID Mile Post: Location: Direction:	:	71 2.33 500 Ft. W. EASTBOU	of Ponderos ND	a Rd.
Date Day Time	6 Sun	7 Mon	1 Tue	2 Wed	3 Thu	4 Fri	5 Sat	Weekly Average	Wk Day Avg.
100	3	5	2	0	0	0	5	2	1
200	2	1	2	3	2	1	1	2	2
300	0	0	0	2	2	1	1	1	1
400 500	1	13	11	7	4	4	5		8
600	7	22	30	23	26	19	8	19	24
700	10	263	312	275	272	292	47	210	283
800	34	243	206	214	211	185	49	163	212
900	77	145	131	157	153	150	105	131	147
1100	86	00 100	03 78	00 81	79	07 QQ	121	92 93	03 88
1200	92	80	75	79	110	110	96	92	91
1300	83	192	95	77	108	94	108	108	113
1400	70	149	88	105	90	131	91	103	113
1500	65	118	169	212	200	302	69	162	200
1600	61	116	161	129	113	219	74	125	148
1700	61	105	137	133	202	161	83	126	148
1000	48	63	95	1/0	160	84	70	134	100
2000	36	57	74	70	74	73	62	64	70
2100	15	26	23	36	23	41	59	32	30
2200	13	15	9	15	17	32	35	19	18
2300	9	5	7	9	4	18	28	11	9
2400	1	3	4	2	2	8	4	3	4
Totals	947	1949	1975	2021	2128	2258	1304	1797	2066
AM Peak Hr	10:00	7:00	7:00	7:00	7:00	7:00	11:00	7:00	7:00
AM Count	111	263	312	275	272	292	122	210	283
PM Peak Hr	1:00	1:00	6:00	3:00	5:00	3:00	1:00	3:00	3:00
PM Count	83	192	1/9	212	202	302	108	162	200

TOTAL ADT: 4,213

			EL	DORA		NTY			
		DE	PARTM	ENT OF	TRANS	PORTA	TION		
	С	ount Sun	mary Be	ginning:		October	1, 2019		
Count Static City/Town: Road Name Lanes:	on: e:	1200135 Cameron P Meder Roa 2	'ark Id		Counter ID Mile Post: Location: Direction:	:	71 2.33 500 Ft. W. WESTBOL	of Ponderos JND	a Rd.
Date Day Time	6 Sun	7 Mon	1 Tue	2 Wed	3 Thu	4 Fri	5 Sat	Weekly Average	Wk Day Avg.
100	4	3	7	2	6	6	11	6	5
200	6	4	2	6	2	3	7	4	3
400	4	0	0	1	∠ 0	2	2	<u> </u>	<u> </u>
500	1	1	4	2	2	1	- 0	2	2
600	4	8	7	9	7	5	5	6	7
700	4	107	165	207	198	175	23	126	170
800	13	151	150	166	137	143	28	113	149
900	31 /1	66	82 65	89 60	94	99 75	58 71	/b 65	89 60
1100	82	95	70	81	81	86	107	86	83
1200	90	120	74	86	99	94	106	96	95
1300	89	236	131	148	260	141	110	159	183
1400	88	243	165	83	110	160	82	133	152
1500	83	113	192	355	230	217	106	185	221
1600	84	158	225	146	162	218	128	160	182
1700	00 55	14∠ 170	102 106	218	217	104	95	150	1/4
1900	62	129	171	141	138	81	79	114	132
2000	50	69	94	104	94	91	66	81	90
2100	32	41	72	86	118	100	43	70	83
2200	15	30	26	37	86	47	33	39	45
2300	11	14	15	22	13	23	27	18	17
2400	5	5	8	7	6	20	11	9	9
lotals	942	1989	2104	2231	2349	2064	1340	1860	2147
AM Peak Hr	12:00	8:00	7:00	7:00	7:00	7:00	11:00	7:00	7:00
AM Count	90	151	165	207	198	175	107	126	170
PM Peak Hr	1:00	2:00	4:00	3:00	1:00	4:00	5:00	3:00	3:00
PM Count	89	243	225	355	260	218	140	185	221

TOTAL ADT: 4,213



22-0110 L 107 of 138

Intersection

Int Delay, s/veh

Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		t,			ŧ
Traffic Vol, veh/h	27	15	303	16	8	474
Future Vol, veh/h	27	15	303	16	8	474
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	-	-	-	-	-
Veh in Median Storage	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	16	329	17	9	515

Major/Minor	Minor1	N	/lajor1	М	ajor2		
Conflicting Flow All	871	338	0	0	346	0	
Stage 1	338	-	-	-	-	-	
Stage 2	533	-	-	-	-	-	
Critical Hdwy	6.42	6.22	-	-	4.12	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	-	- 2	2.218	-	
Pot Cap-1 Maneuver	322	704	-	-	1213	-	
Stage 1	722	-	-	-	-	-	
Stage 2	588	-	-	-	-	-	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	319	704	-	-	1213	-	
Mov Cap-2 Maneuver	319	-	-	-	-	-	
Stage 1	722	-	-	-	-	-	
Stage 2	582	-	-	-	-	-	
-							

Approach	WB	NB	SB
HCM Control Delay, s	15.3	0	0.1
HCMLOS	С		

Minor Lane/Major Mvmt	NBT	NBRWBL	.n1	SBL	SBT	
Capacity (veh/h)	-	- 3	896 1	1213	-	
HCM Lane V/C Ratio	-	- 0.1	15 0	.007	-	
HCM Control Delay (s)	-	- 1	5.3	8	0	
HCM Lane LOS	-	-	С	А	A	
HCM 95th %tile Q(veh)	-	-	0.4	0	-	
3.4

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			\$		٦	ef 👔		٦	ef 🕺	
Traffic Vol, veh/h	5	0	17	55	0	75	40	238	16	8	467	8
Future Vol, veh/h	5	0	17	55	0	75	40	238	16	8	467	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	150	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	18	60	0	82	43	259	17	9	508	9

Major/Minor	Minor2			Minor1			Major1		Ν	/lajor2			
Conflicting Flow All	926	893	513	894	889	268	517	0	0	276	0	0	
Stage 1	531	531	-	354	354	-	-	-	-	-	-	-	
Stage 2	395	362	-	540	535	-	-	-	-	-	-	-	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-	
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-	
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-	
Pot Cap-1 Maneuver	249	281	561	262	282	771	1049	-	-	1287	-	-	
Stage 1	532	526	-	663	630	-	-	-	-	-	-	-	
Stage 2	630	625	-	526	524	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	215	268	561	244	268	771	1049	-	-	1287	-	-	
Mov Cap-2 Maneuver	215	268	-	244	268	-	-	-	-	-	-	-	
Stage 1	510	522	-	636	604	-	-	-	-	-	-	-	
Stage 2	540	599	-	505	520	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	14.3	18.7	1.2	0.1	
HCM LOS	В	С			

Minor Lane/Major Mvmt	NBL	NBT	NBR I	EBLn1V	VBLn1	SBL	SBT	SBR
Capacity (veh/h)	1049	-	-	411	403	1287	-	-
HCM Lane V/C Ratio	0.041	-	-	0.058	0.351	0.007	-	-
HCM Control Delay (s)	8.6	-	-	14.3	18.7	7.8	-	-
HCM Lane LOS	А	-	-	В	С	А	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	1.5	0	-	-

	1	*	1	1	1	ŧ
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	۲	1	1	1	7	↑
Traffic Volume (veh/h)	175	71	214	80	113	443
Future Volume (veh/h)	175	71	214	80	113	443
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	190	77	233	87	123	482
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	0	0	613	519	186	1220
Arrive On Green	0.00	0.00	0.33	0.33	0.10	0.65
Sat Flow, veh/h	0		1870	1585	1781	1870
Grn Volume(v) veh/h	0.0		233	87	123	482
Grn Sat Flow(s) veh/h/ln	0.0		1870	1585	1781	1870
O[Serve(a, s)] s			16	0.6	1 1	20
$Cycle \cap Clear(a, c) \leq c$			1.0	0.0	1.1	2.0
Pron In Lane			1.0	1 00	1.0	2.0
Lane Grn Can(c) veh/h			613	510	186	1220
V/C Ratio(X)			0 38	0 17	001 0.66	0.40
$\Delta vail Can(c, a) vah/h$			3530	2000	0.00	1567
HCM Platoon Patio			1 00	1 00	1 00	1 00
Linstroam Filter/I)			1.00	1.00	1.00	1.00
Uniform Delay (d) shuch			1.00	2.0	7 1	1.00
Iner Deley (d2), s/ven			4.2	J.9	1.1	1.3
Inci Delay (02), s/ven			0.1	0.1	1.5	0.1
			0.0	0.0	0.0	0.0
Merce Marce Dalars (0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh				1.0	0.5	
LnGrp Delay(d),s/veh			4.4	4.0	8.5	1.4
LINGIPLOS			A	A	A	A
Approach Vol, veh/h			320			605
Approach Delay, s/veh			4.3			2.9
Approach LOS			A			A
Timer - Assigned Phs	1	2				6
Phs Duration (G+Y+Rc), s	5.3	11.1				16.4
Change Period (Y+Rc), s	3.6	5.7				5.7
Max Green Setting (Gmax), s	9.0	31.0				40.0
Max Q Clear Time (q c+l1), s	3.1	3.6				4.0
Green Ext Time (p_c), s	0.0	0.5				1.0
Interportion Cummon						
HCM 6th Ctrl Delay			3.3			
HCM 6th LOS			A			

Notes

User approved pedestrian interval to be less than phase max green.

Scenario 1 6:45 pm 10/07/2020 Baseline

Synchro 11 Report Page 3

22-0110 L 111 of 138

Intersection

Int Delay, s/veh	0.6							
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	Y		t,			÷.		
Traffic Vol, veh/h	12	19	615	36	12	492		
Future Vol, veh/h	12	19	615	36	12	492		
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	-	-	-	-	-		
Veh in Median Storage	, # 0	-	0	-	-	0		
Grade, %	0	-	0	-	-	0		
Peak Hour Factor	92	92	92	92	92	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	13	21	668	39	13	535		

Major/Minor	Minor1	Ν	/lajor1	N	1ajor2				
Conflicting Flow All	1249	688	0	0	707	0			
Stage 1	688	-	-	-	-	-			
Stage 2	561	-	-	-	-	-			
Critical Hdwy	6.42	6.22	-	-	4.12	-			
Critical Hdwy Stg 1	5.42	-	-	-	-	-			
Critical Hdwy Stg 2	5.42	-	-	-	-	-			
Follow-up Hdwy	3.518	3.318	-	- 1	2.218	-			
Pot Cap-1 Maneuver	191	446	-	-	891	-			
Stage 1	499	-	-	-	-	-			
Stage 2	571	-	-	-	-	-			
Platoon blocked, %			-	-		-			
Mov Cap-1 Maneuver	187	446	-	-	891	-			
Mov Cap-2 Maneuver	187	-	-	-	-	-			
Stage 1	499	-	-	-	-	-			
Stage 2	559	-	-	-	-	-			

Approach	WB	NB	SB
HCM Control Delay, s	19	0	0.2
HCM LOS	С		

Minor Lane/Major Mvmt	NBT	NBRWI	BLn1	SBL	SBT	
Capacity (veh/h)	-	-	290	891	-	
HCM Lane V/C Ratio	-	- C).116	0.015	-	
HCM Control Delay (s)	-	-	19	9.1	0	
HCM Lane LOS	-	-	С	Α	А	
HCM 95th %tile Q(veh)	-	-	0.4	0	-	

3.3

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			\$		٦	4î		٢	4î	
Traffic Vol, veh/h	8	0	25	34	0	38	29	586	87	63	438	6
Future Vol, veh/h	8	0	25	34	0	38	29	586	87	63	438	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	200	-	-	150	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	27	37	0	41	32	637	95	68	476	7

Major/Minor	Minor2			Minor1			Major1		Ν	lajor2			
Conflicting Flow All	1385	1412	480	1378	1368	685	483	0	0	732	0	0	
Stage 1	616	616	-	749	749	-	-	-	-	-	-	-	
Stage 2	769	796	-	629	619	-	-	-	-	-	-	-	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-	
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-	
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	- 1	2.218	-	-	
Pot Cap-1 Maneuver	121	138	586	122	147	448	1080	-	-	873	-	-	
Stage 1	478	482	-	404	419	-	-	-	-	-	-	-	
Stage 2	394	399	-	470	480	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	101	123	586	107	131	448	1080	-	-	873	-	-	
Mov Cap-2 Maneuver	101	123	-	107	131	-	-	-	-	-	-	-	
Stage 1	464	444	-	392	406	-	-	-	-	-	-	-	
Stage 2	347	387	-	413	443	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2	101 101 464 347	123 123 444 387	586 - -	107 107 392 413	131 131 406 443	448 - -	1080 - -	-	- - -	873 - -	- - -	- - -	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	20.3	39.9	0.3	1.2	
HCM LOS	С	E			

Minor Lane/Major Mvmt	NBL	NBT	NBR I	EBLn1V	VBLn1	SBL	SBT	SBR
Capacity (veh/h)	1080	-	-	271	179	873	-	-
HCM Lane V/C Ratio	0.029	-	-	0.132	0.437	0.078	-	-
HCM Control Delay (s)	8.4	-	-	20.3	39.9	9.5	-	-
HCM Lane LOS	А	-	-	С	Е	А	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	2	0.3	-	-

Movement WBL WBR NBT NBR SBL SBT Lane Configurations 1		1	*	1	1	4	ŧ
Lane Configurations 1 1 1 1 1 1 1 Traffic Volume (veh/h) 148 98 576 206 96 457 Initial Q (Qb), veh 0 <td< th=""><th>Movement</th><th>WBL</th><th>WBR</th><th>NBT</th><th>NBR</th><th>SBL</th><th>SBT</th></td<>	Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Volume (veh/h) 148 98 576 206 96 457 Future Volume (veh/h) 148 98 576 206 96 457 Initial Q (Qb), veh 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 Ped-Bike Adj(A_pbT) 1870 1870 1870 1870 1870 1870 1870 Adj Flow Rate, veh/h 161 107 626 224 104 497 Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 Peak Hour Factor 0.00 0.00 0.45 0.45 0.09 0.71 Sat Flow, veh/h 0 1870 1885 1781 1870 Srp Volume(v), veh/h 0.0 626 224 104 497 Srp Volume(v), veh/h 0.0 626 224 104 497 Srp Volume(v), veh/h 0.0 0.85 708 156 1381 Srp Vat	Lane Configurations	٦	1	1	1	7	1
Future Volume (veh/h) 148 98 576 206 96 457 Initial Q (Qb), veh 0 0 0 0 0 0 Ped-Bike Adj(A_pbT) 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 Work Zone On Approach No No No No No Adj Sat Flow, veh/h/In 1870 1870 1870 1870 1870 1870 Yeach Hour Factor 0.92 0.92 0.92 0.92 0.92 2	Traffic Volume (veh/h)	148	98	576	206	96	457
Initial Q (Qb), veh 0 0 0 0 0 0 0 Ped-Bike Adj(A_pbT) 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 Work Zone On Approach No No No No No Adj Sat Flow, veh/h/In 1870 1870 1870 1870 1870 Adj Flow Rate, veh/h 161 107 626 224 104 497 Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 Cap, veh/h 0 0 835 708 156 1336 Arrive On Green 0.00 0.00 0.45 0.45 0.09 0.71 Sat Flow, veh/h 0 1870 1585 1781 1870 Sat Flow(s), veh/h/in 1870 1585 1781 1870 Qserve(g_s), s 5.6 1.8 1.1 2.1	Future Volume (veh/h)	148	98	576	206	96	457
Ped-Bike Adj(A_pbT) 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 Work Zone On Approach No No No No No Adj Sat Flow, veh/h/In 1870 1870 1870 1870 1870 1870 Adj Flow Rate, veh/h 161 107 626 224 104 497 Peak Hour Factor 0.92 0.92 0.92 0.92 0.92 0.92 Precent Heavy Veh, % 2 <td>Initial Q (Qb), veh</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	Initial Q (Qb), veh	0	0	0	0	0	0
Parking Bus, Adj 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 No Adj Sat Flow, veh/h/ln 1870	Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Work Zone On Åpproach No No No Adj Sat Flow, veh/h/ln 1870	Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln 1870 1871 1870 363 1871 1870 363 1871 1870 363 1871 1870 363 3747 1870 357 56 1.8 1.1 2.1 2.1 210 100 1.00 1.00 1.00	Work Zone On Approach	No		No			No
Adj Flow Rate, veh/h 161 107 626 224 104 497 Peak Hour Factor 0.92	Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Peak Hour Factor 0.92 0.83 708 156 1336 0.11 1870 356 1.8 1.1 2.1 0.02 0.02 0.03 0.03 0.1 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Adj Flow Rate, veh/h	161	107	626	224	104	497
Percent Heavy Veh, % 2 2 2 2 2 2 2 2 Cap, veh/h 0 0 835 708 156 1336 Arrive On Green 0.00 0.00 0.45 0.45 0.09 0.71 Sat Flow, veh/h 0 1870 1585 1781 1870 Grp Volume(V), veh/h 0.0 626 224 104 497 Grp Sat Flow(s), veh/h/n 1870 1585 1781 1870 Q Serve(g_s), s 5.6 1.8 1.1 2.1 Cycle Q Clear(g_c), s 5.6 1.8 1.1 2.1 Prop In Lane 1.00 1.00 1.00 1.00 Lane Grp Cap(c), veh/h 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 <t< td=""><td>Peak Hour Factor</td><td>0.92</td><td>0.92</td><td>0.92</td><td>0.92</td><td>0.92</td><td>0.92</td></t<>	Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Cap, veh/h 0 0 835 708 156 1336 Arrive On Green 0.00 0.00 0.45 0.45 0.09 0.71 Sat Flow, veh/h 0 1870 1585 1781 1870 Grp Volume(v), veh/h 0.0 626 224 104 497 Grp Sat Flow(s), veh/h/In 1870 1585 1781 1870 Q Serve(g_s), s 5.6 1.8 1.1 2.1 Cycle Q Clear(g_c), s 5.6 1.8 1.1 2.1 Prop In Lane 1.00 1.00 1.00 Lane Grp Cap(c), veh/h 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 Jpstream Filter(I) 1.00 1.00 1.00 1.00 Jniform Delay (d), s/veh 0.5 0.1	Percent Heavy Veh. %	2	2	2	2	2	2
Arrive On Green 0.0 0.00 0.45 0.45 0.45 0.45 Sat Flow, veh/h 0 1870 1585 1781 1870 Grp Volume(V), veh/h 0.0 626 224 104 497 Grp Sat Flow(s), veh/h/ln 1870 1585 1781 1870 Q Serve(g_s), s 5.6 1.8 1.1 2.1 Cycle Q Clear(g_c), s 5.6 1.8 1.1 2.1 Prop In Lane 1.00 1.00 1.00 1.00 _ane Grp Cap(c), veh/h 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 Jpstream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00 Jnifal Q Delay(d3), s/veh 0.5 0.1 1.8 0.1 0.1 0.0 0.0	Cap. veh/h	0	0	835	708	156	1336
Antice Listen Oto of the strict St	Arrive On Green	0.00	0.00	0.45	0.45	0.09	0 71
Cash (S) Construction Construction <td>Sat Flow, veh/h</td> <td>0.00</td> <td>0.00</td> <td>1870</td> <td>1585</td> <td>1781</td> <td>1870</td>	Sat Flow, veh/h	0.00	0.00	1870	1585	1781	1870
Grp Sat Flow(s),veh/h/ln 0.0 0.0 0.0 1870 1585 1781 1870 Q Serve(g_s), s 5.6 1.8 1.1 2.1 Cycle Q Clear(g_c), s 5.6 1.8 1.1 2.1 Prop In Lane 1.00 1.00 ane Grp Cap(c), veh/h 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 Jpstream Filter(I) 1.00 1.00 1.00 1.00 1.00 Jniform Delay (d), s/veh 4.6 3.6 8.8 1.1 ncr Delay (d2), s/veh 0.1 0.0 0.0 0.0 Jnig Delay(d3), s/veh 0.1 0.0 0.2 0.0 Jnsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d), s/veh 5.1 3.7 10.6 1.2 _nGrp LOS A A B A	Grn Volume(v), voh/h	0.0		676	204	10/	/07
Gr p Sat From(s), veh/him 1870 1870 1870 1870 Q Serve(g_s), s 5.6 1.8 1.1 2.1 Cycle Q Clear(g_c), s 5.6 1.8 1.1 2.1 Prop In Lane 1.00 1.00 1.00 Lane Grp Cap(c), veh/h 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 Jpstream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00 Jniform Delay (d), s/veh 0.5 0.1 1.8 0.1 1.11 0.1 0.0 0.0 0.0 Jile BackOfQ(50%), veh/ln 0.1 0.0<	Crp Set Elow(a) yeh/h/h	0.0		1070	1505	1704	497
Cycle Q Clear(g_c), s 5.0 1.0 1.1 2.1 Cycle Q Clear(g_c), s 5.6 1.8 1.1 2.1 Prop In Lane 1.00 1.00 1.00 Lane Grp Cap(c), veh/h 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 Jpstream Filter(I) 1.00 1.00 1.00 1.00 1.00 Jniform Delay (d), s/veh 0.5 0.1 1.8 0.1 0.0 0.0 0.0 Jusig. Movement Delay, s/veh 0.1 0.0 0.0 0.0 0.0 0.0 Indig Delay(d),s/veh 5.1 3.7 10.6 1.2 InGrp Delay(d),s/veh 5.1 3.7 10.6 1.2 InGrp Delay(d),s/veh 5.1 3.7 10.6 1.2 InGrp Delay(d),s/veh 4.7 2.8 A A				10/0	1000	1/01	10/0
Cycle Q Clear(g_C), s 5.6 1.8 1.1 2.1 Prop In Lane 1.00 1.00 1.00 1.00 Lane Grp Cap(c), veh/h 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 Jpstream Filter(I) 1.00 1.00 1.00 1.00 1.00 Jniform Delay (d), s/veh 4.6 3.6 8.8 1.1 ncr Delay (d2), s/veh 0.5 0.1 1.8 0.1 Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 Jnig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d), s/veh 5.1 3.7 10.6 1.2 _nGrp Delay, dy, s/veh 4.7 2.8 Approach LOS A A Approach LOS A 1.6 20.0 Ch	Q Serve(g_s), s			5.0	1.ŏ	1.1	2.1
Prop in Lane 1.00 1.00 Lane Grp Cap(c), veh/h 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 Jpstream Filter(I) 1.00 1.00 1.00 1.00 1.00 Jpstream Filter(I) 1.00 1.00 1.00 1.00 1.00 Jniform Delay (d), s/veh 4.6 3.6 8.8 1.1 ncr Delay (d2), s/veh 0.5 0.1 1.8 0.1 nitial Q Delay(d3), s/veh 0.1 0.0 0.0 0.0 Jnie BackOfQ(50%), veh/ln 0.1 0.0 0.2 0.0 Jnsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d), s/veh 5.1 3.7 10.6 1.2 _nGrp LOS A A B A Approach LOS A 1.7 2.8 Approach LOS 14.6	Cycle Q Clear(g_c), s			5.6	1.8	1.1	2.1
Lane Grp Cap(c), ven/n 835 708 156 1336 V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 1.00 1.00 1.00 1.00 1.00 Upstream Filter(I) 1.00 1.00 1.00 1.00 1.00 Jniform Delay (d), s/veh 4.6 3.6 8.8 1.1 ncr Delay (d2), s/veh 0.5 0.1 1.8 0.1 Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 Jnsig. Movement Delay, s/veh 0.1 0.0 0.2 0.0 Jnsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d), s/veh 5.1 3.7 10.6 1.2 _nGrp LOS A A B A Approach Vol, veh/h 850 601 4.7 2.8 Approach LOS A A A A Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s<	Prop In Lane			005	1.00	1.00	4000
V/C Ratio(X) 0.75 0.32 0.66 0.37 Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 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 Upstream Filter(I) 1.00 1.00 1.00 1.00 1.00 1.00 Upstream Filter(I) 0.5 0.1 1.8 0.1 0.0 1.00 1.00 Upstream Filter(I) 0.0 1.0 <td>Lane Grp Cap(c), veh/h</td> <td></td> <td></td> <td>835</td> <td>708</td> <td>156</td> <td>1336</td>	Lane Grp Cap(c), veh/h			835	708	156	1336
Avail Cap(c_a), veh/h 2904 2461 803 3747 HCM Platoon Ratio 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 Uniform Delay (d), s/veh 4.6 3.6 8.8 1.1 Incr Delay (d2), s/veh 0.5 0.1 1.8 0.1 Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 %ile BackOfQ(50%), veh/ln 0.1 0.0 0.2 0.0 Jnsig. Movement Delay, s/veh	V/C Ratio(X)			0.75	0.32	0.66	0.37
HCM Platoon Ratio 1.00 1.00 1.00 1.00 Upstream Filter(I) 1.00 1.00 1.00 1.00 Uniform Delay (d), s/veh 4.6 3.6 8.8 1.1 Incr Delay (d2), s/veh 0.5 0.1 1.8 0.1 Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 %ile BackOfQ(50%), veh/ln 0.1 0.0 0.2 0.0 Jnsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d), s/veh 5.1 3.7 10.6 1.2 _nGrp LOS A A B A Approach Vol, veh/h 850 601 Approach LOS A A A Approach LOS A A A Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Max Q Clear Time (p_c), s 0.0 1.4 1.0 Intersection Summary 1.0 1.0	Avail Cap(c_a), veh/h			2904	2461	803	3747
Upstream Filter(I) 1.00 1.00 1.00 1.00 Uniform Delay (d), s/veh 4.6 3.6 8.8 1.1 Incr Delay (d2), s/veh 0.5 0.1 1.8 0.1 Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 %ile BackOfQ(50%),veh/In 0.1 0.0 0.2 0.0 Jnsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d),s/veh 5.1 3.7 10.6 1.2 _nGrp LOS A A B A Approach Vol, veh/h 850 601 Approach LOS A A A Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Vax Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 1.0 1.0 1.0 Atersection Summary 3.9 1.0	HCM Platoon Ratio			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh 4.6 3.6 8.8 1.1 Incr Delay (d2), s/veh 0.5 0.1 1.8 0.1 Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 %ile BackOfQ(50%), veh/ln 0.1 0.0 0.2 0.0 Jnsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d), s/veh 5.1 3.7 10.6 1.2 _nGrp LOS A A B A Approach Vol, veh/h 850 601 Approach LOS A A A Fimer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Vax Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (p_c), s 0.0 1.4 1.0 Intersection Summary 1.0 1.0 1.0 Intersection Summary 3.9 1.0 A ICM 6th Ctrl Delay 3.9 1.0 A	Upstream Filter(I)			1.00	1.00	1.00	1.00
Incr Delay (d2), s/veh 0.5 0.1 1.8 0.1 Initial Q Delay(d3), s/veh 0.0 0.0 0.0 0.0 %ile BackOfQ(50%), veh/ln 0.1 0.0 0.2 0.0 Unsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d), s/veh 5.1 3.7 10.6 1.2 _nGrp LOS A A B A Approach Vol, veh/h 850 601 Approach LOS A A A Fimer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Vax Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (p_c), s 0.0 1.4 1.0 Intersection Summary 1.0 1.4 1.0 Intersection Summary 3.9 1.0 A	Uniform Delay (d), s/veh			4.6	3.6	8.8	1.1
Initial Q Delay(d3),s/veh 0.0 0.0 0.0 0.0 %ile BackOfQ(50%),veh/ln 0.1 0.0 0.2 0.0 Unsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d),s/veh 5.1 3.7 10.6 1.2 _nGrp Delay(d),s/veh A A B A Approach Vol, veh/h 850 601 Approach Delay, s/veh 4.7 2.8 Approach LOS A A A Timer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Vax Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (p_c), s 0.0 1.4 1.0 Intersection Summary 1.2 1.4 1.0 Intersection Summary 3.9 1.2 A ICM 6th Ctrl Delay 3.9 1.2 A	Incr Delay (d2), s/veh			0.5	0.1	1.8	0.1
%ile BackOfQ(50%),veh/In 0.1 0.0 0.2 0.0 Unsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 LnGrp Delay(d),s/veh 5.1 3.7 10.6 1.2 _nGrp LOS A A B A Approach Vol, veh/h 850 601 Approach Delay, s/veh 4.7 2.8 Approach LOS A A Fimer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 3.9 400 1.4 1CM 6th Ctrl Delay 3.9 1.4	Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh 5.1 3.7 10.6 1.2 LnGrp Dolay(d), s/veh 5.1 3.7 10.6 1.2 LnGrp LOS A A B A Approach Vol, veh/h 850 601 Approach Delay, s/veh 4.7 2.8 Approach LOS A A Timer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 3.9 1.2 1.0 ICM 6th Ctrl Delay 3.9 3.9 1.2 ICM 6th LOS A A 1.0	%ile BackOfQ(50%),veh/ln			0.1	0.0	0.2	0.0
LnGrp Delay(d),s/veh 5.1 3.7 10.6 1.2 LnGrp LOS A A B A Approach Vol, veh/h 850 601 Approach Delay, s/veh 4.7 2.8 Approach LOS A A Timer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 3.9 1.2 6 ICM 6th Ctrl Delay 3.9 3.9 1.2	Unsig. Movement Delay, s/veh						
Andress Andress <t< td=""><td>LnGrp Delav(d).s/veh</td><td></td><td></td><td>5.1</td><td>3.7</td><td>10.6</td><td>1.2</td></t<>	LnGrp Delav(d).s/veh			5.1	3.7	10.6	1.2
Approach Vol, veh/h 850 601 Approach Delay, s/veh 4.7 2.8 Approach LOS A A Timer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Vax Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 3.9	LnGrp LOS			A	A	В	А
Approach Delay, s/veh 4.7 2.8 Approach LOS A A Timer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 3.9 3.9 1/2 1CM 6th Ctrl Delay 3.9 1/2 A	Approach Vol. veh/h			850			601
Approach LOS A A Approach LOS A A Timer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 3.9	Approach Delay, s/yeb			17			2.8
Timer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Vax Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 1.0 1.0 1.0 ICM 6th Ctrl Delay 3.9 1.9 1.0	Approach LOS			4.7			2.0
Timer - Assigned Phs 1 2 6 Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Max Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 3.9	Approach LOS			A			A
Phs Duration (G+Y+Rc), s 5.4 14.6 20.0 Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Max Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary 3.9	Timer - Assigned Phs	1	2				6
Change Period (Y+Rc), s 3.6 5.7 5.7 Max Green Setting (Gmax), s 9.0 31.0 40.0 Max Q Clear Time (g_c+l1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary	Phs Duration (G+Y+Rc), s	5.4	14.6				20.0
Max Green Setting (Gmax), s 9.0 31.0 40.0 Max Q Clear Time (g_c+l1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 Intersection Summary 3.9 3.9 ICM 6th Ctrl Delay 3.9 3.9 ICM 6th LOS A A	Change Period (Y+Rc), s	3.6	5.7				5.7
Max Q Clear Time (g_c+I1), s 3.1 7.6 4.1 Green Ext Time (p_c), s 0.0 1.4 1.0 Intersection Summary 3.9 3.9 ICM 6th LOS A A	Max Green Setting (Gmax), s	9.0	31.0				40.0
Green Ext Time (p_c), s 0.0 1.4 1.0 ntersection Summary	Max Q Clear Time (g c+l1), s	3.1	7.6				4.1
Intersection Summary 3.9 ICM 6th LOS A	Green Ext Time (n. c) s	0.0	14				1.0
Intersection Summary HCM 6th Ctrl Delay 3.9 HCM 6th LOS A		5.0	1.1				1.0
HCM 6th Ctrl Delay3.9HCM 6th LOSA	Intersection Summary						
HCM 6th LOS A	HCM 6th Ctrl Delay			3.9			
	HCM 6th LOS			А			

Notes

User approved pedestrian interval to be less than phase max green.

Scenario 1 6:45 pm 10/07/2020 Baseline

Synchro 11 Report Page 3

22-0110 L 115 of 138

Intersection

Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		ţ,			र्भ
Traffic Vol, veh/h	27	15	307	16	8	478
Future Vol, veh/h	27	15	307	16	8	478
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	-	-	-	-	-
Veh in Median Storage	, # 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	16	334	17	9	520

Major/Minor	Minor1	l	Major1	Ма	ajor2			
Conflicting Flow All	881	343	0	0	351	0		
Stage 1	343	-	-	-	-	-		
Stage 2	538	-	-	-	-	-		
Critical Hdwy	6.42	6.22	-	-	4.12	-		
Critical Hdwy Stg 1	5.42	-	-	-	-	-		
Critical Hdwy Stg 2	5.42	-	-	-	-	-		
Follow-up Hdwy	3.518	3.318	-	- 2	.218	-		
Pot Cap-1 Maneuver	317	700	-	- 1	1208	-		
Stage 1	719	-	-	-	-	-		
Stage 2	585	-	-	-	-	-		
Platoon blocked, %			-	-		-		
Mov Cap-1 Maneuver	314	700	-	- ´	1208	-		
Mov Cap-2 Maneuver	314	-	-	-	-	-		
Stage 1	719	-	-	-	-	-		
Stage 2	579	-	-	-	-	-		

Approach	WB	NB	SB
HCM Control Delay, s	15.4	0	0.1
HCMLOS	С		

Minor Lane/Major Mvmt	NBT	NBRWBLr	1 SBL	SBT
Capacity (veh/h)	-	- 39	1 1208	-
HCM Lane V/C Ratio	-	- 0.11	7 0.007	-
HCM Control Delay (s)	-	- 15	4 8	0
HCM Lane LOS	-	-	C A	Α
HCM 95th %tile Q(veh)	-	- 0	4 0	-

Intersection													
Int Delay, s/veh	6.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4			¢		۴	4		*	£,		
Traffic Vol, veh/h	5	0	17	91	ო	94	38	223	39	41	439	7	
Future Vol, veh/h	5	0	17	91	ო	94	38	223	39	41	439	7	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	•	•	None	1	•	None	1	1	None	•	•	None	
Storage Length	•	'	'	1	•	1	200	1	•	150	•		
Veh in Median Storage, i	' #	0	'	'	0	•	•	0	•	1	0		
Grade, %	•	0	•	•	0	•	•	0	•	•	0		
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	2	0	18	66	ო	102	41	242	42	45	477	ω	
Major/Minor Mi	inor2		2	1 1		2	lajor1		2	ajor2			
Conflicting Flow All	696	937	481	925	920	263	485	0	0	284	0	0	
Stage 1	571	571	•	345	345	•	•	•	•	•	•		
Stage 2	398	366	'	580	575		'	'	'	'	'	ı	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	'	'	4.12	•		
Critical Hdwy Stg 1	6.12	5.52	'	6.12	5.52		'	'	'	'	'	ı	
Critical Hdwy Stg 2	6.12	5.52	'	6.12	5.52	ı	ı	ľ	'	'	•		
Follow-up Hdwy 3	3.518	4.018	3.318	3.518	4.018	3.318	2.218	•	1	2.218	'		
Pot Cap-1 Maneuver	233	265	585	250	271	776	1078	•	•	1278	'		
Stage 1	506	505	'	671	636	•	•	•	•	•	•		
Stage 2	628	623	•	500	503	'	•	•	•	1	'		
Platoon blocked, %								•	•		•		
Mov Cap-1 Maneuver	189	246	585	229	251	776	1078	1	•	1278	'		
Mov Cap-2 Maneuver	189	246	'	229	251	•	•	•	•	•	•		
Stage 1	487	487	•	646	612	•	•	•	•	•	•		
Stage 2	522	599	'	467	485	•	•	•	•	•	•		
Approach	EB			WB			NB			SB			
HCM Control Delay, s	14.7			28.2			1.1			0.7			
HCM LOS	മ												
Minor Lane/Major Mvmt		NBL	NBT	NBR E	BLn1W	/BLn1	SBL	SBT	SBR				
Capacity (veh/h)		1078	'	•	396	354	1278	'	·				
HCM Lane V/C Ratio		0.038	•	•	0.06	0.577	0.035	•	•				
HCM Control Delay (s)		8.5	'	'	14.7	28.2	7.9	'	'				
HCM Lane LOS		∢	•	•	ш		∢	•	•				
HCM 95th %tile Q(veh)		0.1	•	•	0.2	3.5	0.1	•	•				

	1	*	†	1	1	ŧ
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	۲	1	1	1	۲	↑
Traffic Volume (veh/h)	175	73	217	80	115	446
Future Volume (veh/h)	175	73	217	80	115	446
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adi Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adi Flow Rate, veh/h	190	79	236	87	125	485
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh %	2	2	2	2	2	2
Can veh/h	0	0	614	521	189	1222
Arrive On Green	0.00	0.00	0 33	0 32 1	0 11	0.65
Sat Flow, yeh/h	0.00	0.00	1870	1585	1791	1870
	0		1070	1000	1/01	1070
Grp Volume(v), veh/h	0.0		236	8/	125	485
Grp Sat Flow(s),veh/h/ln			18/0	1585	1/81	1870
Q Serve(g_s), s			1.6	0.6	1.1	2.0
Cycle Q Clear(g_c), s			1.6	0.6	1.1	2.0
Prop In Lane				1.00	1.00	
Lane Grp Cap(c), veh/h			614	521	189	1222
V/C Ratio(X)			0.38	0.17	0.66	0.40
Avail Cap(c_a), veh/h			3527	2989	975	4551
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh			4.2	3.9	7.1	1.3
Incr Delay (d2), s/veh			0.1	0.1	1.5	0.1
Initial Q Delay(d3) s/veh			0.0	0.0	0.0	0.0
% ile Back Ω f Ω (50%) veh/ln			0.0	0.0	0.0	0.0
Unsig Movement Delay, s/vet	h		0.0	0.0	0.1	0.0
LnGrn Doloy(d) c/yoh	1		11	10	86	1 /
LnGrp Los			4.4	4.0	0.0	1.4
			<u>A</u>	<u>A</u>	<u>A</u>	A
Approach Vol, veh/h			323			610
Approach Delay, s/veh			4.3			2.9
Approach LOS			A			А
Timer - Assigned Phs	1	2				6
Phs Duration (G+Y+Rc) s	53	11 1				16.4
Change Period (Y+Rc) s	3.6	5.7				5.7
Max Green Setting (Gmax) s	0.0	31.0				40.0
Max O Clear Time (g. a.l.1) a	9.0	26				40.0
(y_{c+1}) , s	3.1	3.0 0.5				4.0
Green Ext Time (p_c), s	0.0	0.5				1.0
Intersection Summary						
HCM 6th Ctrl Delay			3.4			
HCM 6th LOS			А			

Notes

User approved pedestrian interval to be less than phase max green.

Scenario 1 6:45 pm 10/07/2020 Baseline

Synchro 11 Report Page 3

Intersection

Int Delay, s/veh	2.4									
Movement	EBT	EBR	WBL	WBT	NBL	NBR				
Lane Configurations	1+			4	Y				 	
Traffic Vol, veh/h	24	56	6	125	58	3				
Future Vol, veh/h	24	56	6	125	58	3				
Conflicting Peds, #/hr	0	0	0	0	0	0				
Sign Control	Free	Free	Free	Free	Stop	Stop				
RT Channelized	-	None	-	None	-	None				
Storage Length	-	-	-	-	0	-				
Veh in Median Storage	e, # 0	-	-	0	0	-				
Grade, %	0	-	-	0	0	-				
Peak Hour Factor	92	92	92	92	92	92				
Heavy Vehicles, %	2	2	2	2	2	2				
Mvmt Flow	26	61	7	136	63	3				

Major/Minor	Major1	Major2	Min	or1						
Conflicting Flow All	0	0 87	0 2	207 57						
Stage 1	-		-	57 -						
Stage 2	-		- ′	150 -						
Critical Hdwy	-	- 4.12	- 6	.42 6.22						
Critical Hdwy Stg 1	-		- 5	.42 -						
Critical Hdwy Stg 2	-		- 5	.42 -						
Follow-up Hdwy	-	- 2.218	- 3.5	518 3.318						
Pot Cap-1 Maneuver	-	- 1509	- 7	781 1009						
Stage 1	-		- (966 -						
Stage 2	-		- 8	378 -						
Platoon blocked, %	-	-	-							
Mov Cap-1 Maneuver	r –	- 1509	- 7	777 1009						
Mov Cap-2 Maneuver	r –		- 7	- 77						
Stage 1	-		- 9	- 66						
Stage 2	-		- {	374 -						

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10
HCM LOS			В

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	786	-	-	1509	-
HCM Lane V/C Ratio	0.084	-	-	0.004	-
HCM Control Delay (s)	10	-	-	7.4	0
HCM Lane LOS	В	-	-	А	Α
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection

Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		¢Î,			د
Traffic Vol, veh/h	12	19	616	36	12	493
Future Vol, veh/h	12	19	616	36	12	493
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	-	-	-	-	-
Veh in Median Storage	,# 0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	21	670	39	13	536

Major/Minor	Minor1		Major1	N	lajor2		
Conflicting Flow All	1252	690	0	0	709	0	
Stage 1	690	-	-	-	-	-	
Stage 2	562	-	-	-	-	-	
Critical Hdwy	6.42	6.22	-	-	4.12	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	-	
Follow-up Hdwy	3.518	3.318	-	- 1	2.218	-	
Pot Cap-1 Maneuver	190	445	-	-	890	-	
Stage 1	498	-	-	-	-	-	
Stage 2	571	-	-	-	-	-	
Platoon blocked, %			-	-		-	
Mov Cap-1 Maneuver	186	445	-	-	890	-	
Mov Cap-2 Maneuver	186	-	-	-	-	-	
Stage 1	498	-	-	-	-	-	
Stage 2	559	-	-	-	-	-	

Approach	WB	NB	SB
HCM Control Delay, s	19.1	0	0.2
HCMLOS	С		

Minor Lane/Major Mvmt	NBT	NBRWBL	_n1	SBL	SBT	
Capacity (veh/h)	-	- 2	289	890	-	
HCM Lane V/C Ratio	-	- 0.1	17	0.015	-	
HCM Control Delay (s)	-	- 1	9.1	9.1	0	
HCM Lane LOS	-	-	С	А	А	
HCM 95th %tile Q(veh)	-	-	0.4	0	-	

Intersection	C 7												
IIII Delay, s/vell	4 V												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4			¢		F	\$		F	\$		
Traffic Vol, veh/h	∞	0	25	41	0	46	29	580	95	68	434	9	
Future Vol, veh/h	ω	0	25	4	0	46	29	580	95	88	434	9	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	1	'	None	•	'	None	·	•	Vone	•	'	Vone	
Storage Length	•	'	'	'	•	•	200	•	•	150	•		
Veh in Median Storage,	' #	0	1	1	0	ľ	ı	0	'	ı	0	ı	
Grade, %	١	0	•	•	0	•	ı	0	•	•	0	•	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	თ	0	27	45	0	50	32	630	103	74	472	7	
Major/Minor N	1inor2		2	1 Inor1		N	lajor1		M	ajor2			
Conflicting Flow All	1395	1421	476	1383	1373	682	479	0	0	733	0	0	
Stage 1	624	624	•	746	746	•	ı	'	'	•	1		
Stage 2	771	797	•	637	627	•	ı	•	•	•	•	•	
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	•	•	4.12	•		
Critical Hdwy Stg 1	6.12	5.52	'	6.12	5.52	•		•	'	•	•		
Critical Hdwy Stg 2	6.12	5.52	•	6.12	5.52	'	ı	'	'	•	'		
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	'	'	218	'		
Pot Cap-1 Maneuver	119	136	589	121	146	450	1083	•	•	872	•		
Stage 1	473	478	•	405	421	•	•	•	•	•	•		
Stage 2	393	399	•	465	476	•	•	•	•	•	•		
Platoon blocked, %	ļ		001	001	001		0001	•	•		•		
Mov Cap-1 Maneuver	97	121	589	106	130	450	1083	•	•	872	•		
Mov Cap-2 Maneuver	97	121	1	106	130	1	•	ľ	ľ	ľ	•		
Stage 1	459	437	•	393 406	408	•	•	•	•	•	•		
otage z	339	30/	•	400	430	•	•	•	•	•	•		
Approach	EB			WB			NB			SB			
HCM Control Delay, s	20.8			46.1			0.3			1.3			
HCM LOS	ပ			ш									
Minor Lane/Major Mvmt		NBL	NBT	NBR E	BLn1W	BLn1	SBL	SBT	SBR				
Capacity (veh/h)		1083	•	•	264	178	872	•	•				
HCM Lane V/C Ratio	-	0.029	'	'	0.136	0.531 (0.085	'	'				
HCM Control Delay (s)		8.4	•	•	20.8	46.1	9.5	•	•				
HCM Lane LOS		A	•	•	ပ	ш	۷	•	•				
HCM 95th %tile Q(veh)		0.1	1	1	0.5	2.7	0.3	•	•				

Scenario 1 6:45 pm 10/07/2020 Baseline

L

	1	*	Ť	1	1	ŧ
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	٦	1	1	1	۲	1
Traffic Volume (veh/h)	148	99	577	206	97	458
Future Volume (veh/h)	148	99	577	206	97	458
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adi Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adi Flow Rate, veh/h	161	108	627	224	105	498
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh %	2.02	2.02	2.02	2.02	0.02	0.02
Can veh/h	0	0	228	708	157	1337
Arrive On Green	0 00	0.00	0.45	0.45	0.00	0 70
	0.00	0.00	1070	1595	1704	1070
Sat riow, ven/n	0		10/0	1005	1/01	10/0
Grp Volume(v), veh/h	0.0		627	224	105	498
Grp Sat Flow(s),veh/h/ln			1870	1585	1781	1870
Q Serve(g_s), s			5.6	1.8	1.1	2.1
Cycle Q Clear(g_c), s			5.6	1.8	1.1	2.1
Prop In Lane				1.00	1.00	
Lane Grp Cap(c), veh/h			836	708	157	1337
V/C Ratio(X)			0.75	0.32	0.67	0.37
Avail Cap(c_a), veh/h			2898	2456	801	3739
HCM Platoon Ratio			1 00	1 00	1 00	1 00
Instream Filter(I)			1.00	1.00	1.00	1.00
Uniform Delay (d) s/yeb			1.00	3.6	8.8	1 1
Iner Delay (d2), s/veh			4.0	0.1	1.0	0.1
Inci Delay (u2), S/Vell			0.5	0.1	1.0	0.1
			0.0	0.0	0.0	0.0
%Ile BackOfQ(50%),ven/In			0.1	0.0	0.2	0.0
Unsig. Movement Delay, s/ver	ו					
LnGrp Delay(d),s/veh			5.1	3.7	10.6	1.2
LnGrp LOS			A	A	В	A
Approach Vol, veh/h			851			603
Approach Delay, s/veh			4.7			2.8
Approach LOS			А			А
Timer - Assigned Phe	1	2				6
		14.0				00.0
Phs Duration (G+Y+Rc), s	5.4	14.6				20.0
Change Period (Y+Rc), s	3.6	5.7				5.7
Max Green Setting (Gmax), s	9.0	31.0				40.0
Max Q Clear Time (g_c+I1), s	3.1	7.6				4.1
Green Ext Time (p_c), s	0.0	1.4				1.0
Intersection Summary						
HCM 6th Ctrl Delay			39			
HCM 6th LOS			Δ			
			А			

Notes

User approved pedestrian interval to be less than phase max green.

Scenario 1 6:45 pm 10/07/2020 Baseline

Synchro 11 Report Page 3

Intersection

Int Delay, s/veh	0.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	f,			÷	Y	
Traffic Vol, veh/h	149	14	2	70	15	1
Future Vol, veh/h	149	14	2	70	15	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage	,# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	162	15	2	76	16	1

Major/Minor	Major1	Major2	Minor1	
Conflicting Flow All	0	0 177	0 250	170
Stage 1	-		- 170	-
Stage 2	-		- 80	-
Critical Hdwy	-	- 4.12	- 6.42	6.22
Critical Hdwy Stg 1	-		- 5.42	-
Critical Hdwy Stg 2	-		- 5.42	-
Follow-up Hdwy	-	- 2.218	- 3.518	3.318
Pot Cap-1 Maneuver	-	- 1399	- 739	874
Stage 1	-		- 860	-
Stage 2	-		- 943	-
Platoon blocked, %	-	-	-	
Mov Cap-1 Maneuve	r -	- 1399	- 738	874
Mov Cap-2 Maneuve	r -		- 738	-
Stage 1	-		- 860	-
Stage 2	-		- 942	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.9
HCM LOS			А

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	745	-	-	1399	-
HCM Lane V/C Ratio	0.023	-	-	0.002	-
HCM Control Delay (s)	9.9	-	-	7.6	0
HCM Lane LOS	А	-	-	А	А
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Queues <u>3: Meder Rd & Cameron Park Dr</u>

	4	*	Ť	1	4	Ŧ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	190	77	233	87	123	482
v/c Ratio	0.41	0.16	0.39	0.15	0.38	0.50
Control Delay	16.9	5.4	15.1	4.8	22.4	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	5.4	15.1	4.8	22.4	8.8
Queue Length 50th (ft)	31	0	35	0	20	46
Queue Length 95th (ft)	104	25	125	26	95	187
Internal Link Dist (ft)	1158		1009			2407
Turn Bay Length (ft)		150		215	250	
Base Capacity (vph)	1107	1019	1566	1344	575	1736
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.08	0.15	0.06	0.21	0.28
Intersection Summary						

Queues 3: Meder Rd & Cameron Park Dr

	1	*	1	1	4	Ŧ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	161	107	626	224	104	497
v/c Ratio	0.41	0.25	0.62	0.23	0.39	0.38
Control Delay	23.4	6.7	17.1	2.9	29.5	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	6.7	17.1	2.9	29.5	6.6
Queue Length 50th (ft)	40	0	135	0	27	52
Queue Length 95th (ft)	107	33	#430	38	93	188
Internal Link Dist (ft)	1158		1009			2407
Turn Bay Length (ft)		150		215	250	
Base Capacity (vph)	916	870	1274	1153	463	1592
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.12	0.49	0.19	0.22	0.31
Intersection Summary						

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues 3: Meder Rd & Cameron Park Dr

	1	×.	1	r	1	ŧ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	190	79	236	87	125	485
v/c Ratio	0.41	0.17	0.39	0.15	0.38	0.50
Control Delay	16.9	5.4	15.1	4.8	22.5	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	5.4	15.1	4.8	22.5	8.8
Queue Length 50th (ft)	31	0	36	0	21	47
Queue Length 95th (ft)	104	25	127	26	96	188
Internal Link Dist (ft)	1158		1009			2407
Turn Bay Length (ft)		150		215	250	
Base Capacity (vph)	1104	1017	1562	1341	574	1736
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.08	0.15	0.06	0.22	0.28
Intersection Summary						

Queues 3: Meder Rd & Cameron Park Dr

	4	*	Ť	1	1	ŧ
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	161	108	627	224	105	498
v/c Ratio	0.41	0.25	0.62	0.23	0.39	0.38
Control Delay	23.4	6.6	17.2	2.9	29.6	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	6.6	17.2	2.9	29.6	6.6
Queue Length 50th (ft)	41	0	135	0	27	52
Queue Length 95th (ft)	107	33	#431	38	94	188
Internal Link Dist (ft)	1158		1009			2407
Turn Bay Length (ft)		150		215	250	
Base Capacity (vph)	915	870	1273	1152	463	1590
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.12	0.49	0.19	0.23	0.31
Intersection Summary						

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



22-0110 L 128 of 138

_____ Exist AM _____ Signal Warrant Summary Report Base MetFuture Met[Del / Vol][Del / Vol]No / NoNo / NoNo / NoNo / Yes Intersection # 1 Cam Prk / Virada # 2 Cam Prk / Mira Loma

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to kdANDERSON TRANSP.

22-0110 L 129 of 138

	Exist AM					
Peak Hour Delay Signal Warrant Report						
Intersection	Intersection #1 Cam Prk / Virada					
Base Volume A	Alternative: Peak Hour Warrant NOT Met					
Approach: Movement:	North Bound South Bound East Bound L - T - R L - T - R L - T - R	- West Bound L - T - R				
Control: Lanes: Initial Vol: ApproachDel:	Stop Sign Stop Sign Uncontrolled 0 0 1 0	Uncontrolled 0 0 1! 0 0 27 0 15 xxxxxx				
Approach[nort Signal Warrar FAIL - Veł Signal Warrar SUCCEED - Signal Warrar SUCCEED -	thbound][lanes=1][control=Stop Sign] nt Rule #1: [vehicle-hours=1.1] hicle-hours less than 4 for one lane approach. nt Rule #2: [approach volume=319] Approach volume greater than or equal to 100 for nt Rule #3: [approach count=3][total volume=843] Total volume greater than or equal to 650 for in with less than four approaches.	one lane approach.				
Approach[sout Signal Warrar FAIL - Veb Signal Warrar SUCCEED - Signal Warrar SUCCEED -	thbound][lanes=1][control=Stop Sign] nt Rule #1: [vehicle-hours=2.1] hicle-hours less than 4 for one lane approach. nt Rule #2: [approach volume=482] Approach volume greater than or equal to 100 for nt Rule #3: [approach count=3][total volume=843] Total volume greater than or equal to 650 for in with less than four approaches.	one lane approach. tersection				
Peak Hour Volume Signal Warrant Report [Rural] ************************************						
Approach: Movement:	North Bound South Bound East Bound L - T - R L - T - R L - T - R	West Bound L - T - R				
Control: Lanes: Initial Vol:	Stop Sign Stop Sign Uncontrolled 0 0 1 0	Uncontrolled 0 0 1! 0 0 27 0 15				
Major Street Minor Approac Minor Approac	Volume: 42 ch Volume: 482 ch Volume Threshold: 621	111				
SIGNAL WARRAN This peak hou	NT DISCLAIMER ur signal warrant analysis should be considered se	olely as an				

"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

_____ Exist + Project AM _____ Peak Hour Delay Signal Warrant Report Intersection #1 Cam Prk / Virada Future Volume Alternative: Peak Hour Warrant NOT Met Approach:North BoundSouth BoundEast BoundWest BoundMovement:L - T - RL - T - RL - T - RL - T - R

 Control:
 Stop Sign
 Stop Sign
 Uncontrolled
 Uncontrolled

 Lanes:
 0
 0
 1
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 1!
 0

 Initial Vol:
 0
 307
 16
 8
 478
 0
 0
 0
 27
 0
 15

 ApproachDel:
 12.2
 15.8
 xxxxxx
 xxxxxx
 xxxxxx
 xxxxxx

 Approach[northbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=1.1] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=323] SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=851] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches. _____ Approach[southbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=2.1] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=486] SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=851] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches. _____ _____ Peak Hour Volume Signal Warrant Report [Rural] Intersection #1 Cam Prk / Virada Future Volume Alternative: Peak Hour Warrant NOT Met Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R
 Control:
 Stop Sign
 Stop Sign
 Uncontrolled
 Uncontrolled

 Lanes:
 0
 0
 1
 0
 0
 0
 0
 0
 1
 0
 Initial Vol: 0 307 16 8 478 0 0 0 0 27 0 15 Major Street Volume: 42 Minor Approach Volume: 486 Minor Approach Volume Threshold: 621 _____ SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an

"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

		Exist	AM					
	Peak Hou	r Delay Sig	nal War:	rant Repor	 t			
Intersection	**************************************	**************************************	******	* * * * * * * * * * * *	* * * * * * * *	*****	******	****
Base Volume A	Alternative: Peak	Hour Warra	nt NOT I	Met				
Approach: Movement:	 North Bound L - T - R	 South Bc L - T	+ und - R	East Bo L - T	 und - R 	 Wes L -	 t Boun T -	 d R
Control: Lanes: Initial Vol: ApproachDel:	Stop Sign 1 0 0 1 0 40 238 16 14.5	Stop Si 1 0 0 8 467 20.2	gn 1 0 8	Uncontro 0 0 1! 5 0 xxxxxx	lled '' 0 0 17	Unco 0 0 55 xxx	ntroll 1!0 0 xxx	ed 0 75
Approach[nor Signal Warran FAIL - Vel Signal Warran SUCCEED - Signal Warran SUCCEED -	ht Rule #1: [vehi hicle-hours less ht Rule #2: [appr Approach volume ht Rule #3: [appr Total volume gre with four or mor	<pre>[control=St cle-hours=1 than 5 for coach volume >= 150 for coach count= cater than coache e approache</pre>	op Sign .2] two or n =294] two or n 4][tota: r equal s.	nore lane nore lane l volume=9 to 800 fo	approac approac 29] r inter	h. h. sectio	n 	
Approach[sout Signal Warran FAIL - Vel Signal Warran SUCCEED - Signal Warran SUCCEED -	thbound][lanes=2] ht Rule #1: [vehi hicle-hours less ht Rule #2: [appr Approach volume ht Rule #3: [appr Total volume gre with four or mor	[control=St cle-hours=2 than 5 for oach volume >= 150 for oach count= ater than c e approache	op Sign .7] two or n =483] two or n 4][tota r equal s.] more lane more lane l volume=9 to 800 fo	approac approac 29] r inter	h. h. sectio 	n 	
	Peak Hour Vol	ume Signal	 Warrant	Report [R	ural]			
**************************************	**************************************	**************************************	**************************************	*********** *********** Met	* * * * * * * *	******	*****	* * * *
Approach: Movement:	 North Bound L - T - R	South Bc L - T	' und - R !	East Bo L - T	 und - R 	Wes L -	t Boun T -	 d R
Control: Lanes: Initial Vol:	Stop Sign 1 0 0 1 0 40 238 16	Stop Si 1 0 0 8 467	gn 1 0 8	Uncontro 0 0 1! 5 0	lled '' 0 0 17	Unco 0 0 55	ntroll 1! 0 0	ed 0 75
Major Street Minor Approad Minor Approad	Volume: Ch Volume: Ch Volume Thresho	152 483 1d: 535						-
SIGNAL WARRAN	NT DISCLAIMER ur signal warrant	analysis s	hould be	e consider	ed sole	ly as	 an	

"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

Exist + Project AM						
Peak Hour Delay Signal Warrant Report ************************************						
Intersection #2 Cam Prk / Mira Loma						
Future Volume Alternative: Peak Hour Warrant NOT Met						
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R						
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Lanes: 1 0 0 1 0 1 0 0 1 0 0 0 0 1! 0 0 0 0 1! 0 0 Initial Vol: 38 223 39 41 439 7 5 0 17 91 3 94 ApproachDel: 16.5 24.2 xxxxx x xxxxx 						
<pre>Approach[southbound][lanes=2][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=3.3] FAIL - Vehicle-hours less than 5 for two or more lane approach. Signal Warrant Rule #2: [approach volume=487] SUCCEED - Approach volume >= 150 for two or more lane approach. Signal Warrant Rule #3: [approach count=4][total volume=997] SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.</pre>						
Peak Hour Volume Signal Warrant Report [Rural] ************************************						
Future Volume Alternative: Peak Hour Warrant Met						
Control: Stop Sign Stop Sign Uncontrolled Lanes: 1 0 1 0 1 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 1! 0 0 1! 0 0 1! 0 0 1! 0 0 1! 0 0 1! 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 0 1!						
Major Street Volume: 210 Minor Approach Volume: 487 Minor Approach Volume Threshold: 466						
SIGNAL WARRANT DISCLAIMER						

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

Exist PM _____ Signal Warrant Summary Report

In	tersection	Base Met	Future Met
		[Del / Vol]	[Del / Vol]
#	1 Cam Prk / Virada	No / No	No / No
#	2 Cam Prk / Mira Loma	Yes / Yes	Yes / Yes

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to kdANDERSON TRANSP.

Exist PM		
Peak Hour Delay Signal Warra	nt Report	****
Intersection #1 Cam Prk / Virada		
Base Volume Alternative: Peak Hour Warrant NOT Me	et	*************
Approach: North Bound South Bound Movement: L - T - R L - T - R I	East Bound - T - R	West Bound L - T - R
Control: Stop Sign Stop Sign Lanes: 0 0 1 0 0 0 Initial Vol: 0 615 36 12 492 0 ApproachDel: 21.1 16.5	Uncontrolled 0 0 0 0 0 0 0 0 xxxxxx	Uncontrolled 0 0 1! 0 0 12 0 19 xxxxxx
Approach[northbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=3.8] FAIL - Vehicle-hours less than 4 for one lane Signal Warrant Rule #2: [approach volume=651] SUCCEED - Approach volume greater than or equa Signal Warrant Rule #3: [approach count=3][total SUCCEED - Total volume greater than or equal t with less than four approaches.	approach. 1 to 100 for on volume=1186] 20 650 for inter	e lane approach. section
<pre>Approach[southbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=2.3] FAIL - Vehicle-hours less than 4 for one lane Signal Warrant Rule #2: [approach volume=504] SUCCEED - Approach volume greater than or equa Signal Warrant Rule #3: [approach count=3][total SUCCEED - Total volume greater than or equal t with less than four approaches.</pre>	approach. 1 to 100 for on volume=1186] 50 for inter	e lane approach. section
Peak Hour Volume Signal Warrant R ************************************	eport [Rural]	****
**************************************	: * * * * * * * * * * * * * * * * * * *	*****
Approach: North Bound South Bound Movement: L - T - R L - T - R I	 East Bound J - T - R	 West Bound L - T - R
Control: Stop Sign Stop Sign Lanes: 0 0 1 0 0 0 Initial Vol: 0 615 36 12 492 0	Uncontrolled 0 0 0 0 0 0 0 	Uncontrolled 0 0 1! 0 0 12 0 19
Minor Approach Volume: 651 Minor Approach Volume Threshold: 671		
SIGNAL WARRANT DISCLAIMER		

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

Exist PM

Exist + Project PM					
Peak Hour Delay Signal Warrant Report					

Future Volume Alternative: Peak Hour Warrant NOT Met					
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Lanes: 0 0 1 0 0 0 0 0					
ApproachDel: 21.2 16.6 xxxxxx xxxxxx					
<pre>Approach[northbound][lanes=1][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=3.8] FAIL - Vehicle-hours less than 4 for one lane approach. Signal Warrant Rule #2: [approach volume=652] SUCCEED - Approach volume greater than or equal to 100 for one lane approach. Signal Warrant Rule #3: [approach count=3][total volume=1188] SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.</pre>					
Peak Hour Volume Signal Warrant Report [Rural]					

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Lanes: 0 0 1 0 0 0 0 0 1 0 Initial Vol: 0 616 36 12 493 0 0 0 12 0 19					
Major Street Volume: 31 Minor Approach Volume: 652 Minor Approach Volume Threshold: 671					
SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an					

"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

Exist PM

_____ _____ Exist PM _____ Peak Hour Delay Signal Warrant Report Intersection #2 Cam Prk / Mira Loma Base Volume Alternative: Peak Hour Warrant Met Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control:Stop SignStop SignUncontrolledUncontrolledLanes:1 0 0 1 0 1 0 0 1 0 0 0 1! 0 0 0 0 1! 0 0
 Initial Vol:
 29
 586
 87
 63
 438
 6
 8
 0
 25
 34
 0
 38

 ApproachDel:
 32.0
 19.6
 xxxxxx
 xxxxxx
 xxxxxx
 Approach[northbound][lanes=2][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=6.2] SUCCEED - Vehicle-hours >= 5 for two or more lane approach. Signal Warrant Rule #2: [approach volume=702] SUCCEED - Approach volume >= 150 for two or more lane approach. Signal Warrant Rule #3: [approach count=4][total volume=1314] SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches. _____ Approach[southbound][lanes=2][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=2.8] FAIL - Vehicle-hours less than 5 for two or more lane approach. Signal Warrant Rule #2: [approach volume=507] SUCCEED - Approach volume >= 150 for two or more lane approach. Signal Warrant Rule #3: [approach count=4][total volume=1314] SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches. _____ _____ Peak Hour Volume Signal Warrant Report [Rural] Intersection #2 Cam Prk / Mira Loma Base Volume Alternative: Peak Hour Warrant Met Approach:North BoundSouth BoundEast BoundWest BoundMovement:L - T - RL - T - RL - T - RL - T - R

 Control:
 Stop Sign
 Stop Sign
 Uncontrolled
 Uncontrolled

 Lanes:
 1 0 0 1 0 1 0 1 0 0 1 0 0 0 1! 0 0 0 0 1! 0 0
 0 0 1! 0 0
 0 0 1! 0 0

 Initial Vol:
 29 586 87 63 438 6 8 0 25 34 0 38
 38

 Major Street Volume:105Minor Approach Volume:702 Minor Approach Volume Threshold: 615 _____ SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting

"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

Exist PM Sat Dec 12, 2020 10:28:27 Page 3-7 _____ Exist + Project PM _____ Peak Hour Delay Signal Warrant Report Intersection #2 Cam Prk / Mira Loma Future Volume Alternative: Peak Hour Warrant Met Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control:Stop SignStop SignUncontrolledUncontrolledLanes:1 0 0 1 0 1 0 0 1 0 0 0 1! 0 0 0 0 1! 0 0
 Initial Vol:
 29
 580
 95
 68
 434
 6
 8
 0
 25
 41
 0
 46

 ApproachDel:
 35.8
 21.4
 xxxxxx
 xxxxxx
 xxxxxx
 Approach[northbound][lanes=2][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=7.0] SUCCEED - Vehicle-hours >= 5 for two or more lane approach. Signal Warrant Rule #2: [approach volume=704] SUCCEED - Approach volume >= 150 for two or more lane approach. Signal Warrant Rule #3: [approach count=4][total volume=1332] SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches. _____ Approach[southbound][lanes=2][control=Stop Sign] Signal Warrant Rule #1: [vehicle-hours=3.0] FAIL - Vehicle-hours less than 5 for two or more lane approach. Signal Warrant Rule #2: [approach volume=508] SUCCEED - Approach volume >= 150 for two or more lane approach. Signal Warrant Rule #3: [approach count=4][total volume=1332] SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches. _____ _____ Peak Hour Volume Signal Warrant Report [Rural] Intersection #2 Cam Prk / Mira Loma Future Volume Alternative: Peak Hour Warrant Met Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R

 Control:
 Stop Sign
 Stop Sign
 Uncontrolled
 Uncontrolled

 Lanes:
 1 0 0 1 0
 1 0 0 1 0
 0 0 1! 0 0
 0 0 1! 0 0

 Initial Vol:
 29 580
 95 68 434
 6 8 0
 25 41 0 46

 Major Street Volume:120Minor Approach Volume:704 Minor Approach Volume Threshold: 586 _____ SIGNAL WARRANT DISCLAIMER This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting

"indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).