CTC-0001 (REV. 03/2023)

## ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017 PROJECT BASELINE AGREEMENT

PROJECT BASELINE AGREEMENT

Route 101-Upgrade TMS Elements at hubs & at the Los Angeles Regional Transportation Management Center (LARTMC) (07-36320)

Resolution SHOPP-P-2425-02B

(to be completed by CTC)

ı.	FUNDING PROGRAM
	Active Transportation Program
	Local Partnership Program (Competitive)
	Solutions for Congested Corridors Program
	State Highway Operation and Protection Program
	Trade Corridor Enhancement Program
2.	PARTIES AND DATE
2.1	This Project Baseline Agreement (Agreement) effective on October 17, 2024 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, Caltrans , and the Implementing Agency, Caltrans , sometimes collectively referred to as the "Parties".
3.	RECITAL
3.1	Whereas at its 3/22/2024 meeting the Commission approved the State Highway Operation and Protection Program and included in this program of projects the Route 101-Upgrade TMS Elements at hube & at the Los Art, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as <i>Exhibit A</i> , the Project Report attached hereto as <i>Exhibit B</i> , the Performance Metrics Form, if applicable, attached hereto as <i>Exhibit C</i> , as the baseline for project monitoring by the Commission.
3.2	The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.
4.	GENERAL PROVISIONS
	The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:
4.1	To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.
4.2	To adhere, as applicable, to the provisions of the Commission:
	Resolution, "Adoption of Program of Projects for the Active Transportation Program", dated
	Resolution, "Adoption of Program of Projects for the Local Partnership Program", dated
	Resolution , "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
	Resolution G-24-34 "Adoption of Program of Projects for the State Highway Operation and Protection Program",  dated 3/22/2024
	Resolution, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

Project Baseline Agreement Page 1 of 3

- 4.3 All signatories agree to adhere to the Commission's Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.
- 4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.
- 4.5 Caltrans agrees to secure funds for any additional costs of the project.
- 4.6 Caltrans agrees to report to Caltrans on a quarterly basis; on the progress made toward the implementation of the project, including scope, cost, schedule, and anticipated benefits/performance metric outcomes.
- 4.7 Caltrans agrees to prepare program progress reports on a on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.
- 4.8 Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.9 Caltrans agrees to submit a timely Project Performance Analysis as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.10 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits and performance metric outcomes during the course of the project, and retain those records for six years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.11 The Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for six years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

#### 5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost

See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope

See Project Report or equivalent, attached as <u>Exhibit B</u>. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Performance Metrics

See Performance Metrics Form, if applicable, attached as Exhibit C.

#### **Attachments:**

Exhibit A: Project Programming Request Form

Exhibit B: Project Report

Exhibit C: Performance Metrics Form (if applicable)

## SIGNATURE PAGE TO PROJECT BASELINE AGREEMENT

Project Name Roule 101-Upgrade TMS Elements at hubs & at the Los Angeles Regional Transportation Management Center (LARTMC) (07-36320)

Resolution	SHOPP-P-2425-02B	
	(to be completed by CTC)	<del></del>
David Miraansy		08/12/2024
David Miraaney		Date
Project Manager		
Project Applicant		
<b>David Yan</b> David Yan (Aug 12, 2024 19:19 PDT)		08/12/2024
David Yan		Date
Chief, Office of Program Manag	gement	
Implementing Agency		
Il Afflicte		08/19/2024
Gloria Roberts		Date
District Director		
California Department of Trans	sportation	
bul D	Cury	10/2/24
Tony Tavares		Date /
Director		
California Department of Trans	portation	
Tarty		10/31/2025
Tanisha Taylor		Date
Executive Director		

California Transportation Commission

Baseline agreement information was extracted from Caltrans' project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

#### STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

BASELINE AGRE	EMENT		Date:	09/10/24 01:11:09 PM					
District	EA	Project	ID	PPNO		Project Manager			
07	36320	0719000	312	5642	MIRAANEY, DAVID H				
Country	Doute	Begin	n End		Implementing Agency				
County	Route	Postmile	Postmile		су				
VEN	101	2.5	13.9	PA&ED		Calt	rans		
				PS&E Caltrans		rans			
				Right of Way C		Calt	rans		
				Construction Caltrans			rans		
Project Nicknam	Project Nickname								

Mobility - TMS

#### Location/Description

In Thousand Oaks and Camarillo, from 0.5 mile east of Rancho Road to 0.1 mile west of Route 34; also on Route 23 at Route 101 (PM R3.6); also in Los Angeles County, in the city of Los Angeles on Routes 134, 101, and 170 and at the Los Angeles Regional Transportation Management Center (LARTMC) at 2901 West Broadway. Upgrade Transportation Management System (TMS) elements, install fiber optic lines, and upgrade communication equipment at hubs and at the LARTMC.

#### Legislative Districts

Assembly:	44, 46, 51	Senate:	18, 19, 24, 27	Congressional:	26, 29, 34
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#### PERFORMANCE MEASURES

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Transportation	32.4%	0	67.6%	0	37	Each
	Management Systems						
	(Elements)						
Programmed Condition	Transportation	100%	0	0	0	70	Each
	Management Systems						
	(Elements)						

Project Milestone	Actual	Planned
Project Approval and Environmental Document Milestone	05/10/24	
Right of Way Certification Milestone		03/07/25
Ready to List for Advertisement Milestone		03/28/25
Begin Construction Milestone (Approve Contract)		10/24/25

#### FUNDING (Allocated amounts are shaded)

Component	Fiscal Year	SHOPP				Total
PA&ED	22/23	1,460				1,460
PS&E	23/24	4,379				4,379
RW Support	23/24	41				41
Const Support	24/25	6,931				6,931
RW Capital	24/25	104				104
Const Capital	24/25	42,254				42,254
Total		55,169				55,169

## Memorandum

To: Kelly Lamare Date: August 7, 2024

Acting Deputy District Director

Program/Project Management File: 07-363201

District 7 07-VEN-101

PID: 0719000312

From: DAVID MIRAANEY

Project Manager

District 7

#### Subject: SB1 BASELINE AGREEMENT CLARIFICATION MEMORANDUM

This memorandum is written to accompany the SB-1 Baseline Agreement for this Transportation Management Systems project on State Route 101 in Ventura and Los Angeles County. The purpose of this memorandum is to update the project milestones, and Funding table in the Project Report (PR):

• The project milestones are updated as shown in the PPR and PRSM as follows:

o M200 Planned 5/10/2024 (PPR/PRSM) 4/29/2024 (PR)

Actual 5/10/2024

M460 Planned 3/28/2025 (PPR/PRSM) 3/31/2025 (PR)

Fund Source Programming by Fiscal Year								Current Estimate (Escalated)	
20.XX.201.315	Prior	22/23	23/24	24/25	25/26	26/27	Future	Programmed Total	At PAED Total
Component	Component In thousands of dollars (\$1,000)								
PA&ED Support		\$1,460						\$1,460	\$1,460
PS&E Support			\$4,379					\$4,379	\$4,379
Right-of-Way Support			\$41					\$41	\$41
Construction Support				\$6,570				\$6,570	\$6,570 \$6,931
Right-of-Way				\$290				\$290	\$104
Construction				\$33,260				\$33,260	\$42,254
Total		\$1,460	\$4,420	\$40,120				\$46,000	\$54,900

\$55,169

If you have any questions, please contact me at (213) 760-6818.

David Miraaney

David Miraaney

8/7/2024

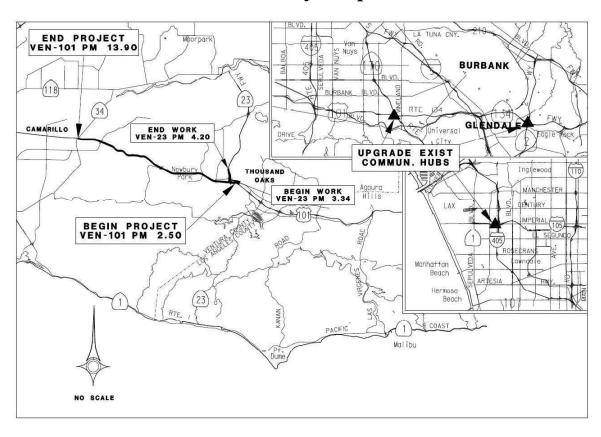
07-VEN-101-PM 2.5/13.9, 07-VEN-23-PM 3.34/4.20 LA-2-PM R18.70, LA-101-PM 11.80, LA-105-PM R2.0 EA 363200- EFIS 0719000312-PPNO 5642 20.20.201.315 - SHOPP Mobility April 2024

## **Project Report**

## For Project Approval

	On Route	Ven 101			
	Between	PM 2.5 (Ve	en 23/101 Interchange)		
	And	PM 13.9 (V	Ven-34)		
	_	•	rmation contained in the nd the data to be comple	ete, current a	•
		D	an Murdoch, Deputy Di	strict Direct	or, Right of Way
APPROVAL R	RECOMMI	ENDED:	David M David H Miraar		Manager
APPROVAL R	ЕСОММЕ	NDED:			
Tyl Whin				04/12	2/2024
Rafael Molina, De	eputy District	Director, Tra	nsportation Safety & Operat	ions	Date
PROJECT API	PROVED:				
Al Alfler	te			05/10/2	2024
Gloria Roberts	, District D	irector			 Date

## Vicinity Map



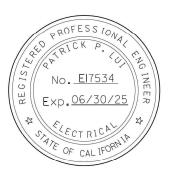
In Ventura and Los Angeles Counties, on Various Routes at Various Locations.

07-VEN-101-PM 2.5/13.9 07-VEN-23-PM 3.34/4.20 LA-2-PM R18.70 (LARTMC) LA-101-PM R11.80 (NHD HUB) LA-105-PM R2.0 (LAX) This project report has been prepared under the direction of the following registered electrical engineer. The registered electrical engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

REGISTERED ELECTRICAL ENGINEER

4/4/2024

DATE



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#### 1. INTRODUCTION

This project is located on the US-101 (Ventura County) starting from east of VEN-23 to west of State Route 34 in Ventura County, and on Ventura Route 23 (VEN-23) starting from north of Rancho Road to north of Hillcrest Drive. The following are the details of the proposed work:

- 1. Install new fiber optic trunk lines in embedded conduits including Pull Boxes and Splice Vaults along NB right shoulder on VEN-101 from PM 3.0 (at VEN-23) to PM 13.8 (at VEN-34).
- 2. Install following new Traffic Management System (TMS) field elements:
  - Closed-Circuit Television (CCTV) Camera Systems (27)
    - o Fifteen (15) at Traffic Signal locations.
    - o Twelve (12) for Mainline.
  - Changeable Message Sign (CMS) Systems (2)
  - Vehicle Detection Systems (Connector Metering Systems) (2)
    - o SB Route 23-NB Route 101 Connector.
    - o SB Route 23-SB Route 101 Connector.
- 3. Technology Lifecycle Replacement of existing TMS filed elements:
  - Traffic Census Station (CS) (5)
    - Communication, Power System, Foundations, Pull Boxes, Conduits
  - CCTV Camera System (1)
    - o Camera, Cabling, Wiring, Communication, Power System
  - Traffic Monitoring Stations (12)
    - Detection Technology, Controller/Central Processing Unit (CPU), Cabling, Wiring, Communication, Power System, Foundations, Pull Boxes, Conduits
  - CMS System (1)
    - o CMS Panel, Controller/CPU, Cabling, Wiring, Communication, Power System
  - Traffic Signals (7)
    - o Signal Heads, Detection, Loops, Communication
- 4. Install Communication breakouts for the following existing TMS elements:
  - Ramp Metering Systems (RMS) (2)
  - CCTV Camera System (1)
  - Vehicle Detection Systems (2)
  - Traffic Signals (15)
- 5. Upgrade Communication Hubs on LA-105 (PM R2.0) at I-405 (LAX), on LA-2 (PM R18.7) at LA-134 (LARTMC), and on LA-101 (PM 11.8) at LA-170 (North Hollywood).

#### 6. Additional work

- Replace two (2) existing Weigh-in-Motion (WIM) systems with new WIMs including Controllers per current standards.
- Construct Maintenance Vehicle Pullouts (MVP) at 20 different locations.
- Remove 500 LF (Length in Feet) existing Metal Beam Guardrail (MBGR) and install approximately 3400 LF new Midwest Guardrail Systems (MGS) at 17 different locations including 17 End Anchor Assemblies and 15 Alternative In-line Terminal Systems.
- Construct approximately 1500 SQYD (Square Yards) Vegetation Growth Control pads under the new MGS.

Project Limits	07-VEN-101-PM 2.5/13.9 07-VEN-23-PM 3.34/4.20					
Number of Alternatives	LA-2 (PM R18.70), LA-101 (P	M R11.80), LA-105 (PM R2.0)				
Programmable Project	Alternative A – Build Alternati	ve				
Funding Source	SHOPP Mobility Programs – 2					
Funding Year	2024/2025	0.20.201.313				
Type of Facility	Freeway					
Number of Structures	None					
SHOPP Project Output	11.2 Fiber Optic miles, 70 TMS elements, 20 MVPs, 3 HUBs, 2 WIMs, 3400 LF MGS, 6.8 Locations of Vegetation Control					
Anticipated Environmental/ Determination or Document	CEQA Exemption/NEPA Cate	CEQA Exemption/NEPA Categorical Exclusion (CE/CE)				
Legal Description	On VEN-101 from VEN-23 to east of VEN-34 (North Lewis Road), and on VEN-23 at VEN-101 in Ventura County; and on LA-2 at LA-134, LA-101 at LA-170, and LA-105 in Los Angeles County					
Project Development	5					
PIR Level	2					
Capital Outlay Project Cost	Current Cost Estimate (\$1000):	Escalated Cost Estimate (\$1000):				
Support						
PA&ED	1,460	1460				
PS&E	4,379	4,379				
R/W (Right-of-Way)	41	41				
CONS (Construction)	5,494	6,570				
Capital	1	1				
R/W	90	104				
CONS	36,121	42,254				
Total	47,600	54,900				

#### 2. RECOMMENDATION

It is recommended that this project be included in the 2022 State Highway Operation and Protection Program (SHOPP) cycle; and to be funded in 2024/25 fiscal year from Program - 20.20.20.315 (Mobility). This report is prepared to Documentation Level 2.

#### 3. BACKGROUND

VEN-101 is a freeway and a designated north-south US-Highway (US-101) in the State of California. Within the project limits, VEN-101 is a 6-lane freeway that runs in the east-west direction through the Cities of Thousand Oaks and Camarillo in Ventura County. VEN-101, also known as the Ventura Freeway, is a heavily traveled commuter route serving greater Los Angeles area and connecting Los Angeles and Ventura Counties. This corridor is facing increasing traffic congestion due to continued regional growth, and at present there is no electronic traffic management system installed within this segment of the freeway corridor. Also, within the project limits, there are two existing WIM systems that need life-cycle replacements for proper monitoring of truck traffic loads. This project addresses the above deficiencies within the corridor and proposes to install new TMS infrastructure including installation of new fiber optic, power cables, and various field elements, upgrade WIM systems, and will utilize IP technology to collect and communicate real-time traffic information. The proposed work will minimize or reduce the effects of traffic congestion and improve overall efficiency and operations of the freeway corridor.

#### 4. PURPOSE AND NEED

#### **Purpose:**

The purpose of this TMS upgrade project is to improve the operational and communication efficiency of the freeway system, reduce maintenance needs/costs, and sustain the existing TMS system performance for all TMS elements along the project corridor.

#### Need:

VEN-101 is a heavily traveled commuter route connecting Los Angeles and Ventura Counties. With continued regional growth, the VEN-101 corridor is facing increasing traffic congestion which needs to be managed and minimized. With no integrated Transportation Management System currently existing within the corridor, VEN-101 demands to have a new TMS infrastructure installed including CCTV cameras, TMS, CS, CMS, RMS, and other field elements. The new Transportation Management System is needed to help communicate real-time traffic information to minimize traffic congestion, and to improve travel reliability within the freeway corridor. Also, within the project limits, there are two existing WIM systems that would need life-cycle replacements for proper monitoring of truck traffic loads passing through the corridor.

#### A. Problem, Deficiencies, Justification

The existing communication system consists of a fiber optic trunk line and a twisted pair copper distribution system, which connects all Intelligent Transportation System (ITS) elements to the trunk line. This system is difficult to maintain and the hardware supporting the copper system is increasingly difficult to purchase from suppliers as suppliers are moving from supporting copper systems to supporting fiber optic systems. Also, widespread copper cable theft throughout the nation has resulted in extensive and costly repairs, necessitating a need for Caltrans to replace the copper cables with fiber optic cables. Much of the equipment of the TMS field elements along the corridor have reached their end of life and need life-cycle replacements.

#### B. Regional and System Planning

This proposed project is on the U.S. Route 101. This project will meet the needs and objectives of the Transportation Management System for District 7 Congestion Relief Program - 2007 Update.

#### C. Traffic

#### Traffic Volumes

The 2021 Traffic Volumes on California State Highways Annual Average Daily Traffic (AADT) for the project limits are shown below:

		Back	Ahead
PM	Description	AADT	AADT
3.107	THOUSAND OAKS, JCT. RTE. 23 NORTH	180000	179000
4.060	THOUSAND OAKS, MOORPARK ROAD	179000	174000
5.046	THOUSAND OAKS, LYNN ROAD	174000	168000
6.186	THOUSAND OAKS, VENTU PARK ROAD	168000	150000
7.017	THOUSAND OAKS, BORCHARD ROAD	150000	135000
7.885	THOUSAND OAKS, WENDY DR	135000	110000
10.738	CAMARILLO, CAMARILLO SPRINGS ROAD	110000	123000
12.298	CAMARILLO, PLEASANT VALLEY ROAD	123000	126000
13.848	CAMARILLO, JCT. RTE. 34	126000	134000

#### **Traffic Collisions**

Based on the latest three years of Caltrans Traffic Accident Surveillance and Analysis System (TASAS) – Table B collision data report, there were a total 1526 collisions occurred within the project limits of VEN-101 including 5 fatal and 468 injury collisions between April 1, 2016 to March 31, 2019 as shown in Table 8.1 below. As provided in the TASAS collision report the overall traffic collision rates within the project limits was close to (NB), or less than (SB) thoseof the statewide average for similar state facilities.

Table 8.1: TASAS Collision Data from 04/01/2016 to 03/31/2019 for VEN-101 (PM 3.0-13.8)

VEN-101		er of Col gnifican		ı	ision Ra tual (MV			ision Ra rage (M	
Post Miles	$F^1$	F+I <sup>2</sup>	Total <sup>3</sup>	F <sup>1</sup>	$F+I^2$	Total <sup>3</sup>	$F^1$	$F+I^2$	Total <sup>3</sup>
3.000 - 13.801 (NB)	4	273	863	0.004	0.30	0.96	0.004	0.28	0.89
3.000 - 13.801 (SB)	1	200	663	0.001	0.22	0.74	0.004	0.28	0.89

Notes: \* MVM: Per million vehicle miles (1) F: Fatal collisions (2) F+ I: Fatal + Injury collisions (3) All reported collisions

#### 5. ALTERNATIVES

#### 5A. Viable Alternatives

#### **Alternative A - Programmable Project Alternative**

The following are the details of the proposed work:

- 1. Install new fiber optic trunk lines in embedded conduits including Pull Boxes and Splice Vaults along NB right shoulder on VEN-101 from PM 3.0 (at VEN-23) to PM 13.8 (at VEN-34).
- 2. Install following new Traffic Management System (TMS) field elements:
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  - o Signal Heads, Detection, Loops, Communication
- 4. Install Communication breakouts for the following existing TMS elements:
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- 5. Upgrade Communication Hubs on LA-105 (PM R2.0) at I-405 (LAX), on LA-2 (PM R18.7) at LA-134 (LARTMC), and on LA-101 (PM 11.8) at LA-170 (North Hollywood).
- 6. Additional work
  - Replace two (2) existing Weigh-in-Motion (WIM) systems with new WIMs including Controllers per current standards.
  - Construct Maintenance Vehicle Pullouts (MVP) at 20 different locations.
  - Remove 500 LF (Length in Feet) existing Metal Beam Guardrail (MBGR) and install approximately 3400 LF new Midwest Guardrail Systems (MGS) at 17 different locations including 17 End Anchor Assemblies and 15 Alternative In-line Terminal Systems.
  - Construct approximately 1500 SQYD (Square Yards) Vegetation Growth Control pads under the new MGS.

#### **Discussions**

All work will be completed within Caltrans Right of Way. Approximate locations of all proposed field elements are listed in Attachment B. More accurate details will be provided during the PS&E phase.

#### 5B. Rejected Alternatives

#### Alternative B - No Build Alternative

This alternative would leave the existing facilities in their present condition with no Transportation Management System available within the corridor. The condition of both recurring and non-recurring congestions would get worse and installation costs for the proposed TMS elements would be higher in the future. This alternative does not meet the purpose and need of the project, and therefore, this alternative is not recommended.

#### 6. CONSIDERATIONS REQUIRING DISCUSSION

#### 6A. Hazardous Waste

A Hazardous Waste Assessment for the project has been prepared by District Hazardous Waste Branch on December 27, 2023 (see Attachment G). According this report, the following hazardous waste issues are anticipated:

- a. Aerially Deposited Lead (ADL): Potential of ADL contamination may exist at the project location, especially during construction of the MVPs and installation of traffic management system elements. The contractor shall prepare a project specific Lead Compliance Plan (LCP) to prevent or minimize worker exposure to lead in the soil.
- b. Electronic Wastes: All electrical equipment and materials requiring disposal shall be properly packaged and transported to a duly permitted Class I hazardous waste disposal facility.

#### **6B. Value Analysis**

This project meets the \$25 million minimum construction cost threshold criteria, and therefore, a Value Analysis study will be required.

#### 6C. Resource Conservation

This project does not involve any resource conservation.

#### 6D. Right-of-Way Issues

All construction work within the project limits will be performed within Caltrans Right-of-Way. No R/W acquisitions nor any temporary construction easements are anticipated. Railroad flagging related to construction activity is needed (See Attachment E).

#### **Utilities:**

Utilities impacts are anticipated per R/W Data Sheet. As recommended in the R/W data sheet, the anticipated utility relocation cost is \$40,000 (escalated \$53,905) (See Attachment E).

#### 6E. Environmental Compliance

The project is CEQA categorically exempt Class l(c) and Categorical Excluded under NEPA. The Categorical Exemption/Categorical Exclusion Determination Form is included in Attachment F.

#### Hazardous waste disposal

A Hazardous Waste Assessment for the project has been prepared by District Hazardous Waste Branch on December 27, 2023 (see Attachment G).

#### 6F. Air Quality Conformity

An Air Quality and Greenhouse Gas Assessment has been prepared for the project (See attachment H).

#### 6G. Title VI Considerations

Title VI of the Civil Rights Act of 1964 states:

No person in the United States shall, on the ground of race, color, or national Origin, be excluded form participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Related federal statues and state law further those protections to include sex, disability, religion, sexual orientation, and age. More information about Caltrans' adherence to Title VI, including the Nondiscrimination Policy Statement, is located at the Title VI Program website.

#### 6H. Noise Abatement Decision Report

Based on the scope of work, this project is not a Type I project as defined in the 2020 Traffic Noise Analysis Protocol and it is not expected to raise traffic noise levels or cause a substantial noise increase. Therefore, a detailed noise study is not required for this project. However, potential construction noise impacts would need to be addressed since there are noise sensitive receptors in the vicinity of the project. Section 14-8.02, Sound Control Requirements, of Caltrans standard specifications states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

#### 7. OTHER CONSIDERATIONS AS APPROPRIATE

#### Maintenance and Worker's Safety:

This project has identified and proposed construction of 20 MVPs along with around 1500 SQYD (6.8 Locations) of Vegetation Control pads under 3400 LF MGS at various locations within project limits to enhance maintenance and worker's safety.

#### Contaminated Material:

Based on the Preliminary Hazardous Waste Assessment report, it is anticipated that there will be potentially hazardous waste contamination due to excess soils with ADL and electronic waste during construction of this project. All excess contaminated materials are to be properly contained and disposed off-site to a permitted Class I hazardous waste disposal facility.

#### Resource Conservation:

This project does not involve any resource conservation.

#### Value Analysis:

This project meets the \$25 million minimum construction cost threshold criteria, and therefore, a Value Analysis study will be required.

#### <u>Transportation Management Plan:</u>

A Transportation Management Plan (TMP) Data Sheet has been prepared for the project (Attachment K). The key elements of TMP are Press Release, Internet, Lane Closure, and COZEEP. The hours available for contractor's operations will be regulated to off-peak hours and detailed within the special provisions to minimize the impact on existing traffic flows.

#### Complete Streets:

Complete Street requirements apply to this project as this project will have impact to pedestrian and bicyclist facilities.

#### Broadband and Advanced Technologies:

California Assembly Bill 1549 (Wood, Chapter 505, Statutes of 2016) requires that Caltrans, during the planning phase of specified Caltrans-led highway construction projects, notify broadband deployment companies and organizations on its Internet Web site of transportation projects that involve construction methods suitable for the installation of broadband.

Terrence Theobbald of Ventura County expressed interest in partnering on this project. This option will be further explored during PS&E phase.

#### 8. FUNDING, PROGRAMMING AND ESTIMATE

#### Funding:

It has been determined that this project is eligible for Federal-aid funding.

To address the cost increases in construction support and construction capital, the project manager has submitted a Project Change Request (PCR) to District Programming.

#### **Programming**

The table below provides the current programmed information for the project cost component, and the current cost estimate by component. The current cost estimate for support is escalated to the middle of each component at a rate of 3.5% per year for each component. The construction capital cost is escalated to mid construction at a rate of 4.89% for FY 24/25 and 3.80% for FY 25/26 and beyond. The Right of Way capital is escalated at 8% to \$104,000.00.

Fund Source			Pre	ogramming	g by Fise	cal Year			Current Estimate (Escalated)
20.XX.201.315	Prior	22/23	23/24	24/25	25/26	26/27	Future	Programmed Total	At PAED Total
Component			In the	ousands of	fdollar	s (\$1,00	00)		
PA&ED Support		\$1,460						\$1,460	\$1,460
PS&E Support			\$4,379					\$4,379	\$4,379
Right-of-Way Support			\$41					\$41	\$41
Construction Support				\$6,570				\$6,570	\$6,570
Right-of-Way				\$290				\$290	\$104
Construction				\$33,260				\$33,260	\$42,254
Total		\$1,460	\$4,420	\$40,120				\$46,000	\$54,900

The support cost ratio is 29.4%.

A programing amendment will be requested for approval to address the total project cost increase and increase in performance outputs.

#### 9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	4/01/2022	A
BEGIN PAED	M020	9/01/2022	A
PA & ED	M200	4/12/2024	T
START PS&E	M210	4/29/2024	T
PRE-60% PS&E		07/19/2024	T
60% PS&E	M313	08/30/2024	T
PRE-95% PS&E		11/08/2024	T
95% PS&E	M315	12/20/2024	T
PS&E TO DOE	M377	01/31/2025	T
DRAFT STRUCTURES PS&E	M378	02/14/2025	T
PROJECT PS&E	M380	03/07/2025	T
RIGHT OF WAY CERTIFICATION	M410	03/07/2025	T
READY TO LIST	M460	03/31/2025	T
FUND ALLOCATION	M470	5/16/2025	T
HEADQUARTERS ADVERTISE	M480	6/13/2025	T
AWARD	M495	8/15/2025	T
APPROVE CONTRACT	M500	10/24/2025	T
CONTRACT ACCEPTANCE	M600	10/29/2027	T
END PROJECT	M800	10/30/2029	T

#### 10. RISKS

The Risk Register for this project has been prepared by the Risk Manager and approved on 3/21/2024. The Risk Register has identified 20 potential risks for this project which will be further evaluated and updated during the future phases of the project.

#### 11. EXTERNAL AGENCY COORDINATION

#### Federal Highway Administration (FHWA)

This project is considered as an Assigned Project in accordance with the current FHWA and Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement.

### 12. PROJECT REVIEW

Title/Office	Reviewer Name	Date of
		Review
Project Manager	David Miraaney	01/12/2024
Scoping Team Field Review	Nathan Sy	10/30/2023
SHOPP Program Manager	Chan Kuoch	01/17/2024
District Asset Manager	Roger Yoh	01/17/2024
Program Advisor – TMS Support	Candace Fung	01/17/2024
Program Advisor – Truck Services	Patricia Amadi	01/17/2024
Program Advisor – Traffic Safety	Ashraf Hanna	01/17/2024
Program Advisor – Roadside Preservation	Kathleen Hamer	01/17/2024
Risk Manager	Cardiel Bugarian	01/17/2024
Design C	Yessuf Tegegne	01/17/2024
Transportation Safety	Emmanuel Balanza	01/17/2024
Constructability	Kyle Kunitake	01/17/2024
Right-of-Way	Michelle Graves	01/5/2024
Environmental Planning	Susan Tse Koo	12/27/2023
Storm Water	Sunny Liem	01/17/2024
Quality Review	Quality Review Team	01/17/2024
Air Quality	Andrew Yoon	12/1/2023
Noise and Vibration	Jin S. Lee	04/19/2023

#### 13. PROJECT PERSONNEL

Name/Title	Office	Contact
David H. Miraaney,	Program and Project Management	213-760-6800
Project Manger		
Patrick P. Lui, TEE	Transportation Safety and	213-628-6132
	Operations/Office of ITS	
Nathan Gabriel Sy, TEE	Transportation Safety and	213-269-1587
	Operations/Office of ITS	
Susan Tse	Division of Environmental Planning	213-269-1106
Environmental Scientist		
Zoltan Elo, Office Chief	District Right of Way	213-713-7763

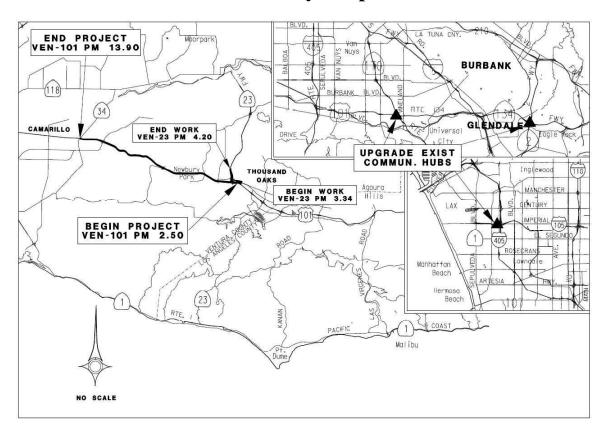
#### 14. ATTACHMENTS

- A. Project Vicinity Map
- B. List of Existing and Proposed TMS Elements
- C. Preliminary Layout Sheets
- D. Project Cost Estimates
- E. Right of Way Data Sheet
- F. Environmental Documents
- G. Hazardous Waste Assesment
- H. Air Quality Analysis
- I. Noise Analysis
- J. Storm Water Data Report
- K. TMP Data Sheet
- L. Risk Register
- M. SHOPP Project Performance Output
- N. Connector Metering Proposal Study

## **ATTACHMENT A**

**Project Vicinity Map** 

## Vicinity Map



In Ventura and Los Angeles Counties, on Various Routes at Various Locations.

07-VEN-101-PM 2.5/13.9 07-VEN-23-PM 3.34/4.20 LA-2-PM R18.70 (LARTMC) LA-101-PM R11.80 (NHD HUB) LA-105-PM R2.0 (LAX)

## **ATTACHMENT B**

# List of Existing and Proposed TMS Elements

					CLOSED	CIRCUIT TELEVIS	CLOSED CIRCUIT TELEVISION (CCTV) CAMERA	RA	
						TECHNOLOGY	STRUCTURE	INSTALL	
ITEM#	TMS ID	LOCATION	ROUTE	Ā	DIRECTION	LIFECYCLE	LIFECYCLE	COMMUNICATION	REMARKS
1	7714	Rancho Road	101	3.2	NB R	YES		YES	POOR Tech Condition
2	07-CCTV-8002-HQ Ventu Park Rd	Ventu Park Rd	101	6.24	SB			YES	Comm only. Camera upgraded at 34880.
e	NEW	RANCHO ROAD	101	2.85	NB		NEW		NEW Camera for Traffic Signal
4	NEW	MOORPARK RD	101	3.93	SB		NEW		NEW Camera for Traffic Signal
2	NEW	MOORPARK RD.	101	4.23	NB		NEW		NEW Camera for Traffic Signal
9	NEW	LYNN RD	101	4.91	SB		NEW		NEW Camera for Traffic Signal
7	NEW	LYNN RD	101	5.27	NB		NEW		NEW Camera for Traffic Signal
∞	NEW	VENTU PARK RD	101	5.99	NB		NEW		NEW Camera for Traffic Signal
6	NEW	VENTU PARK RD	101	6.38	SB		NEW		NEW Camera for Traffic Signal
10	NEW	BORCHARD RD	101	7.04	SB		NEW		NEW Camera for Traffic Signal
11	NEW	RANCHO CONEJO / BORCHARD	101	7.1	NB		NEW		NEW Camera for Traffic Signal
12	NEW	WENDY DR.	101	7.66	NB		NEW		NEW Camera for Traffic Signal
13	NEW	WENDY DR	101	7.92	SB		NEW		NEW Camera for Traffic Signal
14	NEW	PLEASANT VALLEY	101	12.3	SB		NEW		NEW Camera for Traffic Signal
15	NEW	SANTA ROSA RD	101	12.31	NB		NEW		NEW Camera for Traffic Signal
16	NEW	MISSION OAKS/FLYNN RD	101	12.8	NB		NEW		NEW Camera for Traffic Signal
17	NEW	DAWSON / PETIT	101	13.67	SB		NEW		NEW Camera for Traffic Signal
18	NEW	E/O Moorpark Rd	101	3.68	SB		NEW		From PIR. @ SB E/O Moorpark Rd
19	NEW	E/O Wilbur Rd	101	4.46	SB		NEW		From PIR. @ SB E/O Wilbur Rd
20	NEW	S/O Lynn Rd	101	5.014	NB		NEW		From PIR. @ SB S/O Lynn Rd
21	NEW	S/O Ventu Rd	101	6.12	SB		NEW		From PIR. @ SB S/O Ventu Rd
22	NEW	S/O Borchard Rd	101	6.95	NB		NEW		From PIR. @ NB S/O Borchard Rd
23	NEW	S/O Wendy Dr	101	7.79	NB		NEW		From PIR. @ NB S/O Wendy Dr
24	NEW	N/O Conejo WIM Station	101	9.18	NB		NEW		From PIR. @ NB N/O Conejo WIM Station
22	NEW	s/O Camarillo Spring Rd	101	10.12	SB		NEW		From PIR. @ SB S/O Camarillo Spring Rd
56	NEW	Camarillo Ruiz	101	11.637	NB		NEW		From PIR. @ NB Camarillo Ruiz
27	NEW	S/O Pleasant Valley Rd	101	12.23	SB		NEW		From PIR. @ SB S/O Pleasant Valley Rd
28	NEW	Mission Oak Blvd	101	13.12	NB		NEW		From PIR. @ NB Mission Oak Blvd
53	NEW	Petit St	101	13.6	SB		NEW		From PIR. @ SB Petit St

						TRAFFIC SIGNALS	SIGNALS		
						TECHNOLOGY	STRUCTURE	INSTALL	
ITEM#	M# TMS ID	LOCATION	ROUTE	PM	DIRECTION	LIFECYCLE	LIFECYCLE	COMMUNICATION	REMARKS
						REPLACEMENT	REPLACEMENT	BREAKOUT	
	. 07VEN101-2.85	RANCHO ROAD	101	2.85	NB	YES		YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
2	07VEN101-3.93	MOORPARK RD	101	3.93	SB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
3	07VEN101-4.23	MOORPARK RD.	101	4.23	NB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
4	07VEN101-4.91	LYNN RD	101	4.91	SB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
2	07VEN101-5.27	LYNN RD	101	5.27	NB	-	=	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
9	07VEN101-5.99	VENTU PARK RD	101	5.99	NB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
7	07VEN101-6.38	VENTU PARK RD	101	6.38	SB	YES	-	YES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
8	07VEN101-7.04	BORCHARD RD	101	7.04	SB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
6	07VEN101-7.10	RANCHO CONEJO / BORCHARD	101	7.1	NB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
1(	10 07VEN101-7.66	WENDY DR.	101	7.66	NB		-	XES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
11	1 07VEN101-7.92	WENDY DR	101	7.92	SB		-	XES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
1,	2 07VEN101-12.30	07VEN101-12.30   PLEASANT VALLEY	101	12.3	SB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
Ŧ	13 07VEN101-12.31	07VEN101-12.31   101FWY NB AT SANTA ROSA RD	101	12.31	NB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA
1,	14 07VEN101-12.80	07VEN101-12.80 MISSION OAKS/FLYNN RD	101	12.8	NB	YES	-	XES	POOR Tech Condition. SHARE CONDUIT WITH CAMERA
1;	15 07VEN101-13.67	07VEN101-13.67 SB 101 FWY at DAWSON / PETIT	101	13.67	SB	-	-	YES	GOOD Condition. Communication Only. SHARE CONDUIT WITH CAMERA

	•					CENSUS STATION (CS)	TION (CS)		
						TECHNOLOGY	TECHNOLOGY STRUCTURE	INSTALL	
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	DIRECTION LIFECYCLE	LIFECYCLE	LIFECYCLE COMMUNICATION	REMARKS
						REPLACEMENT	REPLACEMENT REPLACEMENT	BREAKOUT	
1	07-TCS-119-HQ	77-TCS-119-HQ N/O JCT RTE 23N (THOUSAND OAKS)	101	3.107	BO	YES	YES	YES	OOR Tech Condition
7	07-TCS-457-HQ	07-TCS-457-HQ N/O BORCHARD RD, S/O WENDY DR	101	7.5	BO	YES	YES	, VES	POOR Tech Condition
3	07-TCS-434-HQ	J7-TCS-434-HQ at LEWIS RD (JCT RTE 34)	101	13.848	ВО	YES	YES	YES	POOR Tech Condition
4	07-TCS-909-HQ   WENDY DR	WENDY DR	101	7.885	BO	YES	YES	YES	OOR Tech Condition
5	07-TCS-908-HQ	27-TCS-908-HQ S/O PLEASANT VALLEY RD	101	12.298	BO	YES	YES	YES	OOR Tech Condition

TMS ID 7CMS-98-HQ VENTU PARK RE IEW NEW NEW IEW NEW	LOCATION NTU PARK RD W	ROUTE 101 101	PM 6.24 3.68 13.12	CHANGEA DIRECTION SB SB NB	CHANGEABLE MESSAGE SIGN (CMS)   TECHNOLOGY   STRUCTION   LIFECYCLE   LIFECYC	TECHNOLOGY   STRUCTURE   INSTALL	8	REMARKS POOR Tech Condition From PIR. © SB E/O Moorpark Rd From PIR. © NB Mission Oak Blvd
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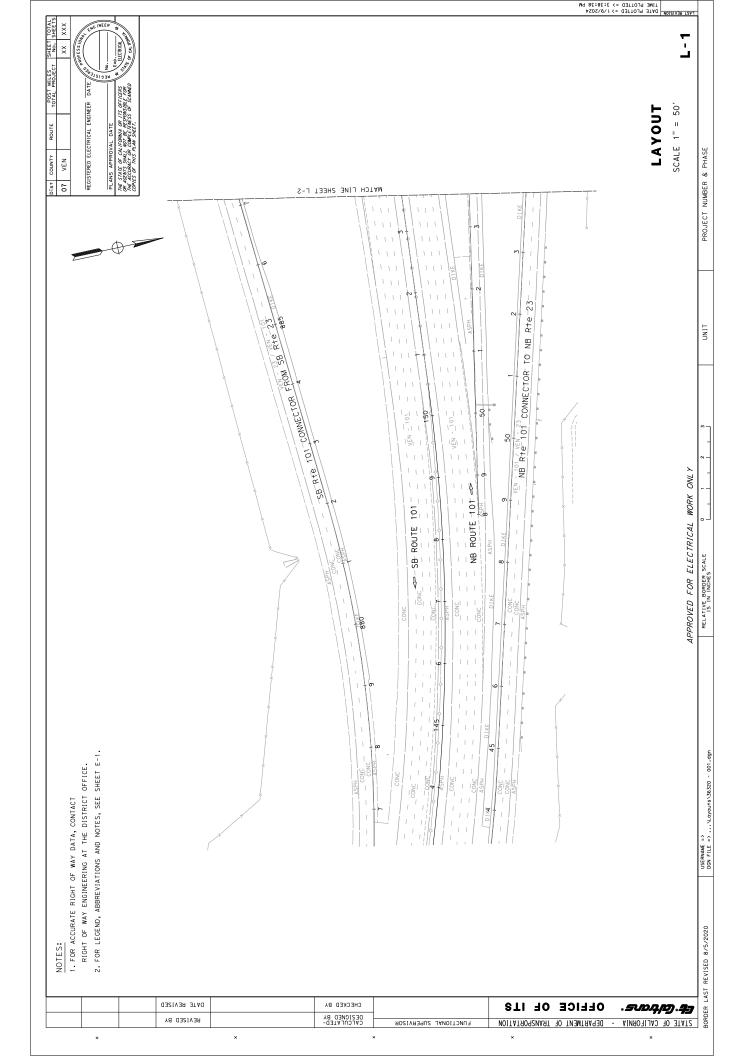
					RAMP M	RAMP METERING SYSTEMS (RMS)	1S (RMS)		
						TECHNOLOGY	TECHNOLOGY STRUCTURE	INSTALL	
ITEM#	TMS ID	LOCATION	ROUTE	PM	DIRECTION	IRECTION LIFECYCLE	LIFECYCLE	COMMUNICATION	REMARKS
						REPLACEMENT	REPLACEMENT REPLACEMENT	BREAKOUT	
1	07-FRM-4479-HQ	Moorpark	101	3.92 SB	SB	-	-	) AES	GOOD Tech Condition. Communication Only
2	07-FRM-4497-HQ	Moorpark	101	4.28 NB	NB	-	-	) AES	GOOD Tech Condition. Communication Only

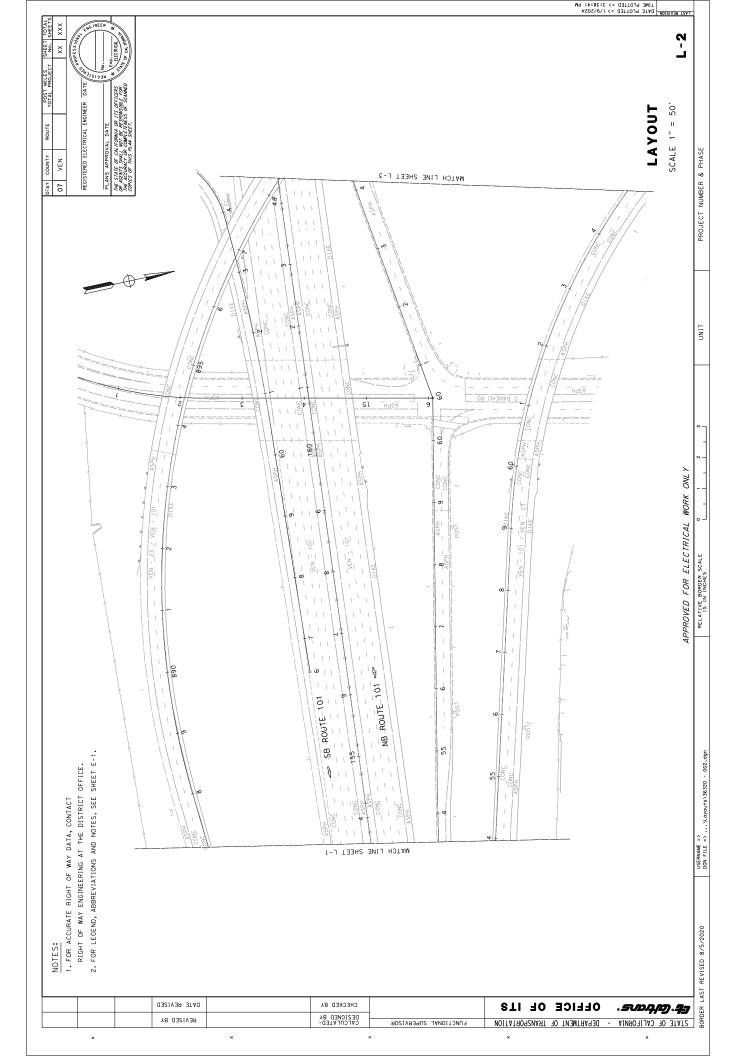
	П	CATION	DUT	Connector Metering.	Connector Metering
	INSTALL	COMMUNICATION	r BREAKOUT		
MS (VDS)	STRUCTURE	LIFECYCLE	REPLACEMENT		
VEHICLE DETECTION SYSTEMS (VDS)	TECHNOLOGY	IRECTION LIFECYCLE	REPLACEMENT REPLACEMENT	NEW	NEW
VEHICLE D		DIRECTION		SB	NB
		PM		2.67 SB	3.34 NB
		ROUTE		101	101
		LOCATION		RT 23 CN	RT 23 CN
		TMS ID		NEW	NEW
		ITEM#		1	2

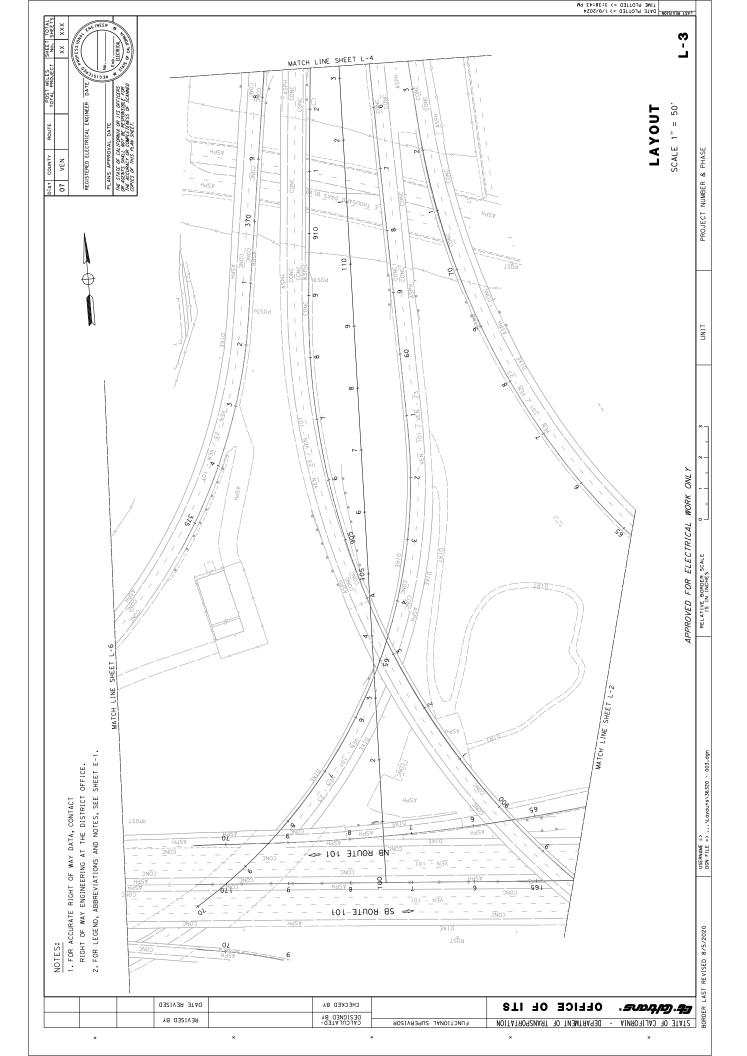
		REMARKS		GOOD Tech Condition. Communication Only	GOOD Tech Condition. Communication Only	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition	POOR Tech Condition
	INSTALL	COMMUNICATION	BREAKOUT	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
STATION	STRUCTURE	LIFECYCLE	REPLACEMENT   REPLACEMENT	-			-		-	-	-	-		-		-	-
TRAFFIC MONITORING STATION	TECHNOLOGY	LIFECYCLE	REPLACEMENT			YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
TRAFF		DIRECTION		SB	NB	SB	NB	SB	NB	SB	NB	NB	SB	NB	NB	SB	NB
		M		4.84 SB	3.34 NB	5.01 SB	5.17 NB	8S 90.9	6.15 NB	6.22 SB	6.34 NB	7.23 NB	7.7 SB	7.86 NB	8.06 NB	12.31 SB	12.396 NB
		ROUTE		101	101	101	101	101	101	101	101	101	101	101	101	101	101
		LOCATION		LYNN 1	RTE 23 CN	TANN 5	Lynn Rd	VENTU PARK 1	VENTU PARK 1	VENTU PARK 2	VENTU PARK 2	BORCHARD	Wendy Dr.	Wendy 1	Wendy 2	Pleasant Valley	Pleasant Valley
		TMS ID		4480	07-FRM-4571-HQ RTE 23 CN	4636	07-FRM-4496-HQ Lynn Rd	4481	4495	4482	4494	4492	07-FRM-4485-HQ Wendy Dr.	07-FRM-4491-HQ Wendy 1	07-FRM-4490-HQ Wendy 2	07-FRM-4488-HQ Pleasant Valley	07-FRM-4487-HQ Pleasant Valley
		ITEM#		1	. 2	3	4	2	, 9	7	8	6	10	11	12	13	14
		_	_	-	-	-	_	_	_	_	_	_	-			_	_

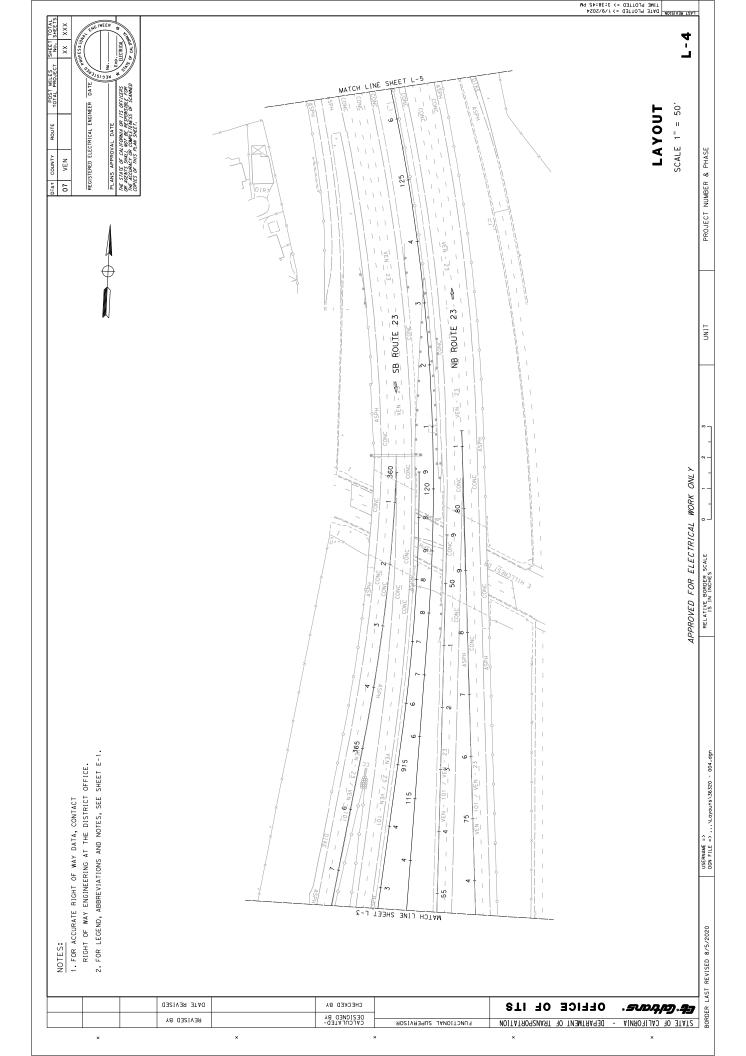
## ATTACHMENT C

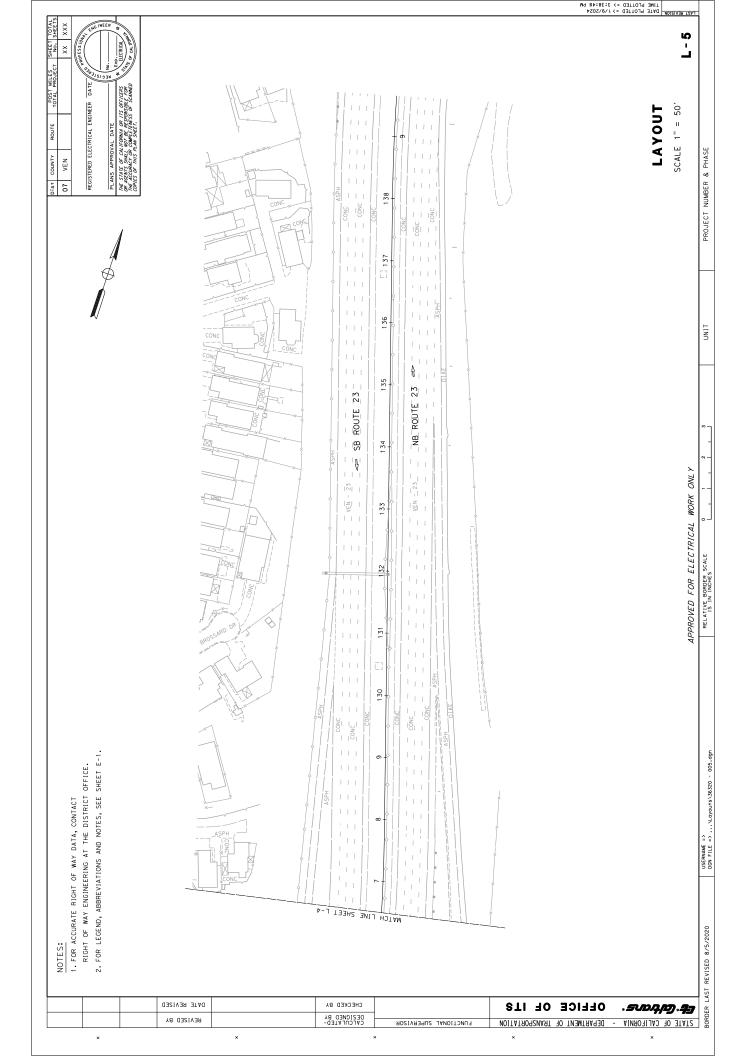
# **Preliminary Layout Sheets**

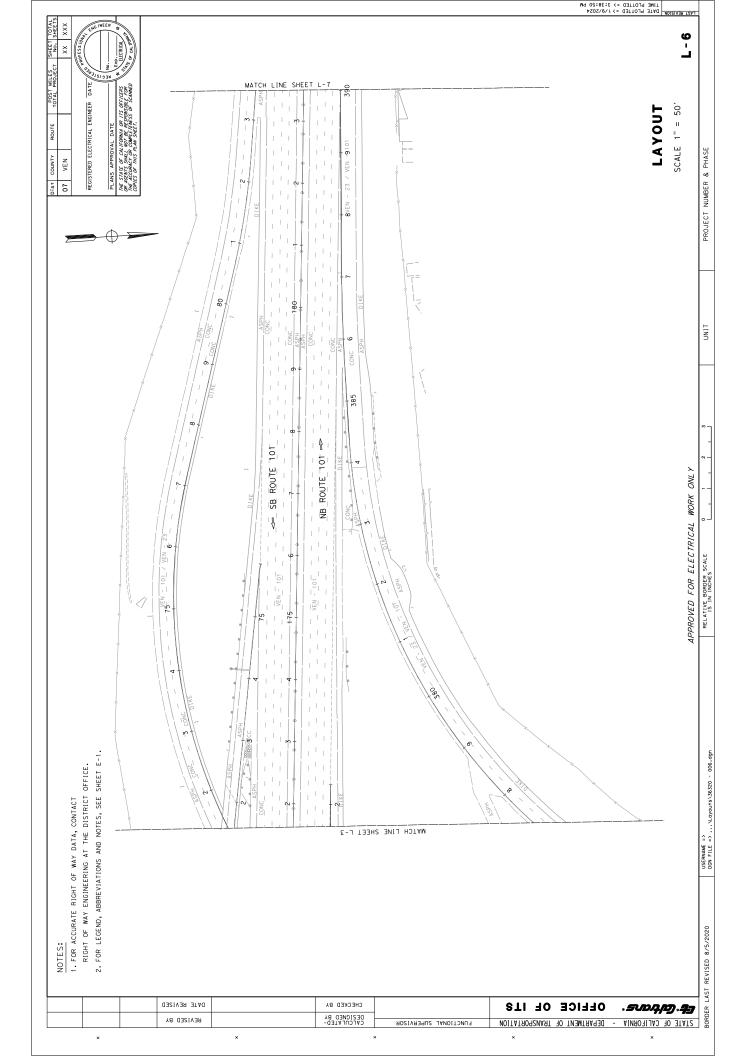


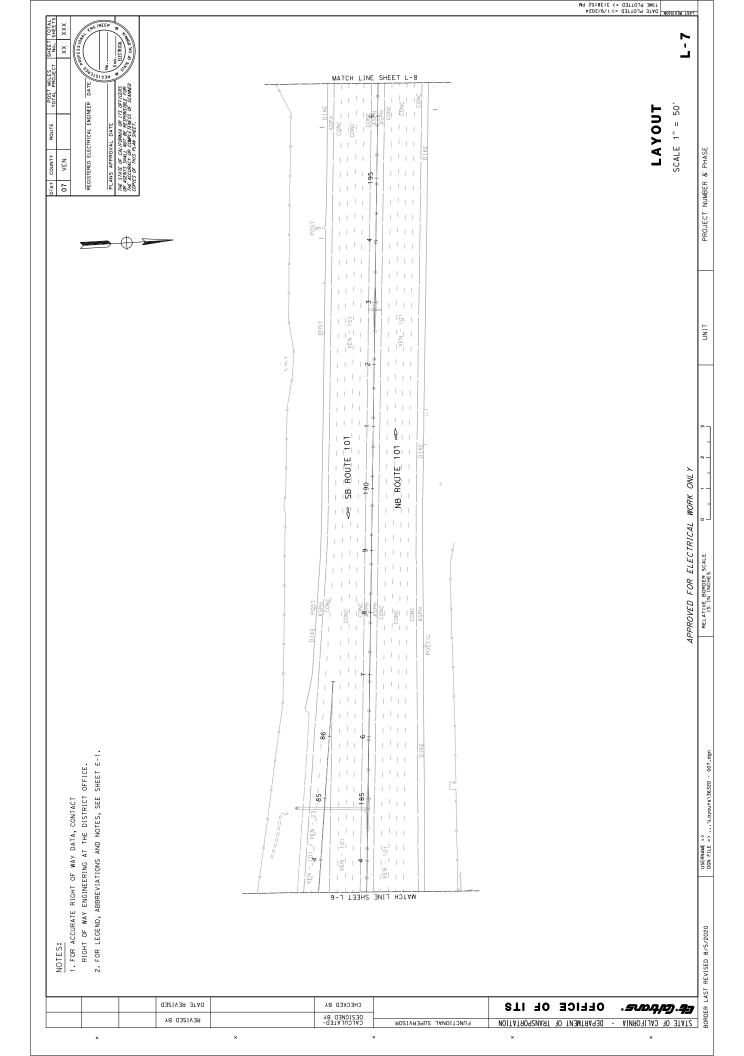


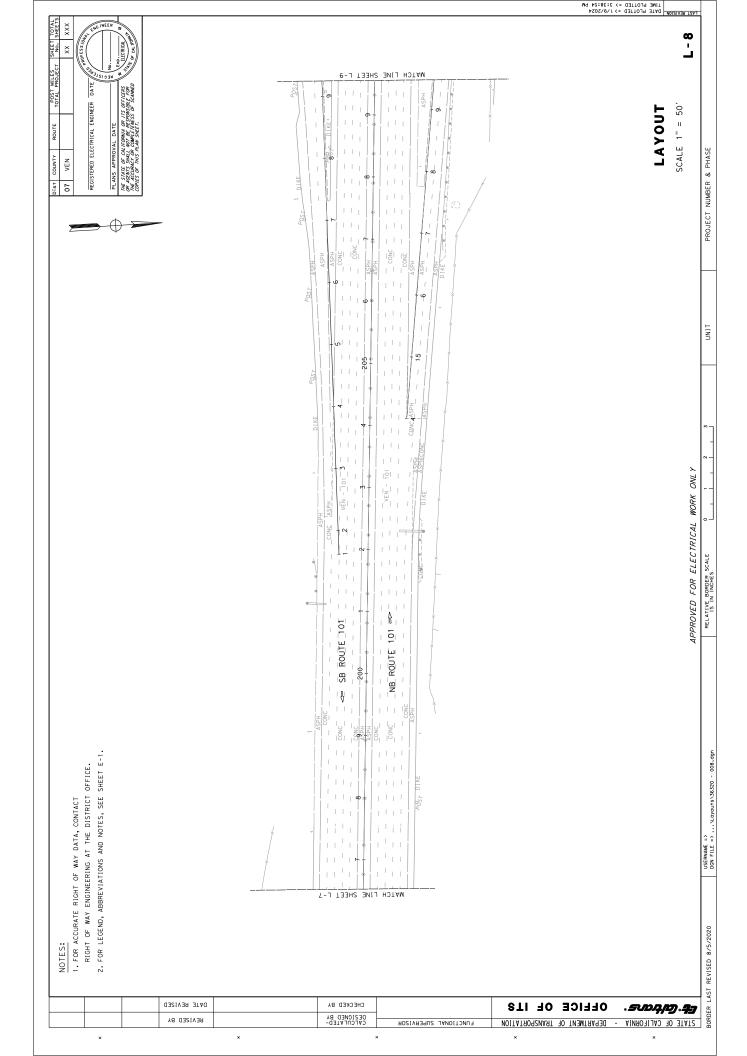


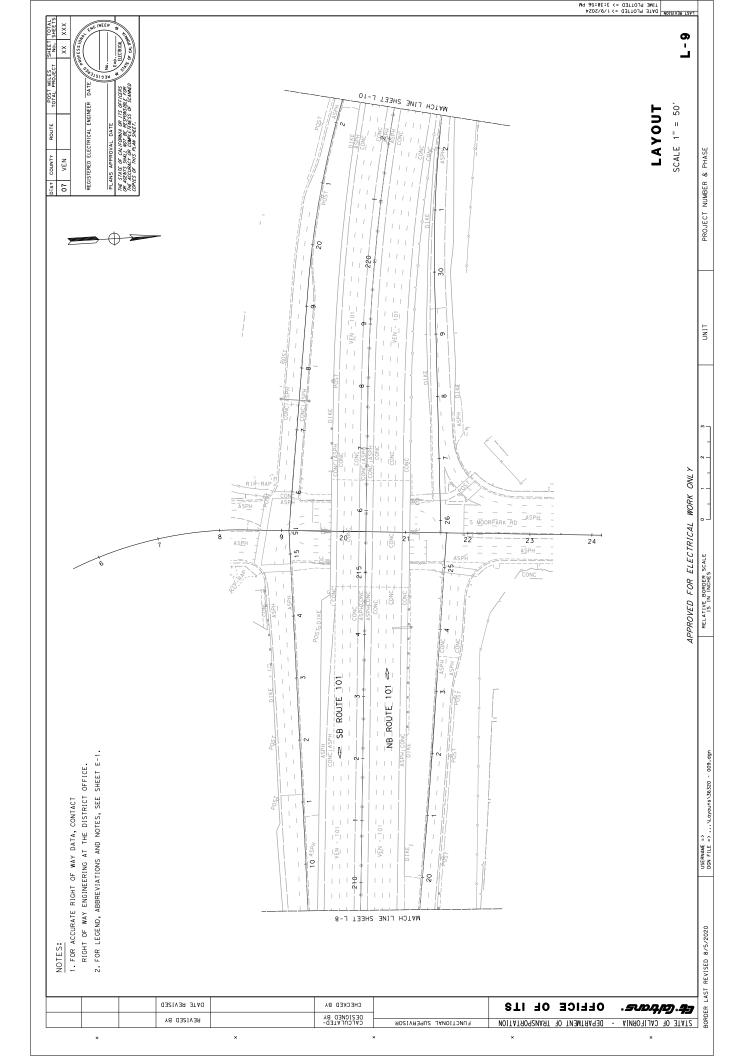


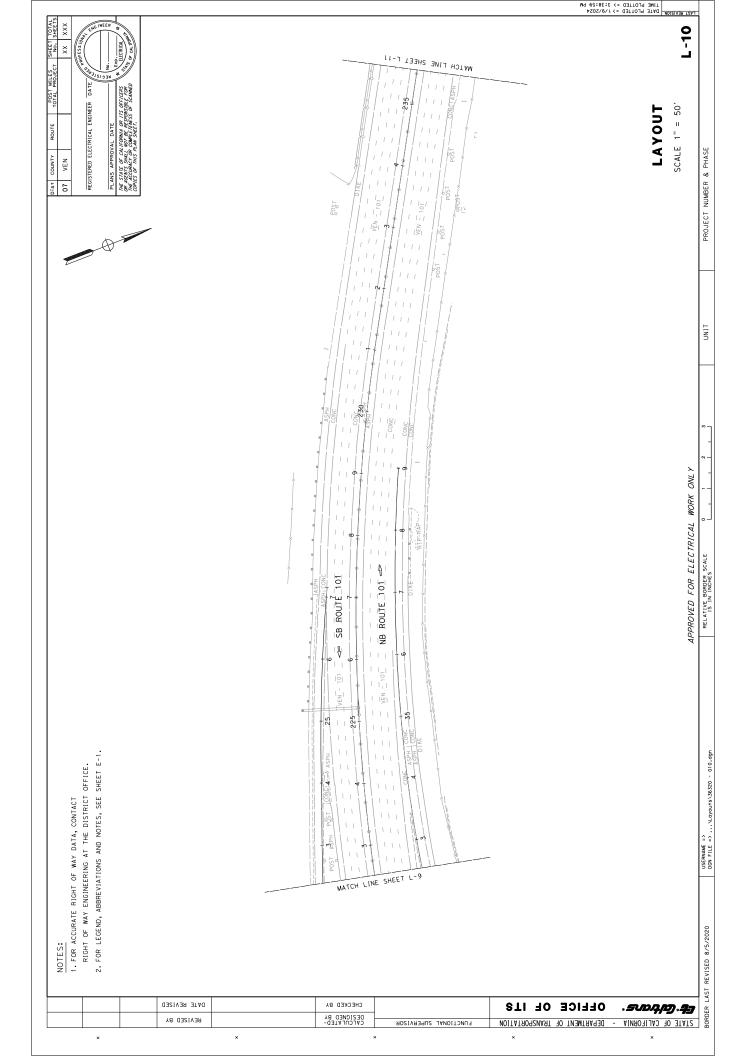


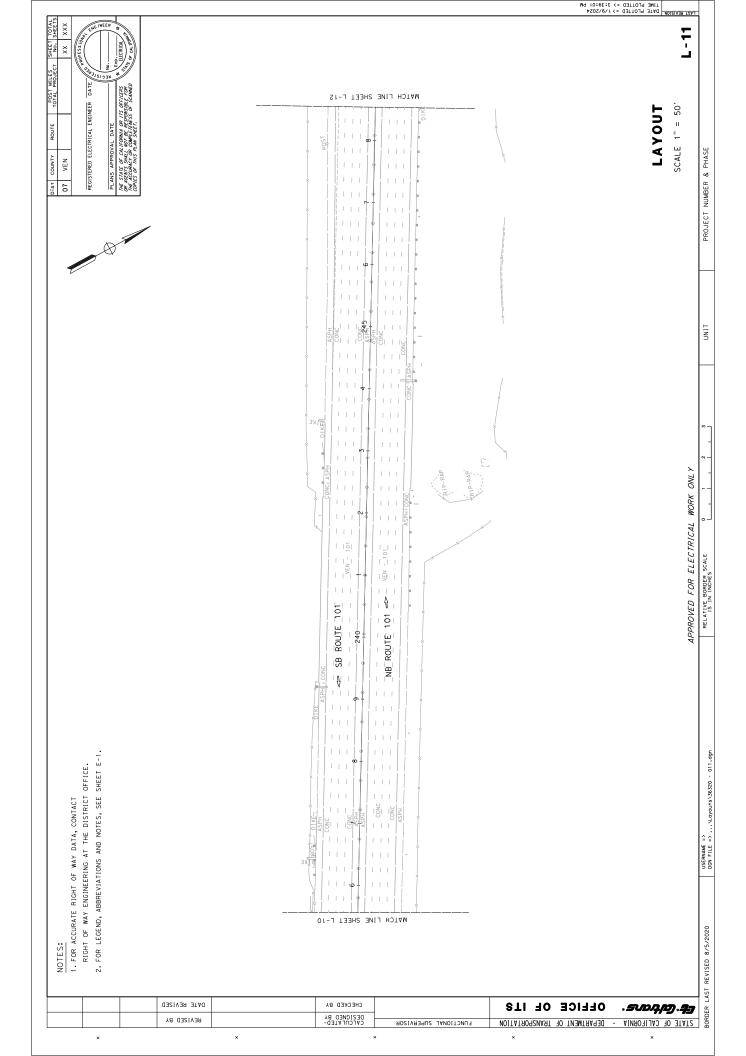


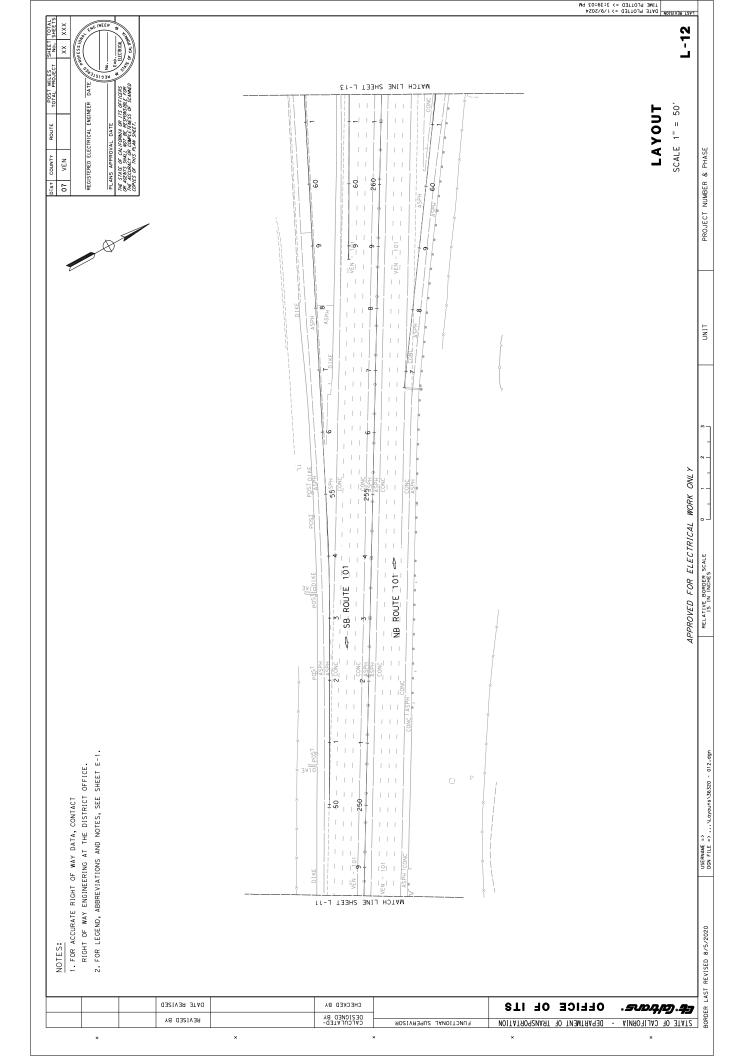


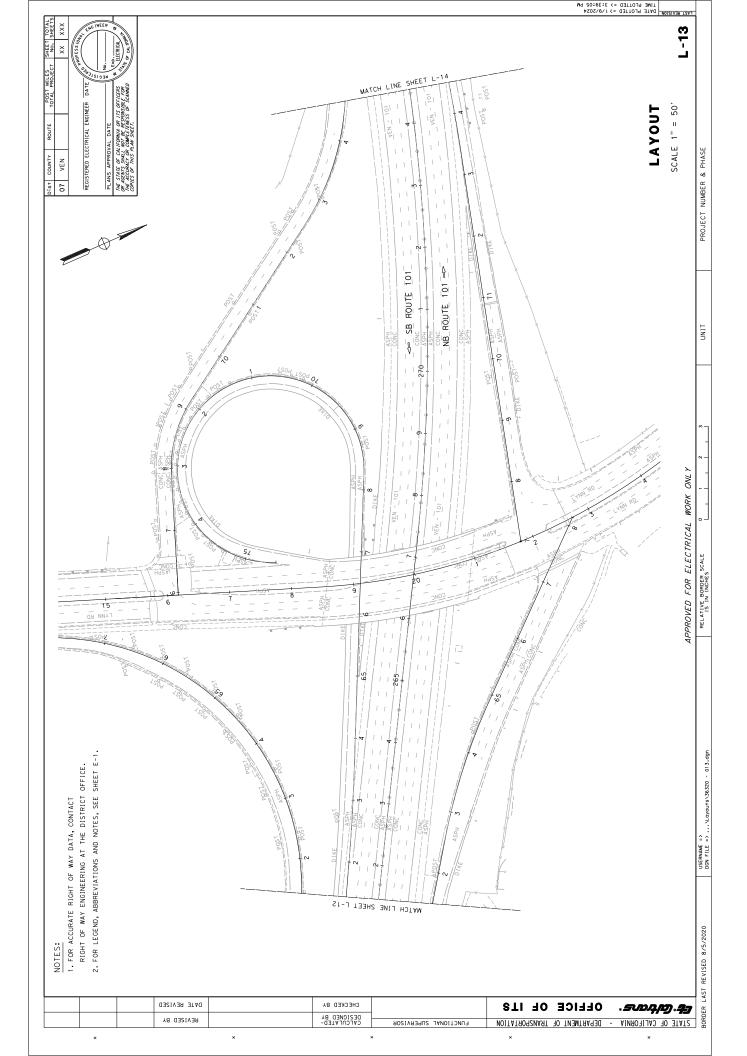


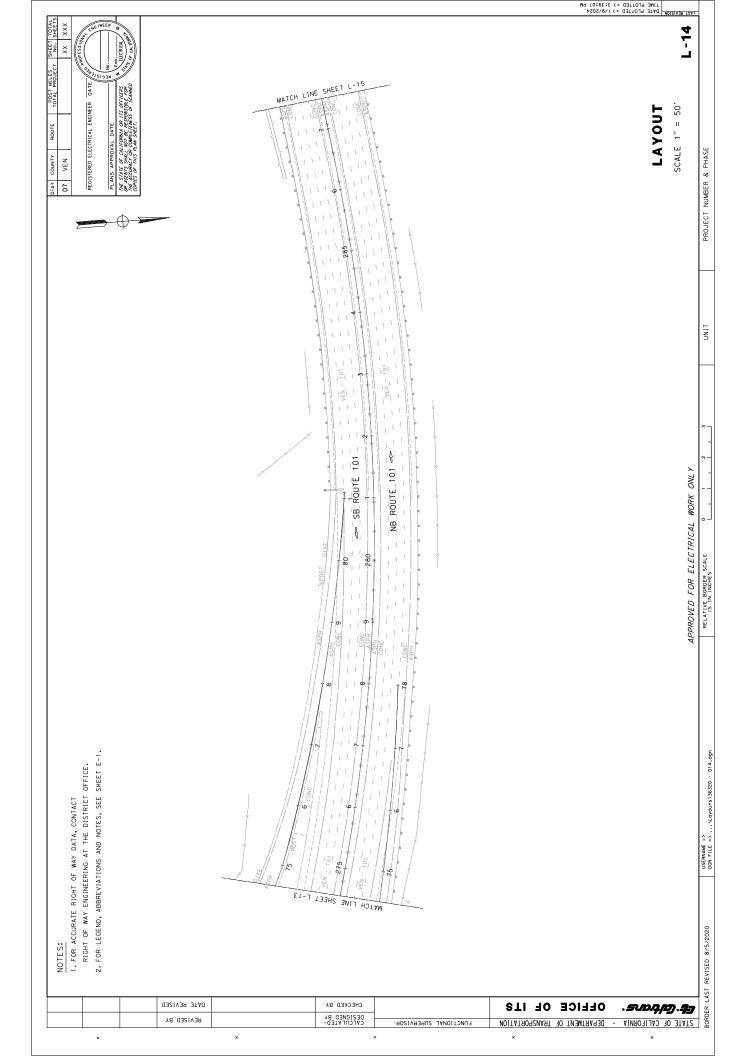


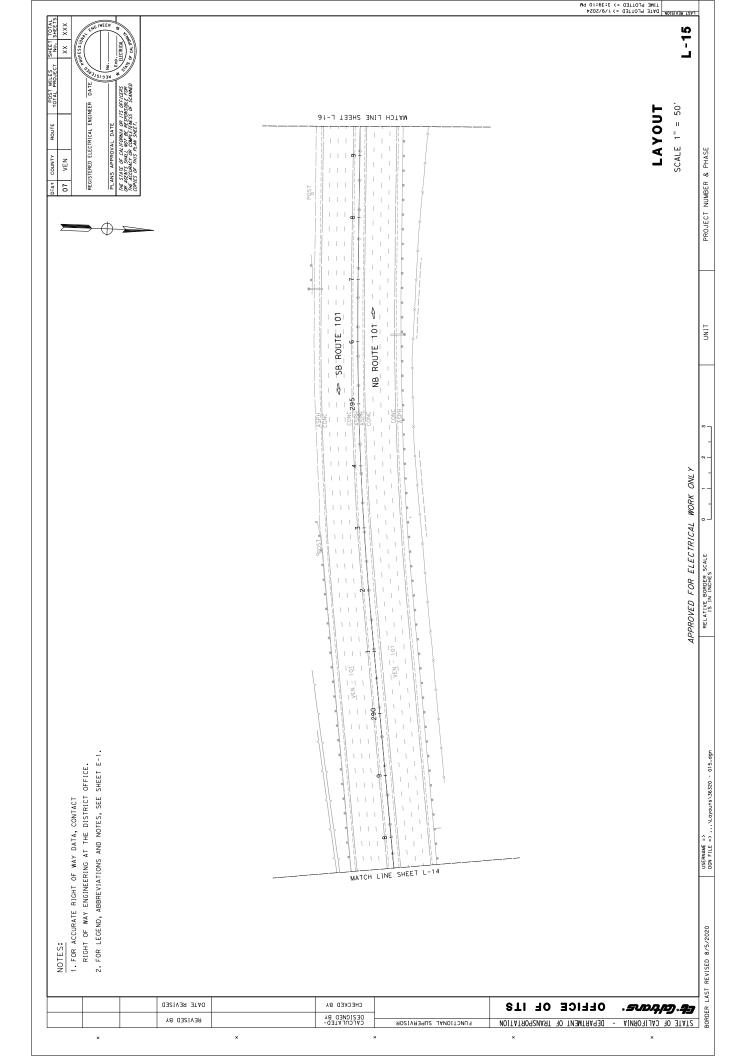


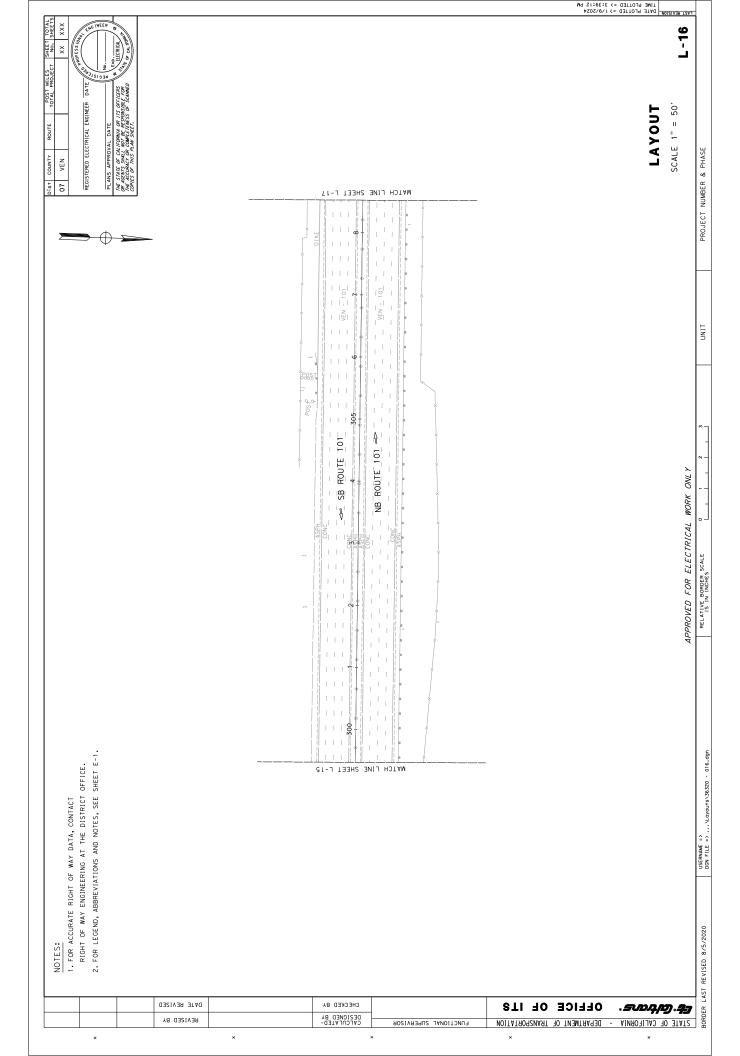


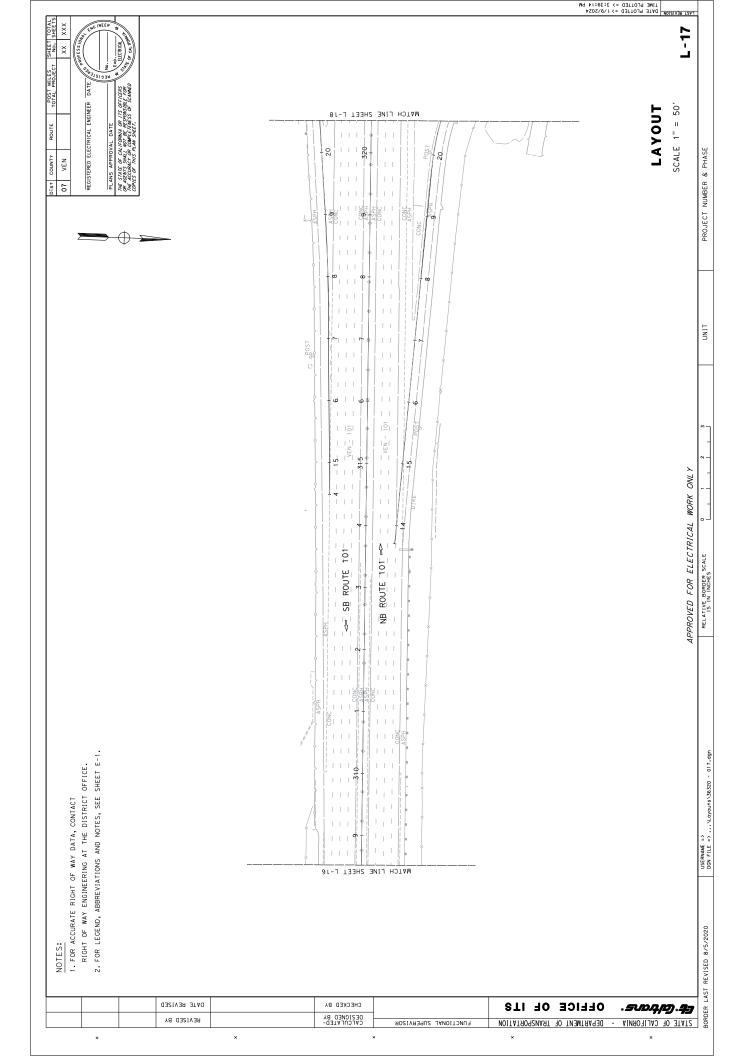


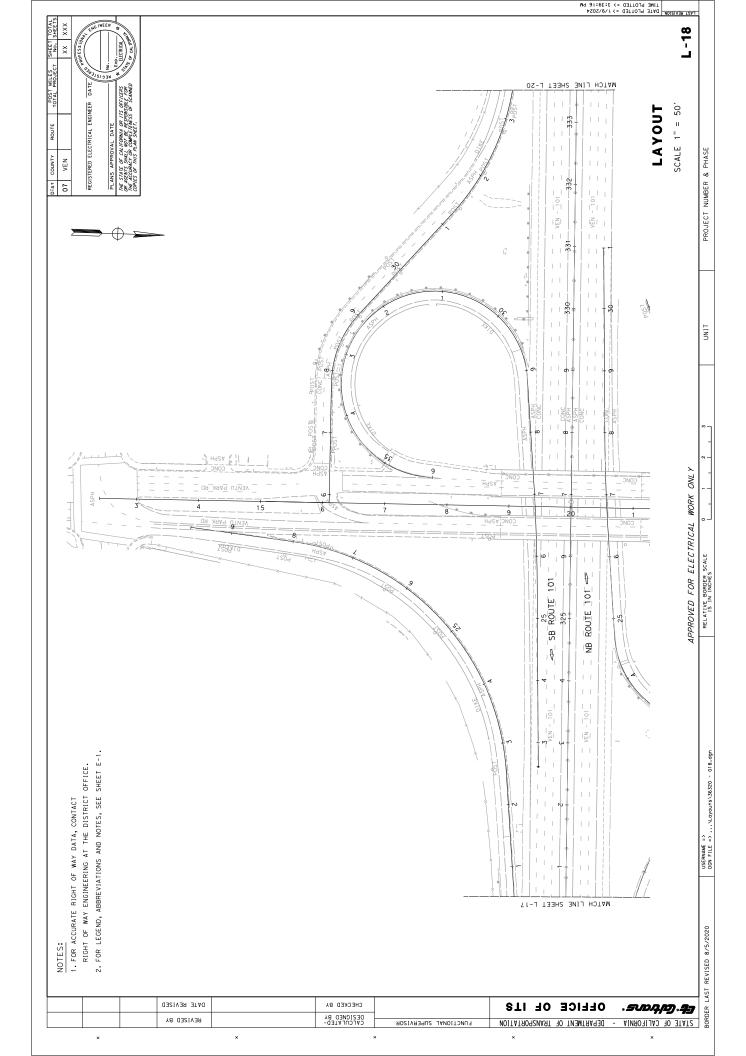


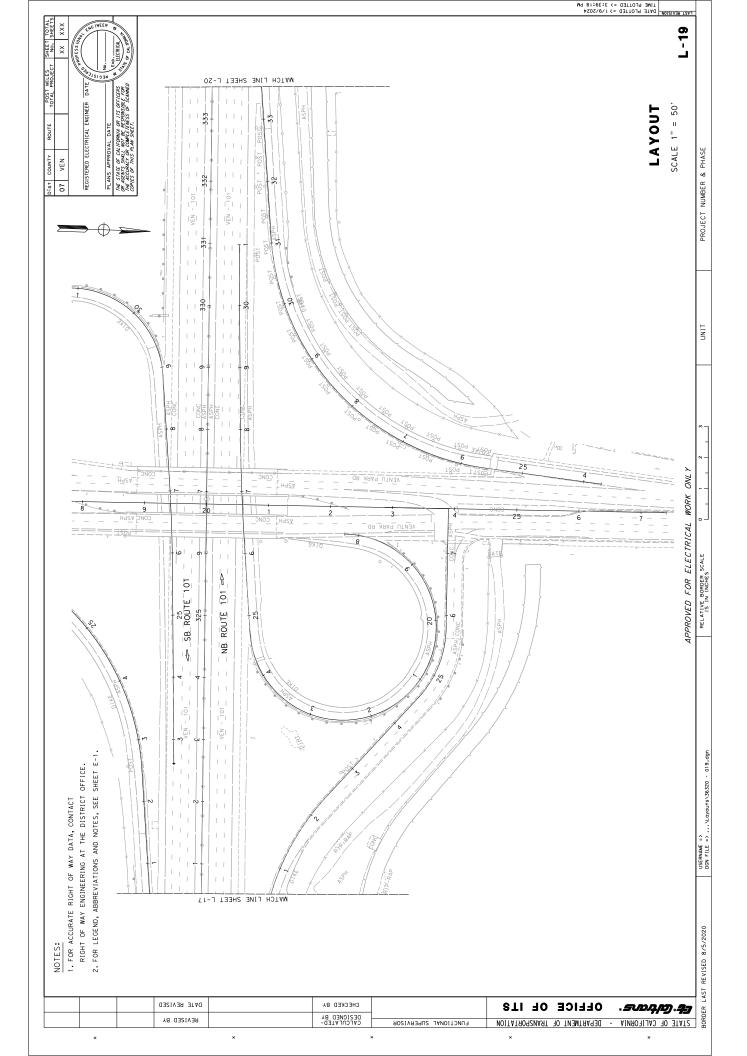


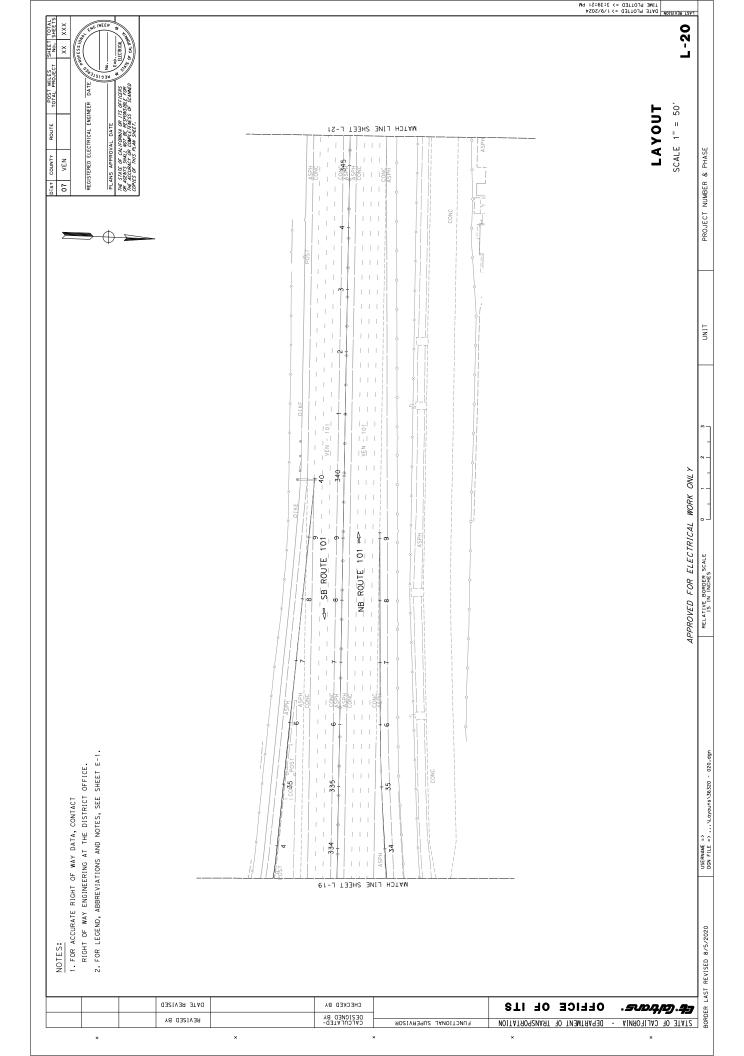


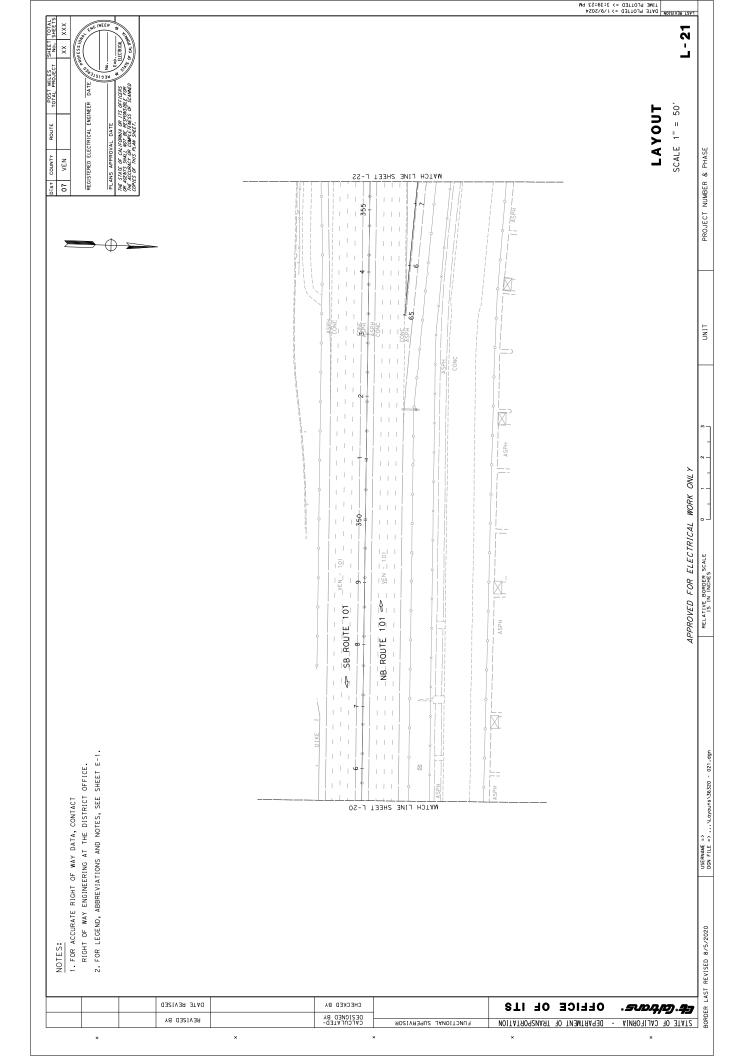


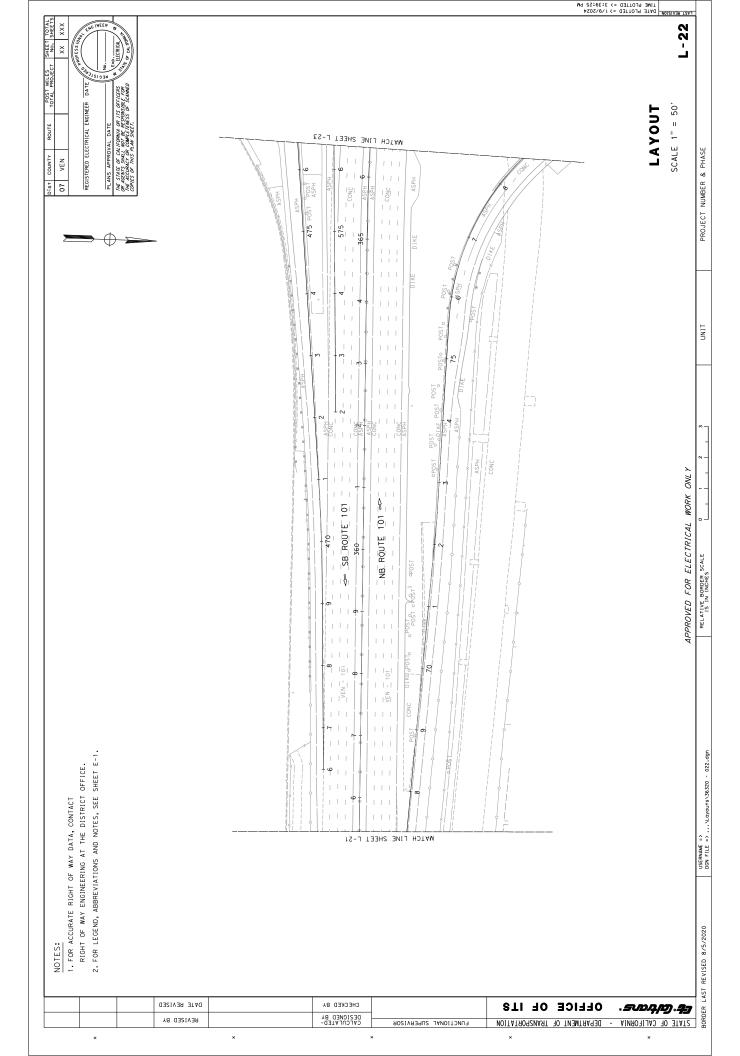


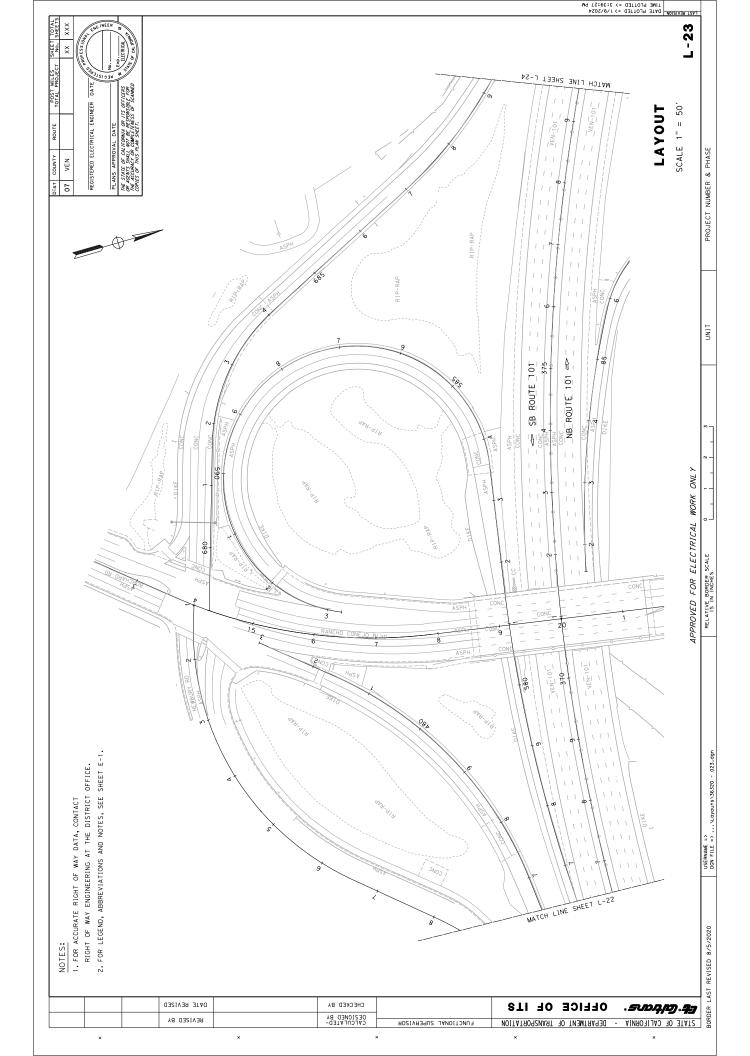


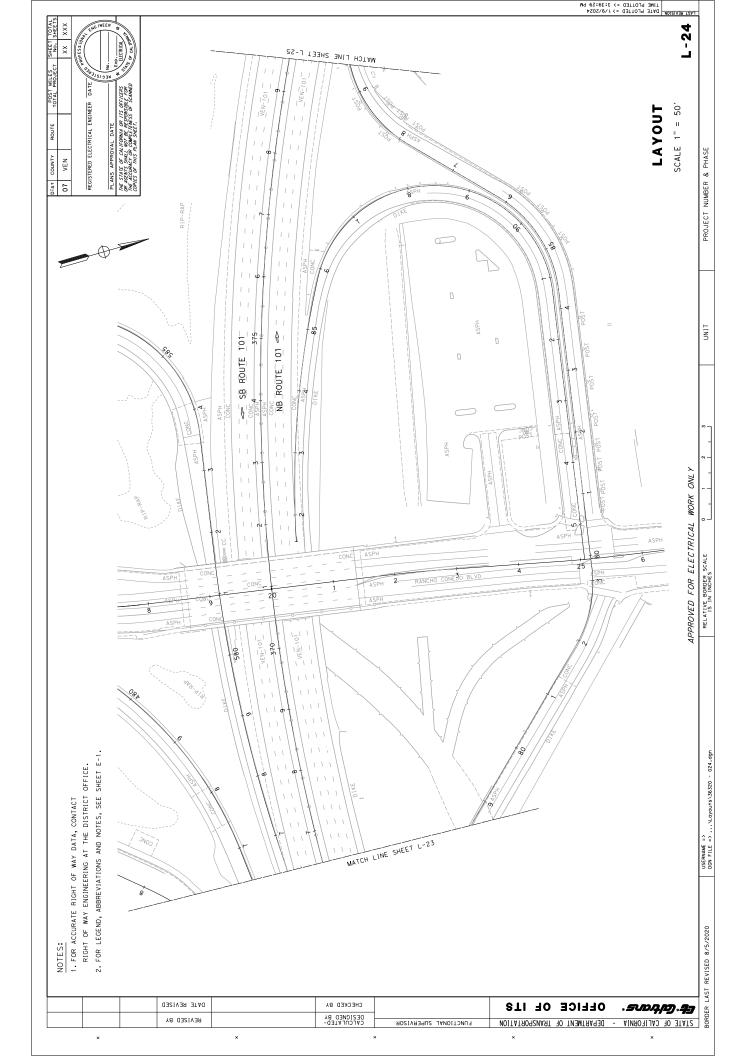


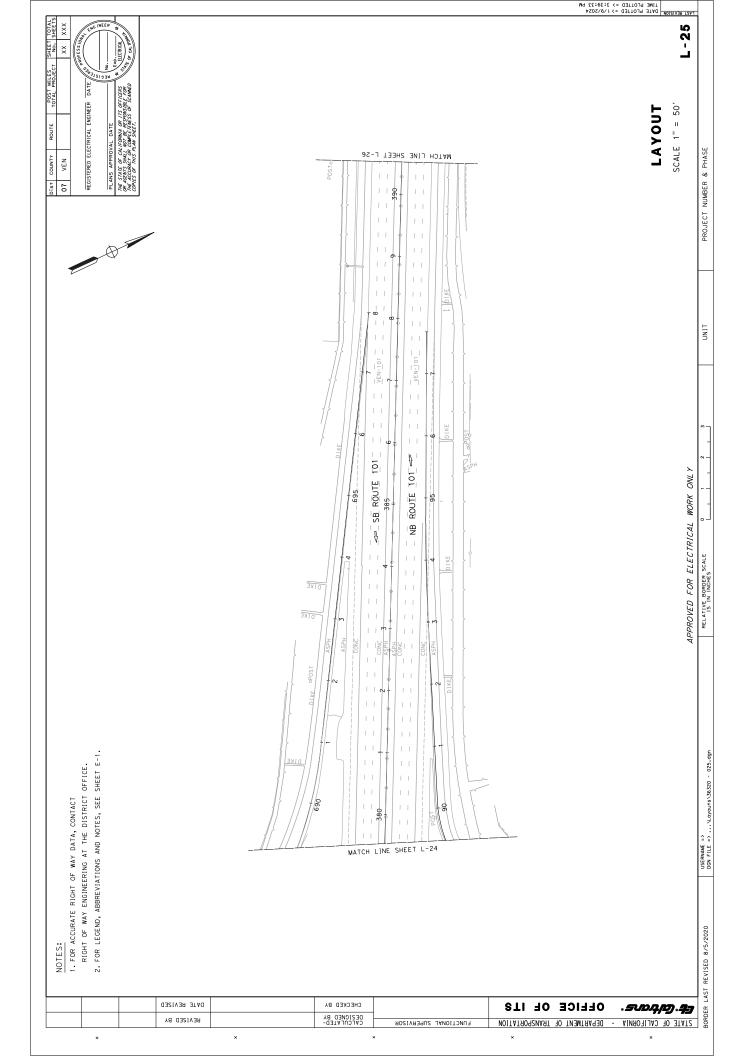


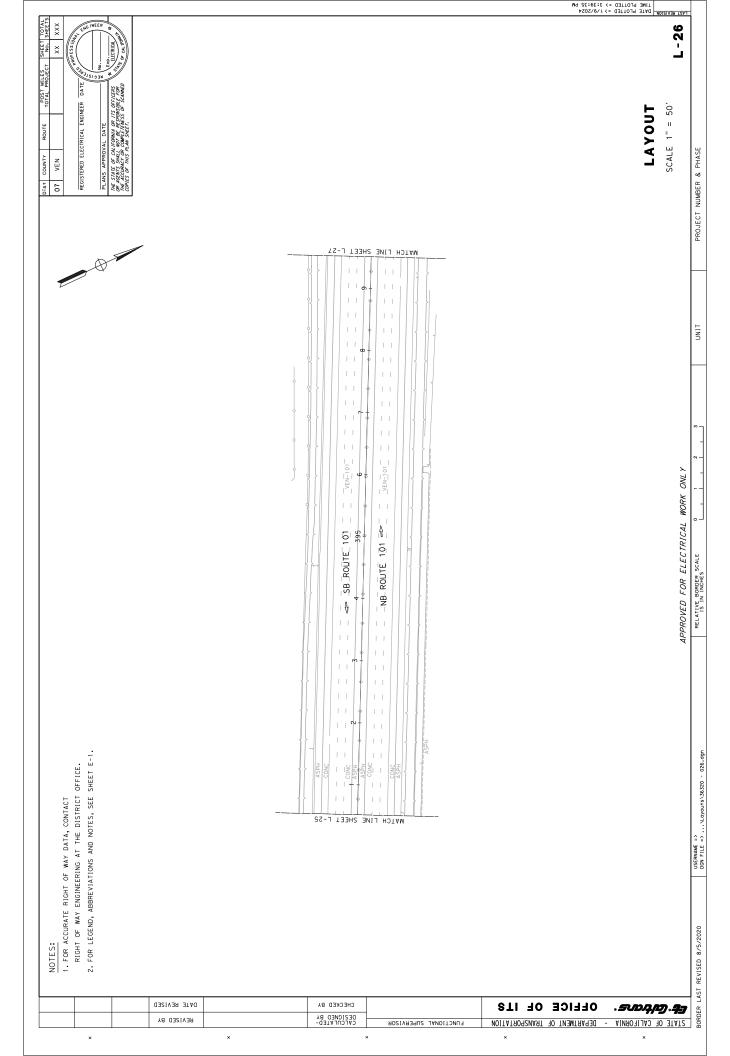


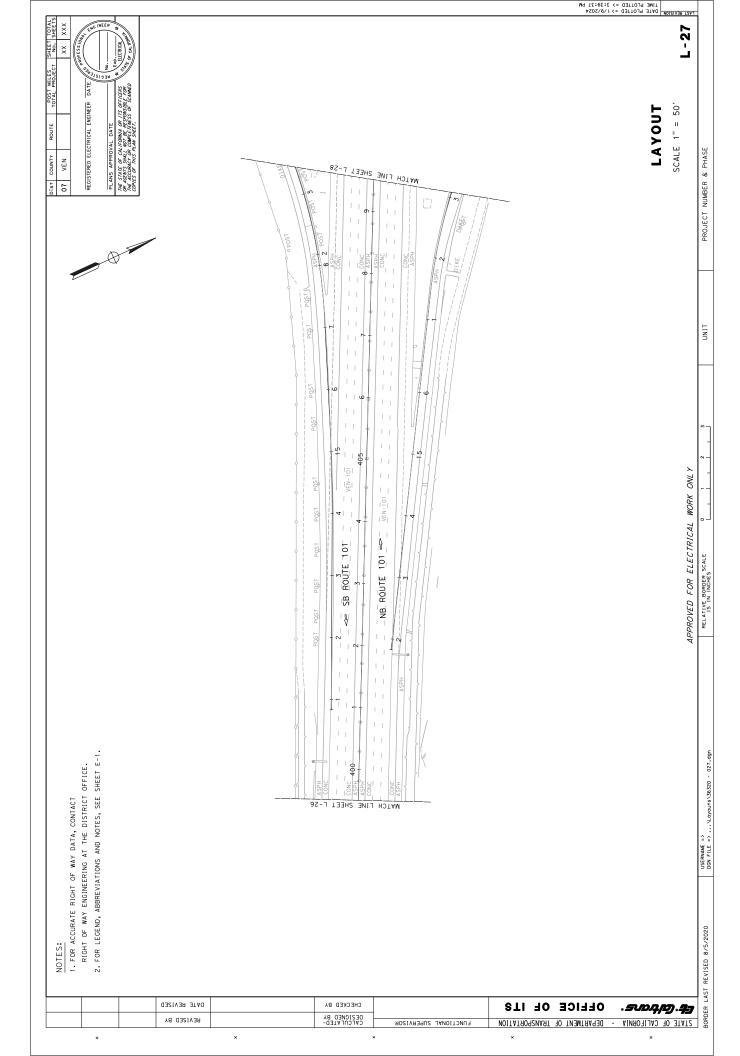


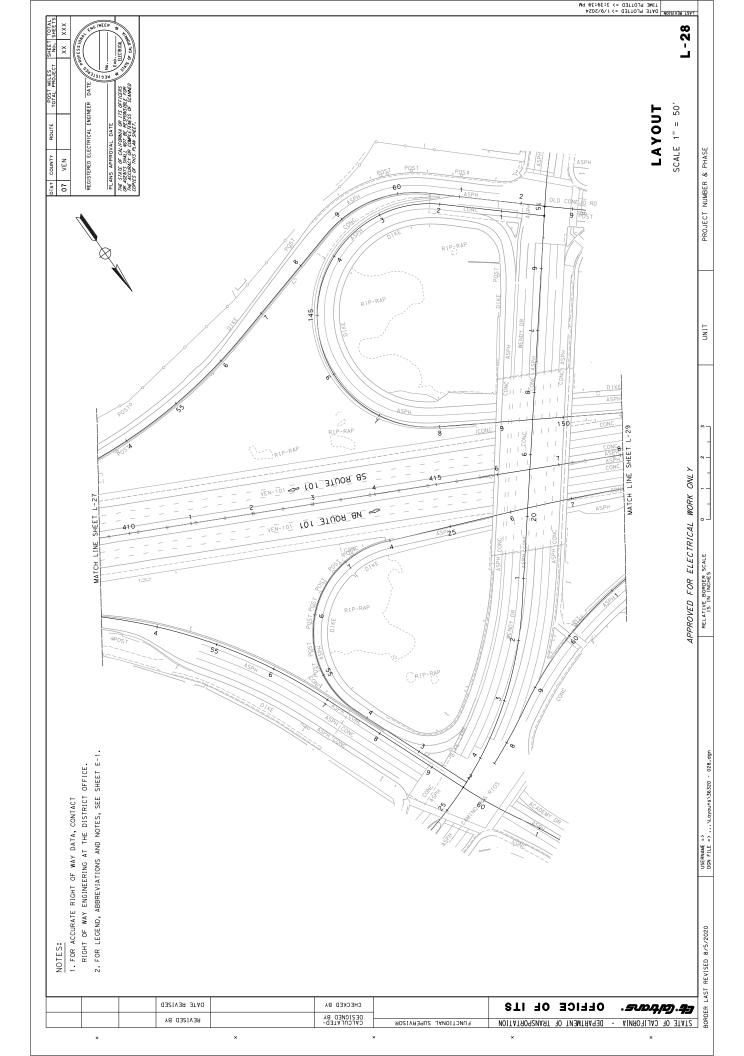


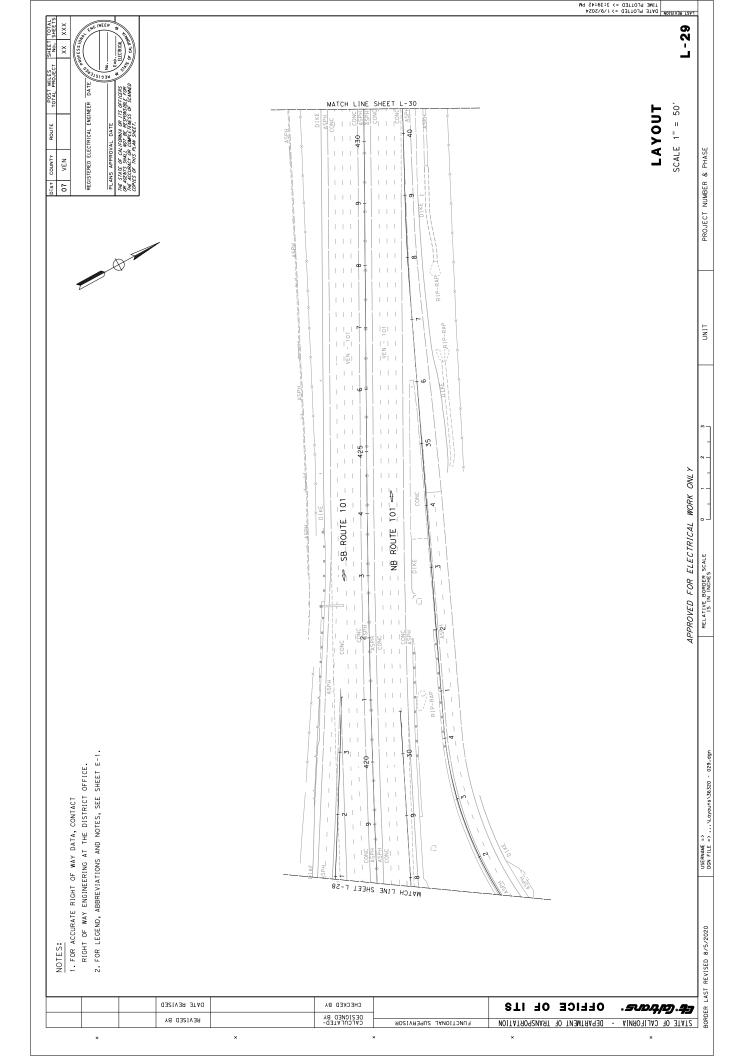


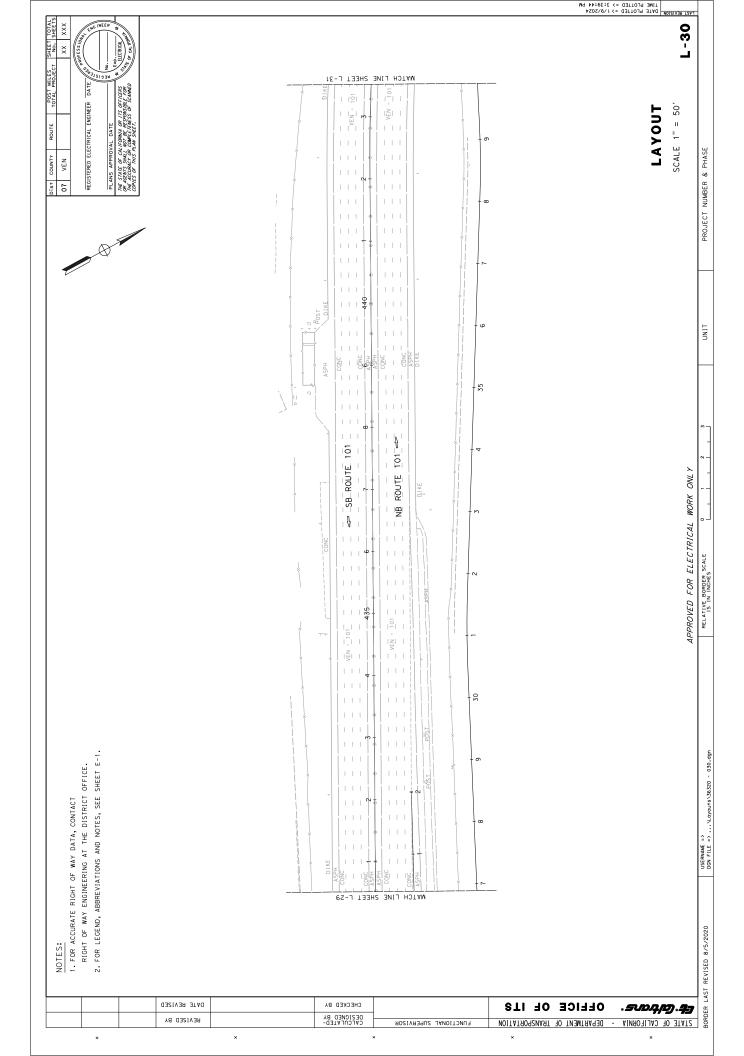


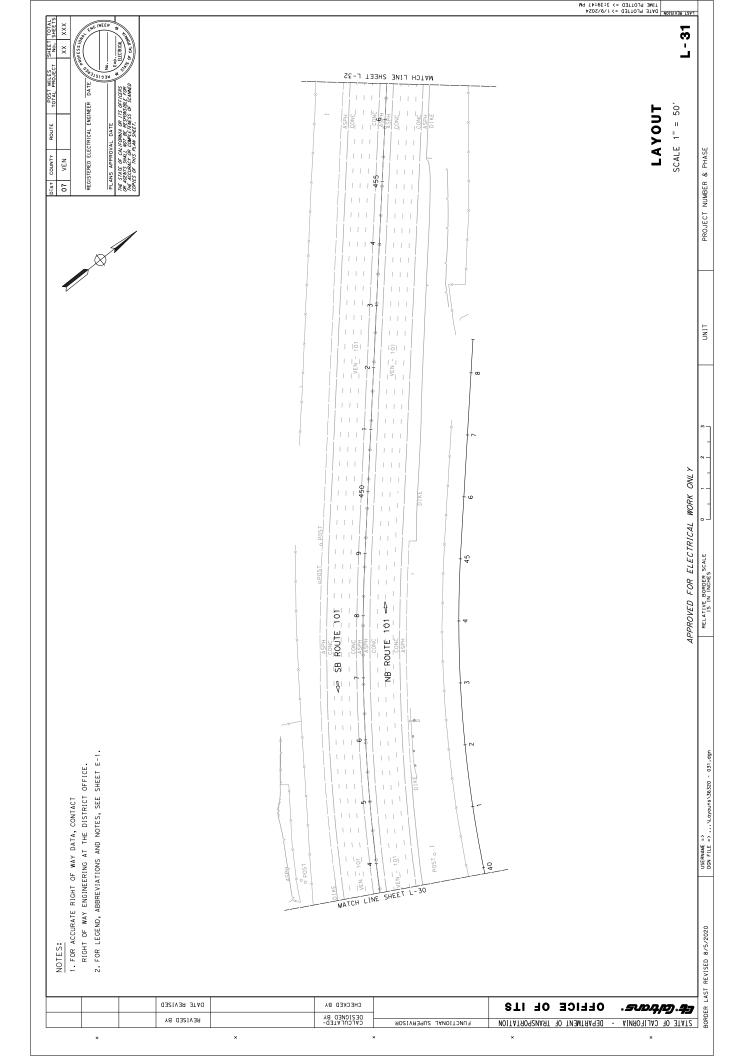


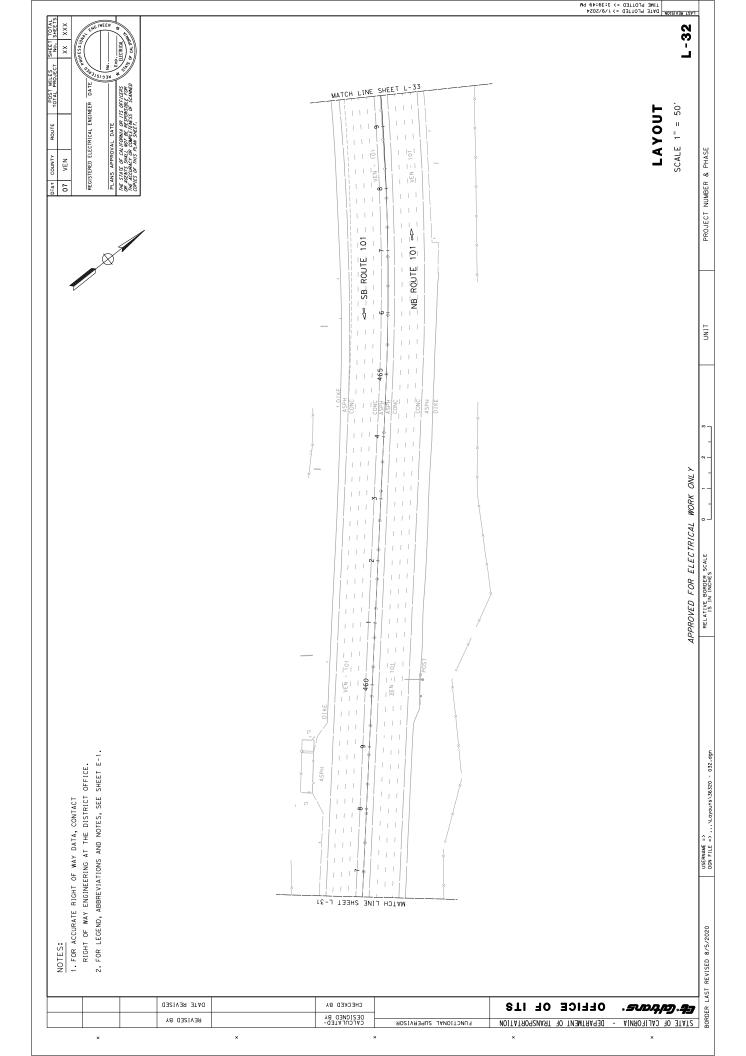


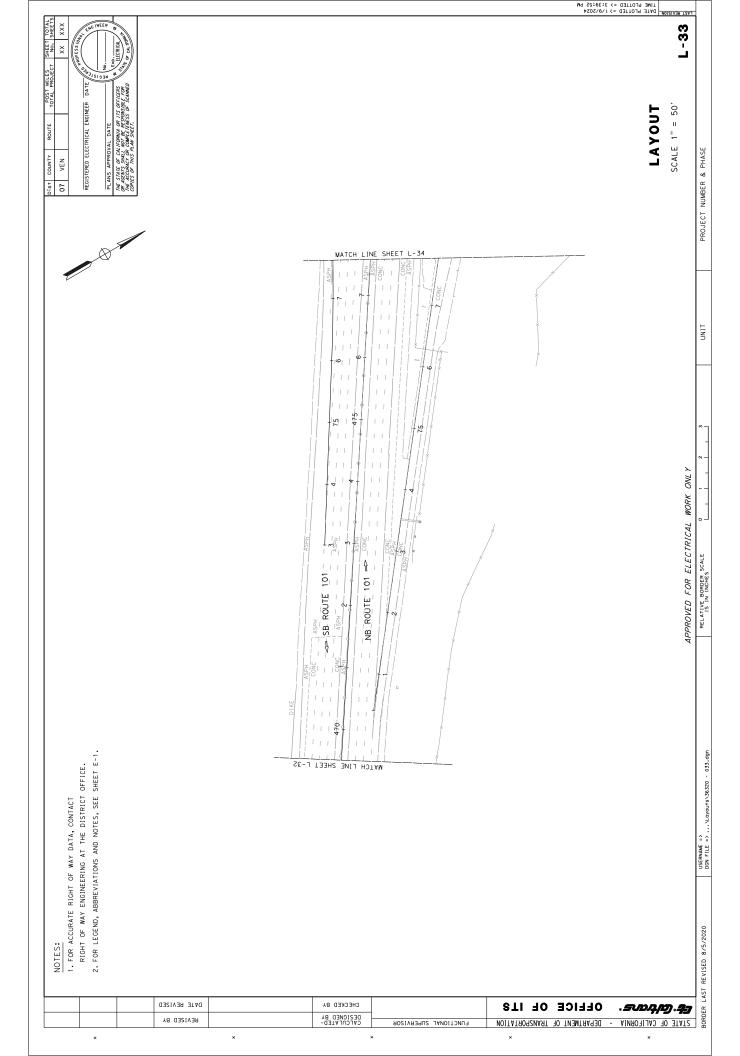


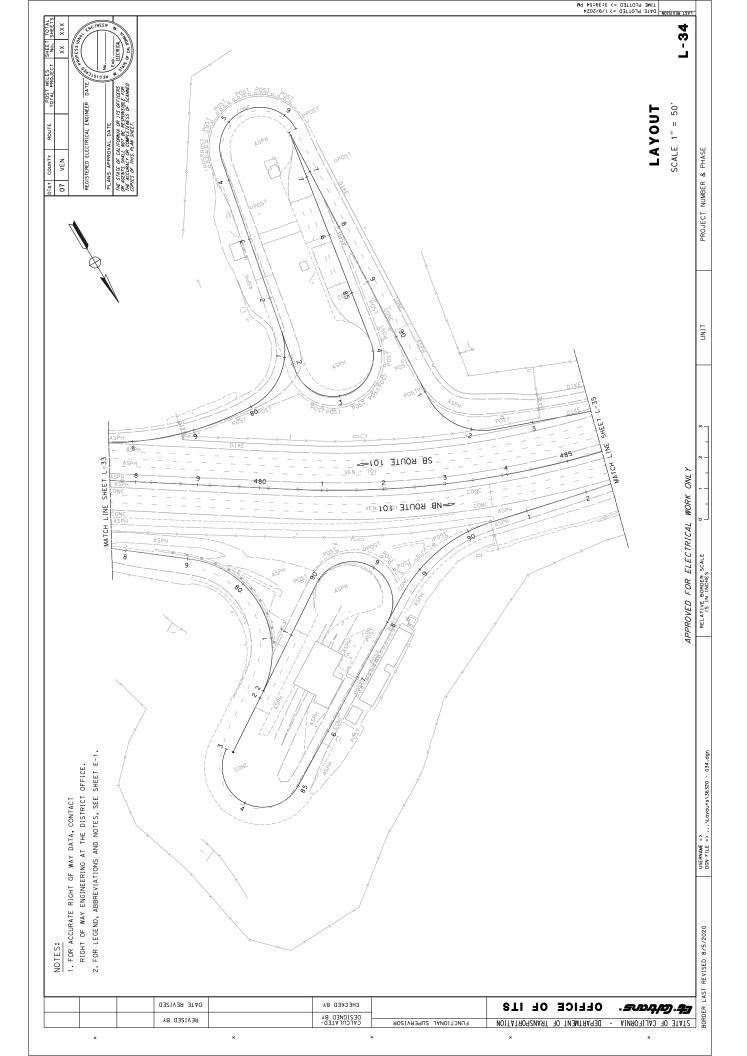


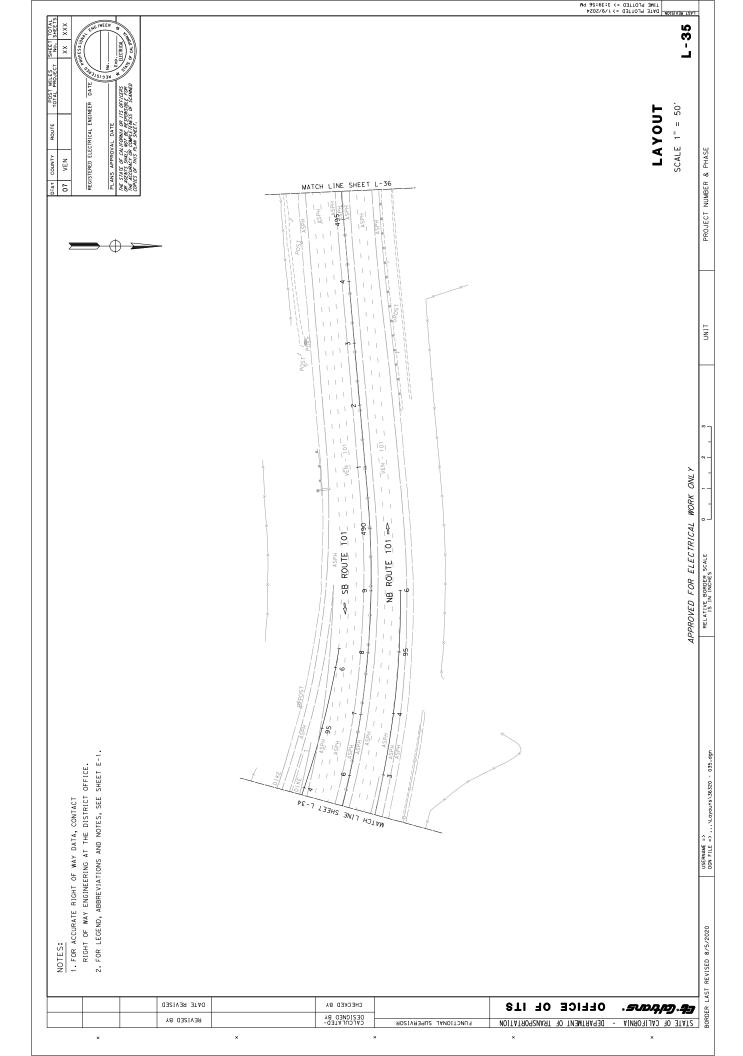


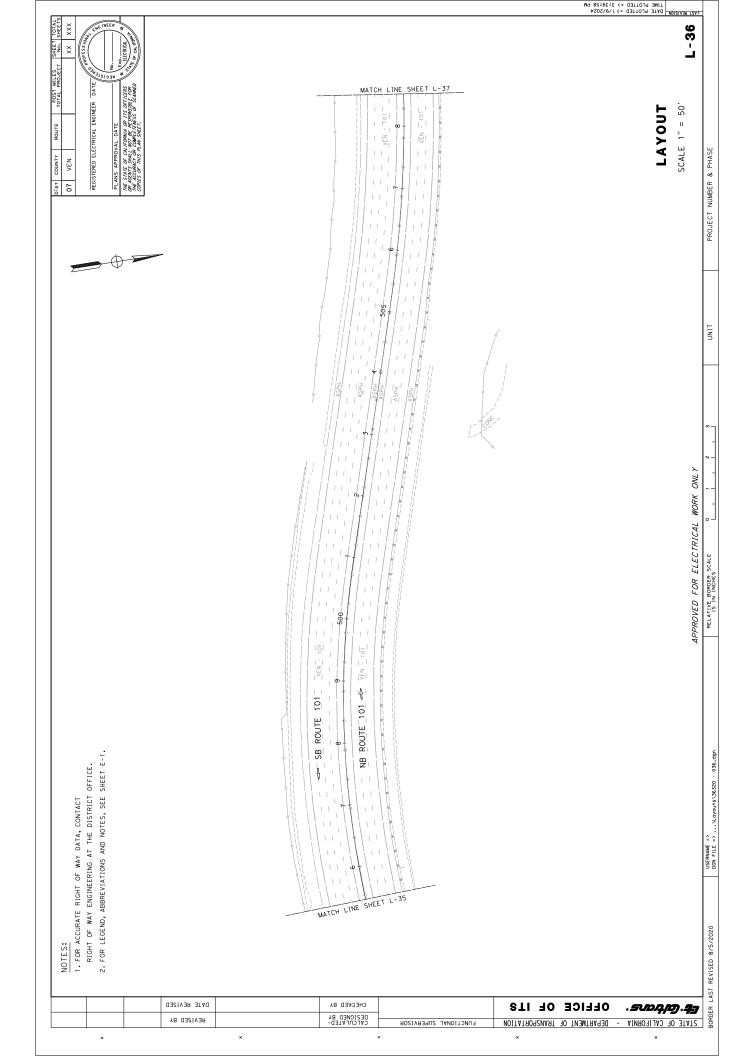


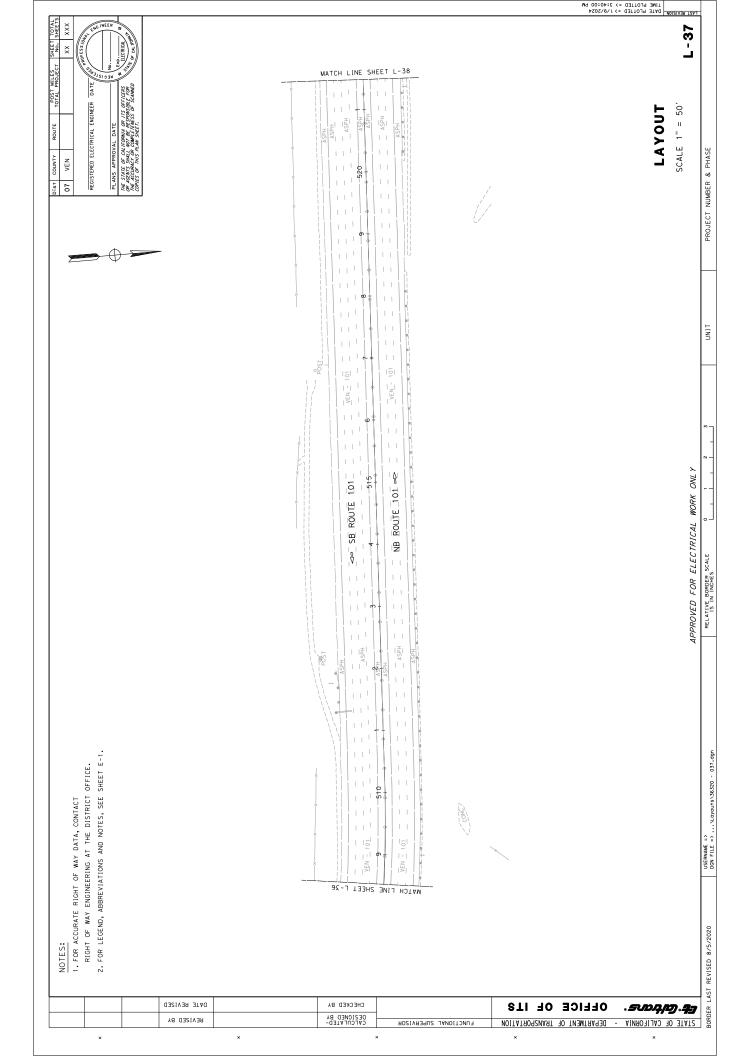


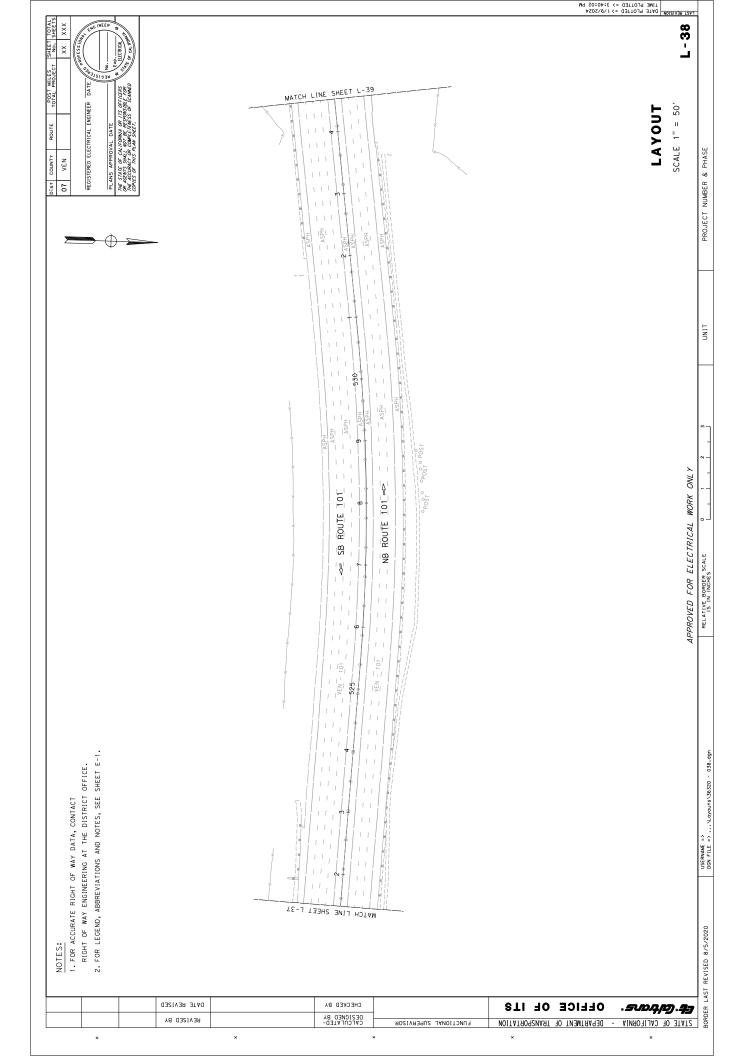


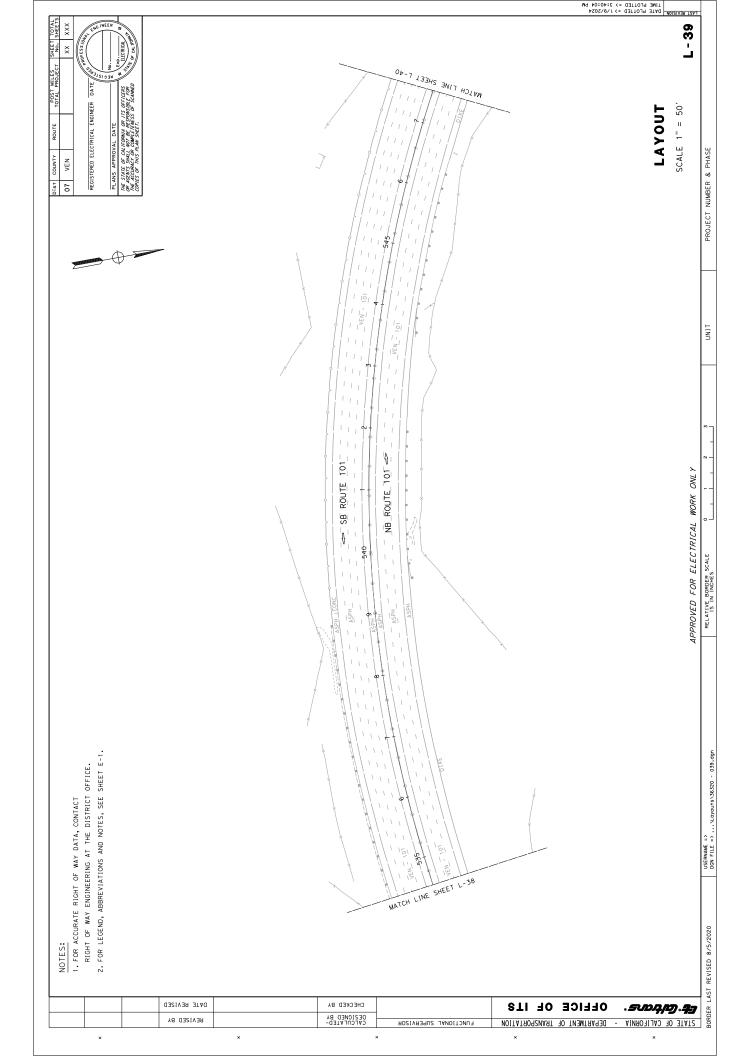


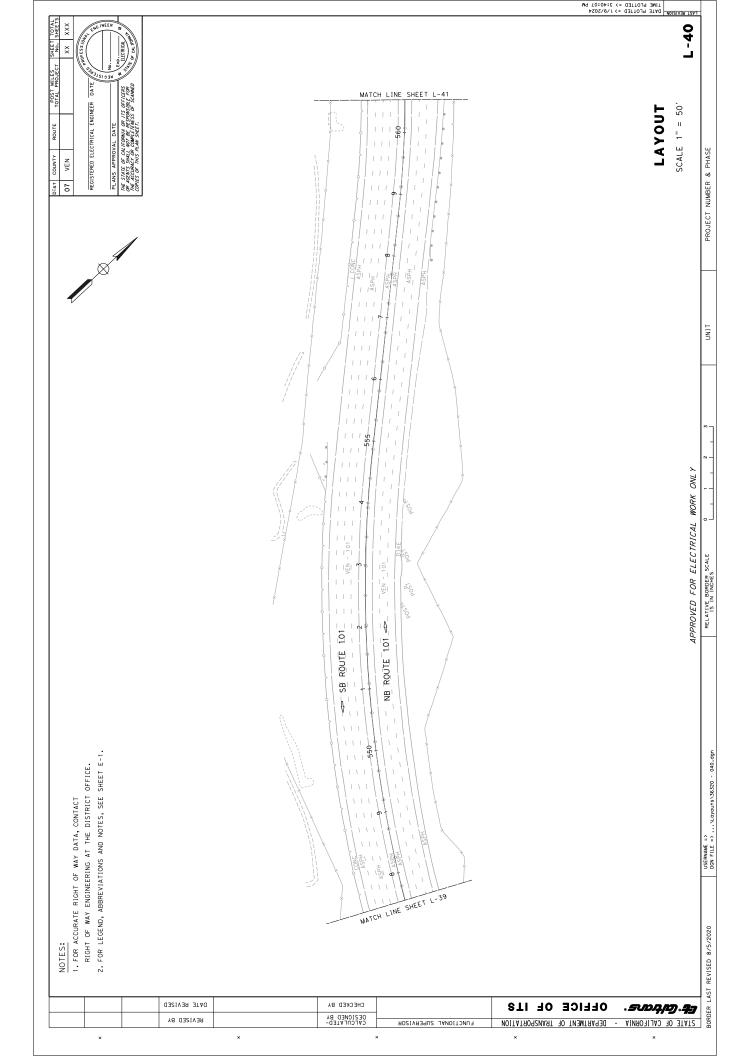


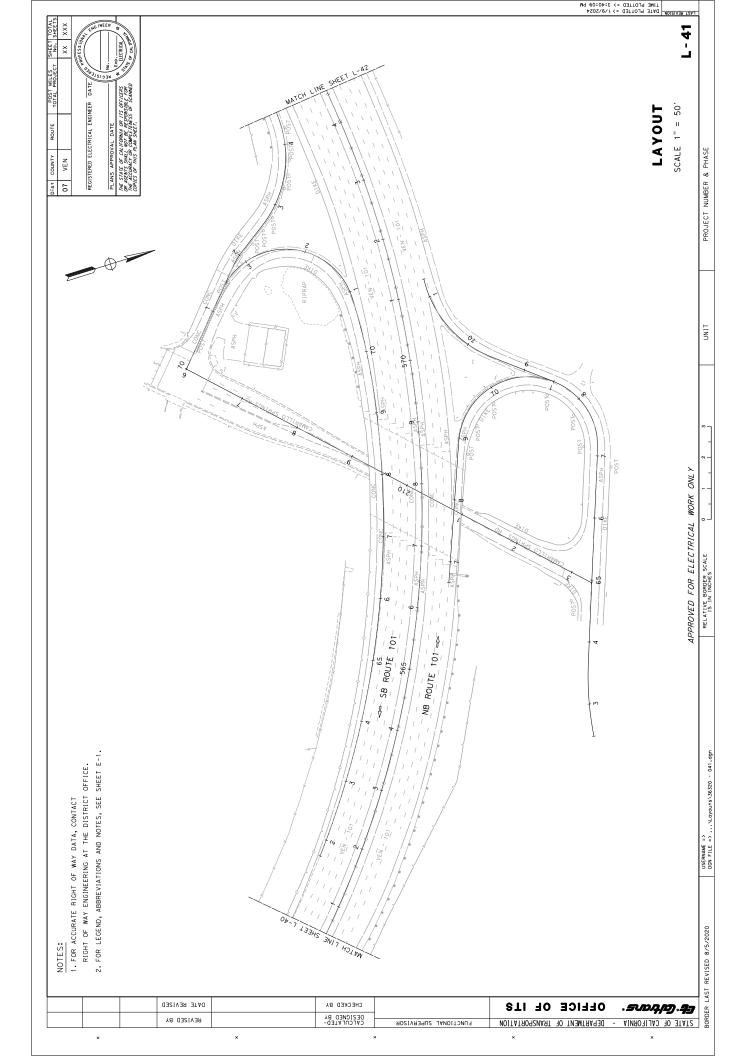


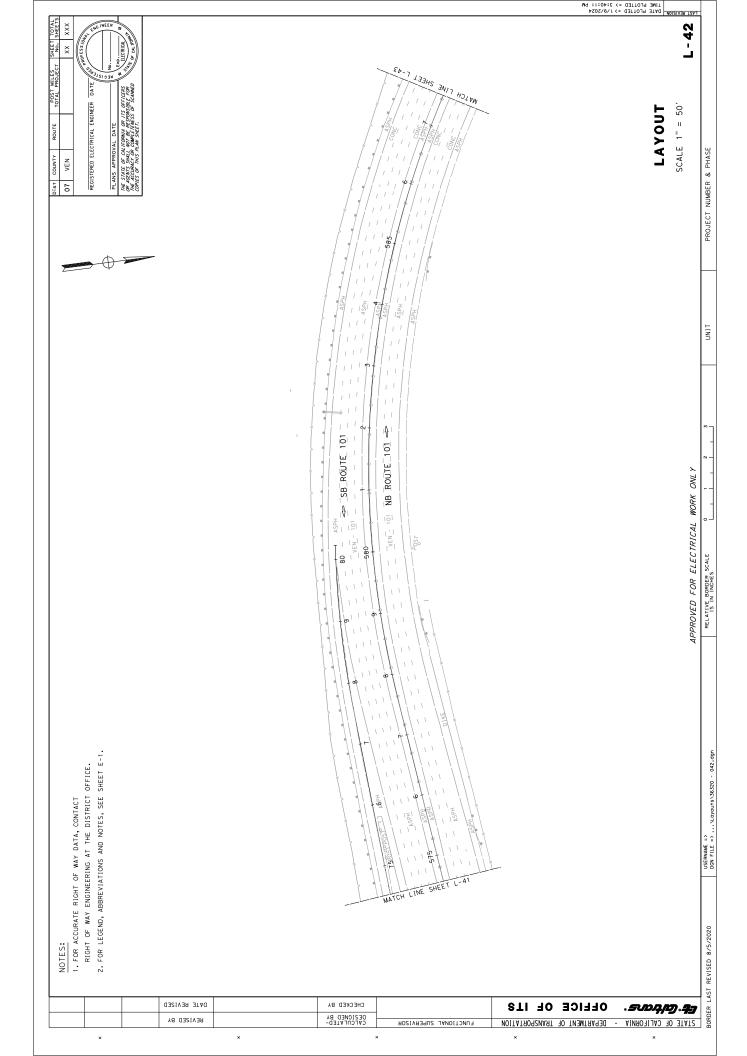


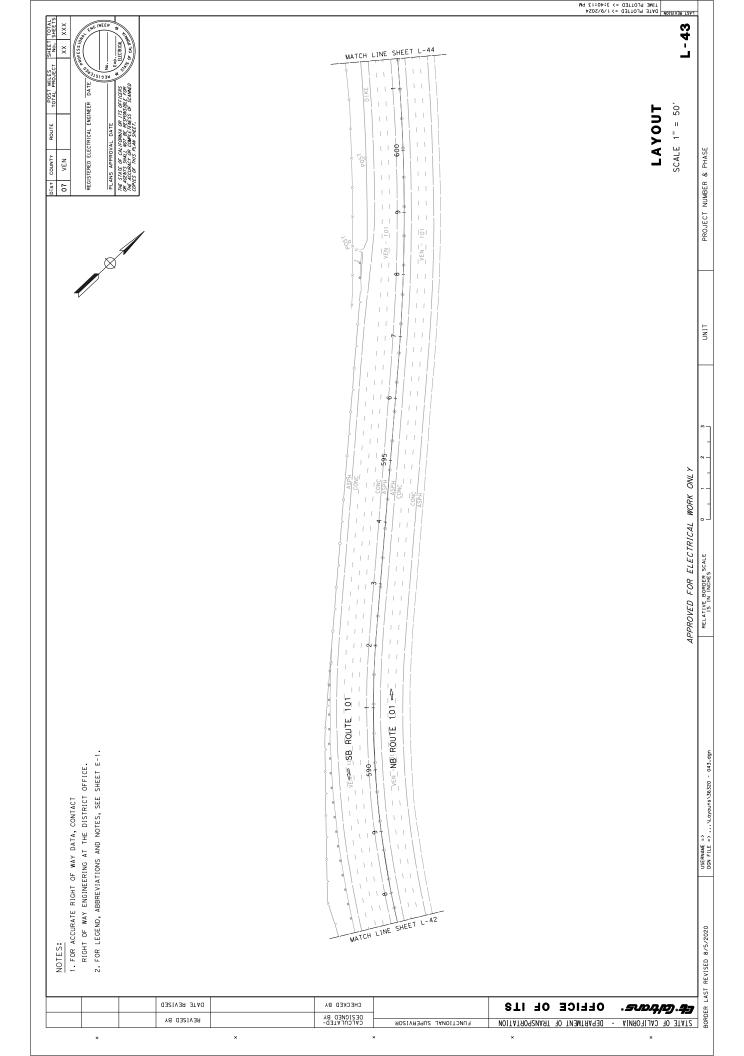


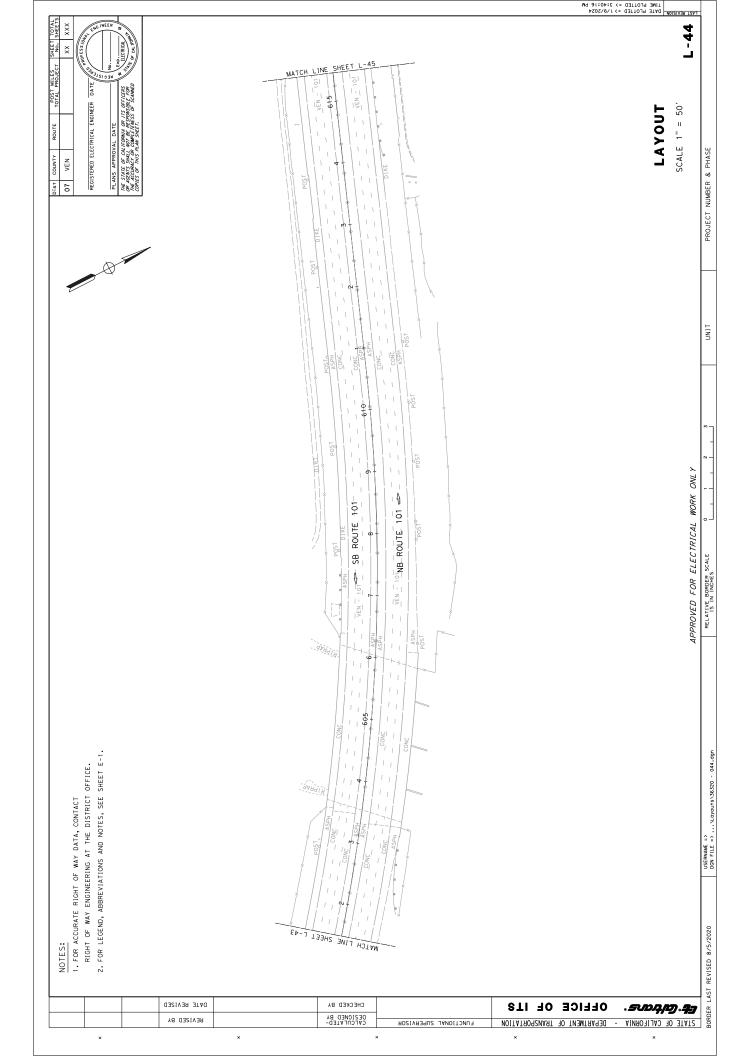




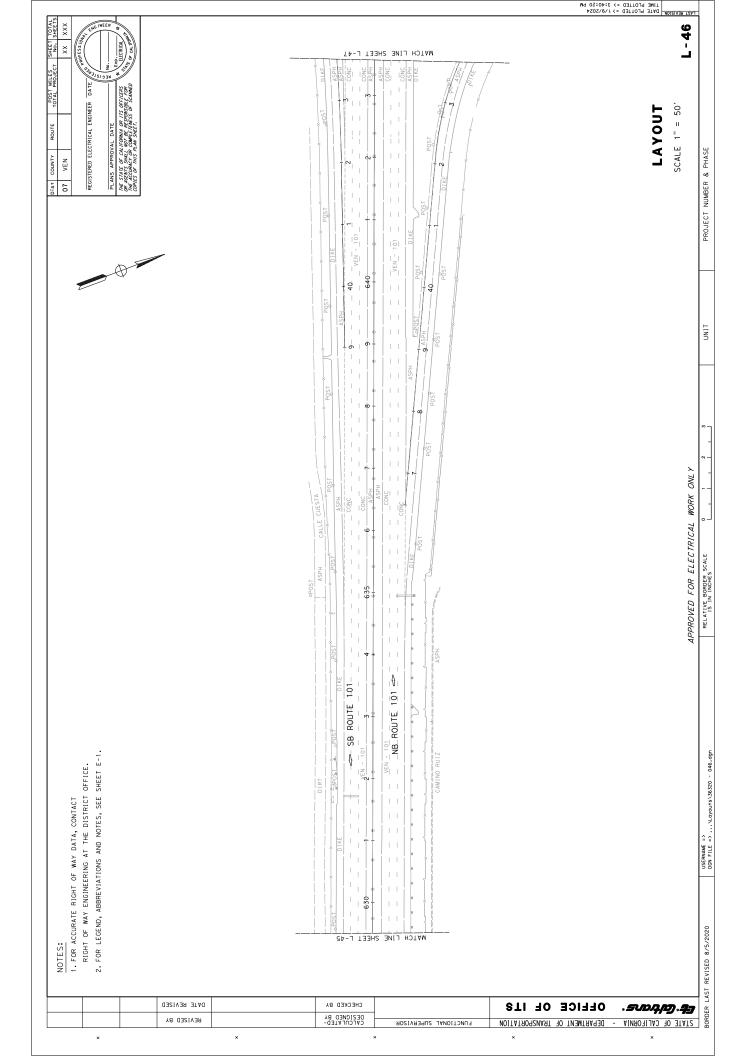


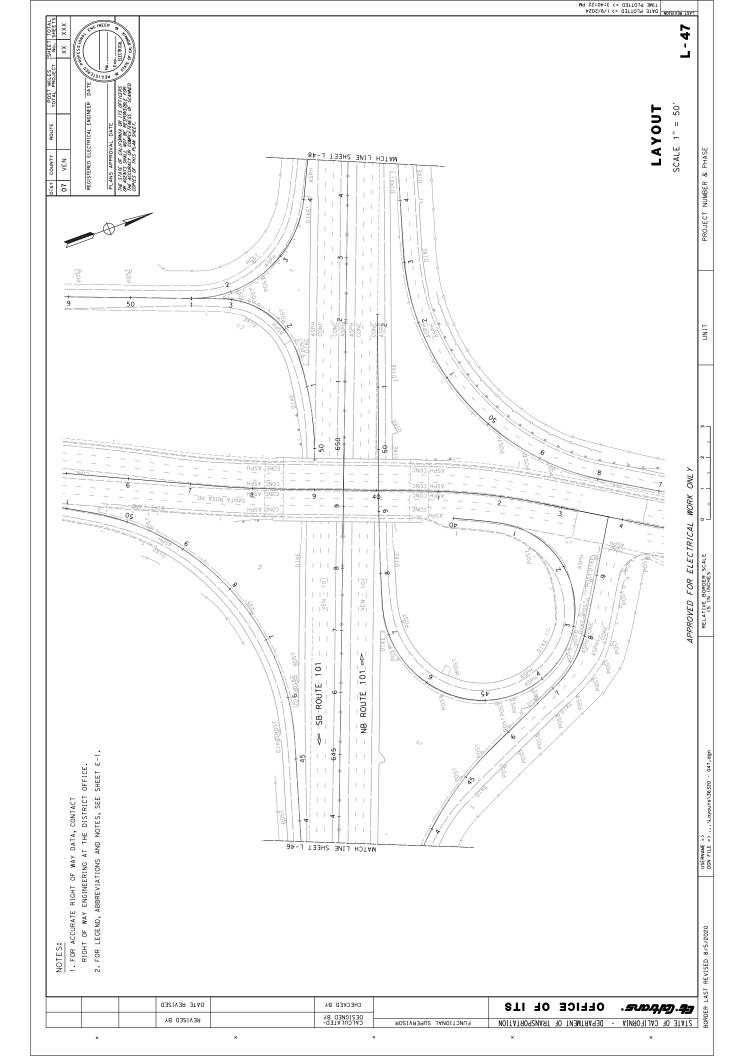




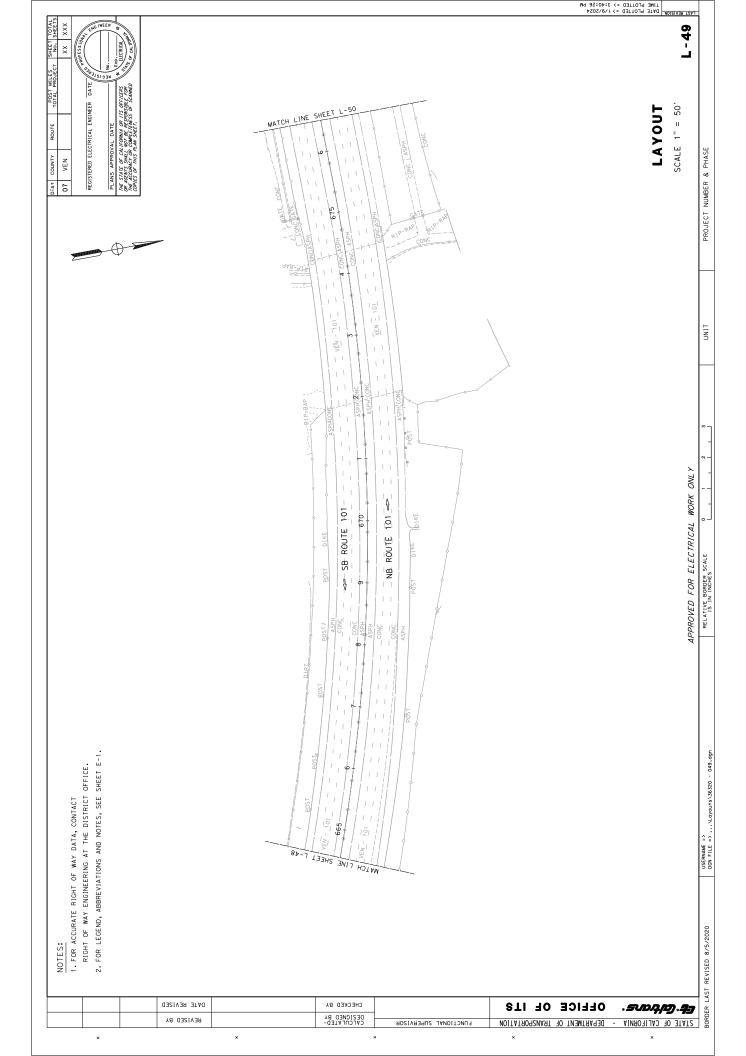


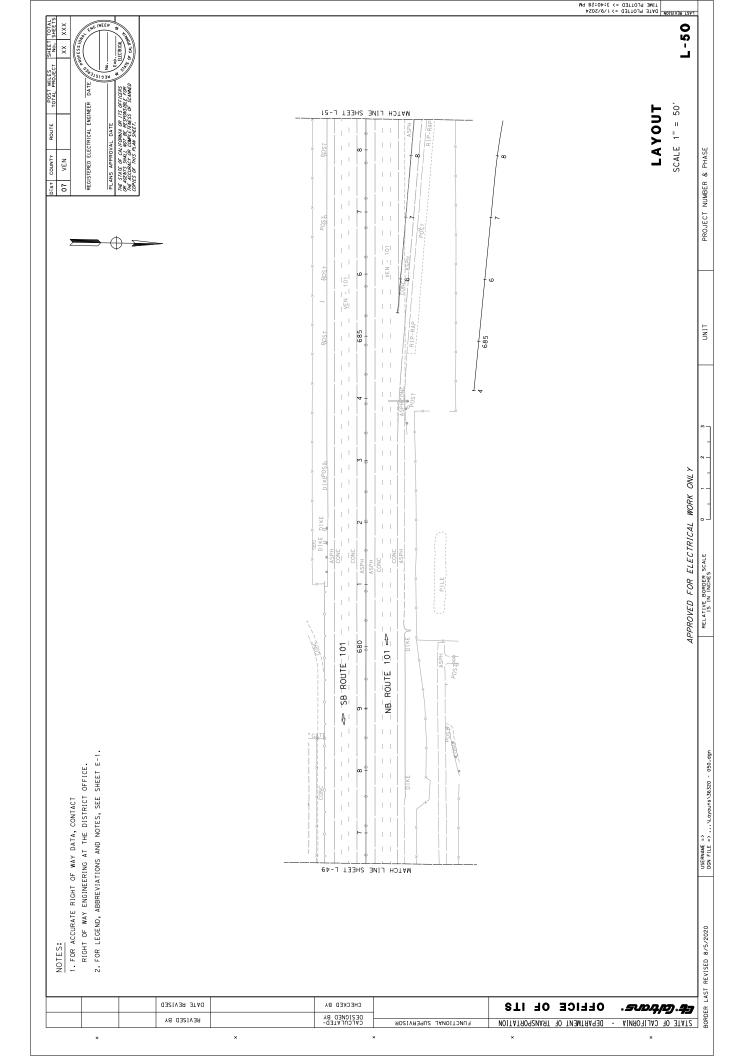
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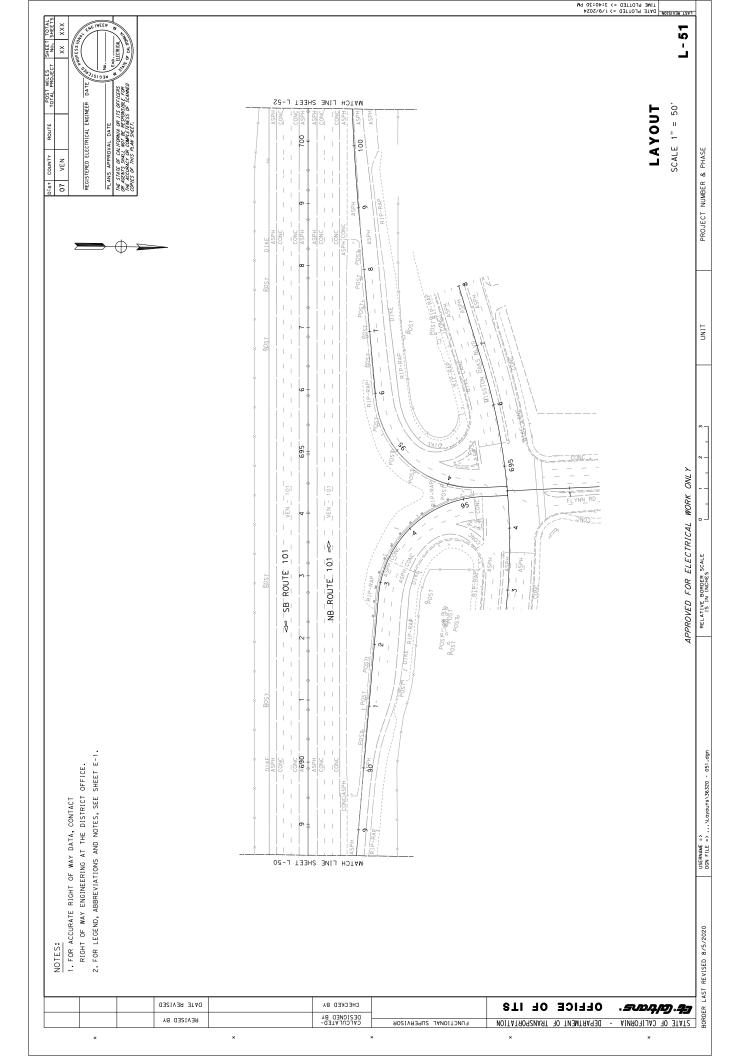


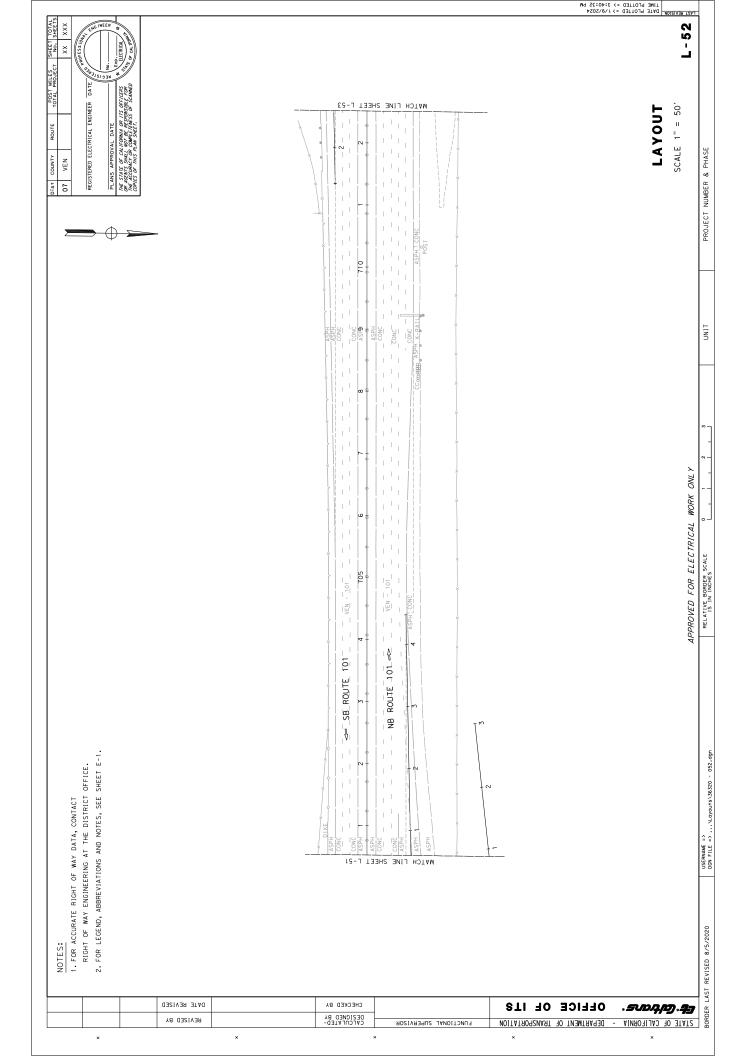


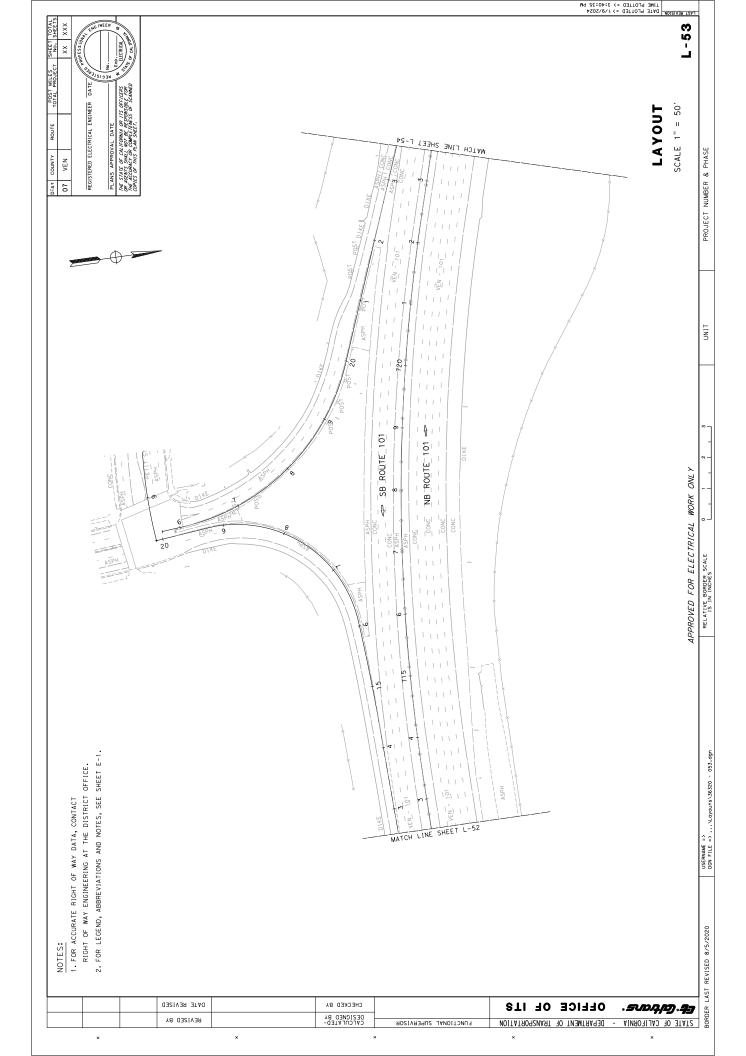
TIME PLOTTED => 3:40:2024 PM ROUTE POST MILES SHEET TOTAL TOTAL PROJECT NO. SHEETS XXX L-48 REGISTERED ELECTRICAL ENGINEER DATE LAYOUT SCALE 1" = 50' PROJECT NUMBER & PHASE Dis+ COUNTY O7 VEN MATCH LINE SHEET L-49 VEN , NJ POST LINO - NB ROUTE 101 ~ SB\_ROUTE 101 099 9 APPROVED FOR ELECTRICAL WORK ONLY RELATIVE BORDER SCALE IS IN INCHES VEN - 101 2. FOR LEGEND, ABBREVIATIONS AND NOTES, SEE SHEET E-1. 1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE. 55 MATCH LINE SHEET L-47 BORDER LAST REVISED 8/5/2020 DATE REVISED CHECKED BA OFFICE OF ITS .*swpp*p.**4**3 CALCULATED-DESIGNED BY BENIZED BA STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION FUNCTIONAL SUPERVISOR

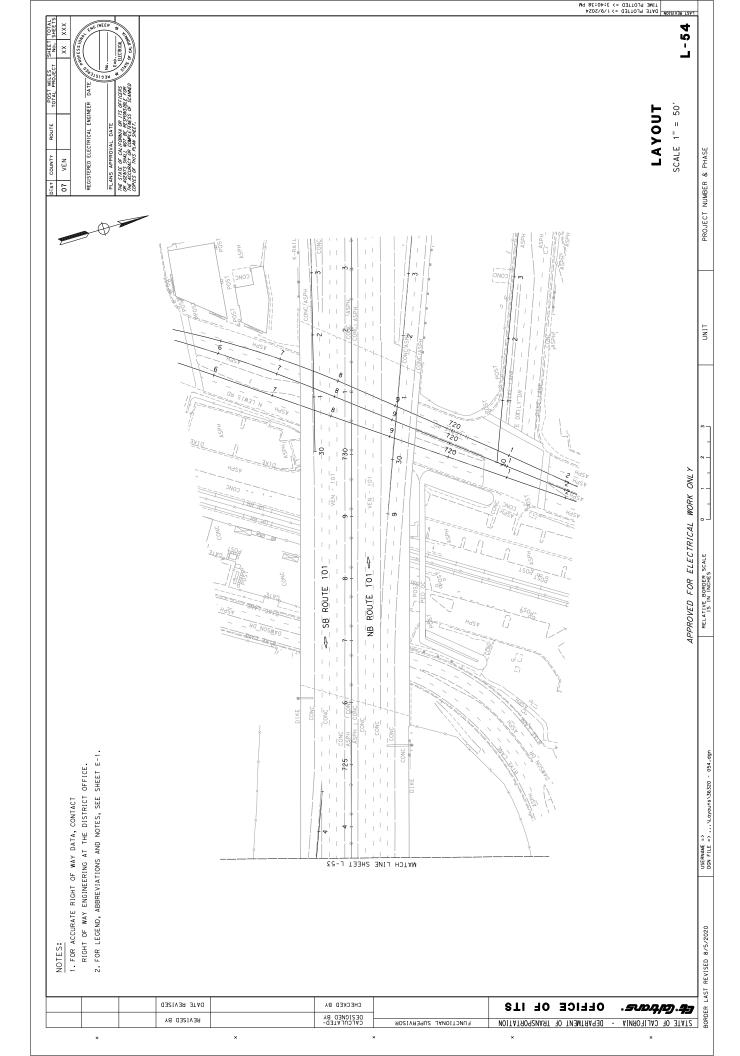












### **ATTACHMENT D**

### **Project Cost Estimates**

### **PROJECT**

### **PLANNING COST ESTIMATE®**

EA: 07-36320 PID: 719000312

PID: 719000312 District-County-Route: 07-Ven-101/23

PM: 3.0/13.8 & 3.34/4.2

Type of Estimate: Project Scope

EA: 07-36320

Program Code: SHOPP 20.XX.201.31SHOPPMobility315Program

Project Limits: Ven 101 PM 3.0/13.8, Ven 23 PM 3.34/4.20, LARTMC at LA 2 PM R18.7, North Hollywood HUB at LA 101 PM 11.8

Project Description: TMS Upgrade at VEN 101 3.0/13.8, Ven 23 3.34/4.20, LARTMC, NHD HUB

Scope: Upgrade and install fiber communication system, CCTV, Traffic Census Station, Connector Metering, CMS, and TMS for Technology life cycle replacement

Alternative: Alternative # 1

### **SUMMARY OF PROJECT COST ESTIMATE**

	Cu	rrent Year Cost	 scalated Cost
TOTAL ROADWAY COST	\$	36,120,500	\$ 42,253,657
TOTAL STRUCTURES COST	\$	-	\$ -
SUBTOTAL CONSTRUCTION COST	\$	36,120,500	\$ 42,253,657
TOTAL RIGHT OF WAY COST	\$	90,000	\$ 104,000
TOTAL CAPITAL OUTLAY COSTS	\$	36,211,000	\$ 42,358,000
PA/ED SUPPORT	\$	1,460,000	\$ 1,460,000
PS&E SUPPORT	\$	4,379,000	\$ 4,379,000
RIGHT OF WAY SUPPORT	\$	41,000	\$ 41,000
CONSTRUCTION SUPPORT	\$	5,494,000	\$ 6,570,000
TOTAL SUPPORT COST	\$	11,374,000	\$ 12,450,000
TOTAL PROJECT COST	\$	47,600,000	\$ 54,900,000

### Programmed Amount

		, 10g. a.i.iii 0a / iiii 0aiii				
		<u>Month</u>	/	<u>Year</u>		
	Date of Estimate (Month/Year) _	1	/	2024		
	Estimated Construction Start (Month/Year)	10	1	2025		
		Number of Working Days	=	500		
Estim	ated Mid-Point of Construction (Month/Year)	10	/	2026		
	Estimated Construction End (Month/Year)	10	/	2027		
	Numbe	er of Plant Establishment Days		0		
	Estimated Project Schedule					
	PID Approval	June 30 - 2020				
	PA/ED Approval	March, 2024				
	PS&E	January, 2025				
	RTL	February, 2025				
	Begin Construction	October, 2025				
	CCA	October, 2027				
Reviewed by District O.E. or Cost Estimate Certifier	Patrick Lui	1/12/2024			(213) 268-6132	
	Office Engineer / Cost Estimate Certifier	Date			Phone	
Approved by Project Manager	David Miraany	1/17/2024			(213) 760-6800	
	Project Manager	Date			Phone	

Page 1 4/4/2024 EA: 07-36320 PID: 719000312

### I. ROADWAY ITEMS SUMMARY

	Section		Cost	
ı, CCTV, Traffic Census	Station, Connector Metering, CMS, a	nd TMS for Technology life	e cycle replacement	
1	Earthwork	\$	25,000	_
2	Pavement Structural Section	\$	-	_
3	Drainage	\$	· -	_
4	Specialty Items	9	1,323,700	_
5	Environmental	9	1,058,400	_
6	Traffic Items	9	24,277,800	_
7	Detours	9	-	_
8	Minor Items	9	266,900	_
9	Roadway Mobilization	9	1,617,200	_
10	Supplemental Work	9	1,381,100	_
11	State Furnished	9	1,539,100	_
12	Time-Related Overhead	\$	1,347,600	_
13	Total Roadway Contingency	9	3,283,700	_
				-
	TOTAL ROADWAY IT	EMS S	36,120,500	
Estimate Prepared By	: Nathan Sy/Transporta	tion Engr 10/19/2021	213-269-1587	,
	Name and Title	Date	Phone	
Estimate Reviewed By		-	213-628-6132	
	Name and Title	Date	Phone	•

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

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### **SECTION 1: EARTHWORK**

Item code		Unit	Quantity		Unit Price (\$)		Cost
190101	Roadway Excavation	CY		Х		=	\$ -
19010X	Roadway Excavation (Insert Type) ADL	CY		Х		=	\$ -
19801X	Imported Borrow	CY/TON		Х		=	\$ -
194001	Ditch Excavation	CY		Х		=	\$ -
192037	Structure Excavation (Retaining Wall)	Station, Co	nnector Mete	Х		=	\$ =
193013	Structure Backfill (Retaining Wall)	CY		Х		=	\$ -
193031	Pervious Backfill Material (Retaining Wall)	CY		Х		=	\$ -
17010X	Clearing & Grubbing	LS/ACRE	1	Х	25,000.00	=	\$ 25,000
100100	Develop Water Supply	LS		Х		=	\$ -
19801X	Imported Borrow	CY/TON		Х		=	\$ -
21012X	Duff	ACRE/SQFT	-	Х		=	\$ =
XXXXXX	Maintenance Vehicle Pullout	EA		Х		=	\$ =
XXXXXX	Some Item	Unit		X		=	\$ -

TOTAL EARTHWORK SECTION ITEMS	\$	25,000
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### **SECTION 2: PAVEMENT STRUCTURAL SECTION**

Item code		Unit	Quantity	Unit Price (\$)		Cost	
401050	Jointed Plain Concrete Pavement	CY	x		=	\$	_
400050	Continuously Reinforced Concrete Pavement	CY	x		=	\$	-
390132	Hot Mix Asphalt (Type A)	TON	x		=	\$	-
26020X	Class 2 Aggregate Base	TON/CY	x		=	\$	-
250401	Class 4 Aggregate Subbase	CY	×		=	\$	-
414240	Isolation Joint Seal (Asphalt Rubber)	LF	x		=	\$	_
414241	Isolation Joint Seal (Silicone)	LF	x		=	\$	-
280010	Rapid Strength Concrete Base	CY	x		=	\$	_
410096	Drill and Bond (Dowel Bar)	EA	x		=	\$	-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	x		=	\$	_
391006	Asphalt Binder (Geosynthetic Pavement Interlayer)	TON	x		=	\$	_
290201	Asphalt Treated Permeable Base	CY	×		=	\$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON	x		=	\$	_
397005	Tack Coat	TON	x		=	\$	_
377501	Slurry Seal	TON	x		=	\$	_
374493	Polymer Asphaltic Emulsion (Seal Coat)	TON	x		=	\$	_
370001	Sand Cover (Seal)	TON	x		=	\$	_
731530	Minor Concrete (Textured Paving)	CY	x		=	\$	_
731502	Minor Concrete (Miscellaneous Construction)	CY	x		=	\$	_
39407X	Place Hot Mix Asphalt Dike (Insert Type)	LF	x		=	\$	_
398100	Remove Asphalt Concrete Dike	LF	x		=	\$	_
420201	Grind Existing Concrete Pavement	SQYD	x		=	\$	_
398300	Remove Base and Surfacing	CY	x		=	\$	_
390095	Replace Asphalt Concrete Surfacing	CY	x		=	\$	_
41800X	Remove Concrete Pavement	SQYD/CY	x		=	\$	_
394090	Place Hot Mix Asphalt (Miscellaneous Area)	SQYD	x		=	\$	_
398200	Cold Plane Asphalt Concrete Pavement	SQYD	x		=	\$	_
846046	6" Rumble Strip (Asphalt Concrete Pavement)	STA	x		=	\$	_
846049	6" Rumble Strip (Concrete Pavement)	STA	x		=	\$	_
846051	12" Rumble Strip (Asphalt Concrete Pavement)	STA	x		=	\$	_
846052	12" Rumble Strip (Concrete Pavement)	STA	x		=	\$	_
420102	Groove Existing Concrete Pavement	SQYD	×		=	\$	_
394095	Roadside Paving (Miscellaneous Areas)	SQYD	x		=	\$	_
390136	Minor Hot Mix Asphalt	TON	x		=	\$	_
XXXXXX	Some Item	Unit	×		=	\$	-

TOTAL PAVEMENT STRUCTURAL SECTION ITEMS \$ -

### EA: 07-36320 PID: 719000312

TOTAL DRAINAGE ITEMS \$

### SECTION 3: DRAINAGE

Item code		Unit	Quantity		Unit Price (\$)		Cost	
71013X	Remove Culvert	EA/LF		Х		=	\$	=
710240	Modify Inlet	EA		Х		=	\$	-
710370	Sand Backfill	CY		Х		=	\$	=
71010X	Abandon Culvert	EA/LF		Х		=	\$	-
710196	Adjust Inlet	Station,	Connector Met	Х		=	\$	=
710262	Cap Inlet	EA		Х		=	\$	-
510501	Minor Concrete	CY		х		=	\$	=
510502	Minor Concrete (Minor Structure)	CY		Х		=	\$	-
731627	Minor Concrete (Curb, Sidewalk, and Curb Ramp)	CY		х		=	\$	=
6101XX	XX" Alternative Pipe Culvert (Insert Type)	LF		Х		=	\$	-
6411XX	XX" Plastic Pipe	LF		Х		=	\$	-
65XXXX	XX" Reinforced Concrete Pipe (Insert Type)	LF		Х		=	\$	=
6811XX	XX" Plastic Pipe (Edge Drain)	LF		Х		=	\$	=
6901XX	XX" Corrugated Steel Pipe Downdrain (0.XXX" Thic	LF		х		=	\$	=
7006XX	XX" Corrugated Steel Pipe Inlet (0.XXX" Thick)	LF		Х		=	\$	=
7032XX	XX" Corrugated Steel Pipe Riser (0.XXX" Thick)	LF		х		=	\$	=
7050XX	XX" Steel Flared End Section	EA		Х		=	\$	=
703233	Grated Line Drain	LF		Х		=	\$	-
72XXXX	Rock Slope Protection (Type and Method)	CY/TO	N	Х		=	\$	=
72901X	Rock Slope Protection Fabric (Insert Class)	SQYD		Х		=	\$	=
721420	Concrete (Ditch Lining)	CY		Х		=	\$	=
721430	Concrete (Channel Lining)	CY		Х		=	\$	=
750001	Miscellaneous Iron and Steel	LB		х		=	\$	-
XXXXXX	Additional Drainage	LS		Х		=	\$	-

### SECTION 4: SPECIALTY ITEMS

Item code		Unit	Quantity		Unit Price (\$)		Cost	
520103	Bar Reinforced Steel (Retaining Wall)	LB	- uu	х	· · · · · · · · · · · · · · · · · · ·	=	\$ 	
5100XX	Structural Concrete	CY		X		=	\$ _	
510060	Structural Concrete, Retaining Wall	CY		X		=	\$ _	
080050	Progress Schedule (Critical Path Method)	LS		X		=	\$ _	
582001	Sound Wall (Masonry Block)	SQFT		X		=	\$ _	
510530	Minor Concrete (Wall)	CY		X		=	\$ _	
731504	Minor Concrete (Curb&Gutter)	CY	30	X	2.000.00	=	\$ 60.000	
	Remove Sound Wall	LF/LS/SQFT	00	X	2,000.00	=	\$ -	
70030	Lead Compliance Plan	LS	1	X	3,000.00	=	\$ 3.000	
41120	Treated Wood Waste	LB		X	0,000.00	=	\$ - -	
50771	Remove AC Dike	LF	2.650	X	5.00	=	\$ 13,250	
339750	Remove Barrier	LF	2,000	X	0.00	=	\$ 10,200	
731710	Remove Concrete Curb	LF	410	X	25.00	=	\$ 10,250	
39752	Remove Guardrail	LF	110	x	20.00	=	\$ -	
39753	Remove Metal Beam Guard Railing	LF	500	X	20.00	=	\$ 10.000	
10167	Remove Flared End Section	EA	000	X	20.00	=	\$ -	
	Chain Link Fence (Insert Type)	LF		X		=	\$ _	
	XX" Chain Link Gate (Type CL-X)	EA		X		=	\$ _	
32070	` · · · · · · · · · · · · · · · · · · ·	SQYD	1,500	X	100.00	=	\$ 150,000	
320XX	Midwest Guardrail System (Steel Post)	LF	3,400	X	50.00	=	\$ 170,000	
39301	Single Thrie Beam Barrier	LF	0, 100	X		=	\$ -	
9310	Double Thrie Beam Barrier	LF		х		=	\$ _	
9521	Cable Railing	LF		X		=	\$ _	
9566	Terminal System (Type CAT)	EA		X		=	\$ _	
39584	Alternative In-line Terminal System	EA	15	X	6.000.00	=	\$ 90.000	
39585	Alternative Flared Terminal System	EA		X	0,000.00	=	\$ - -	
	XX" Cast-In-Drilled-Hole Concrete Piling	LF		X		=	\$ _	
	Crash Cushion (Insert Type)	EA		x		=	\$ _	
	Concrete Barrier (Insert Type)	LF		X		=	\$ _	
75005	Retaining Wall (Timber) with Wire Railing	LF		X		=	\$ _	
75010	Retaining Wall (Masonry Wall)	SQFT		х		=	\$ _	
11035	Architectural Treatment	SQFT		X		=	\$ _	
80460	Anti-Graffiti Coating	SQFT		X		=	\$ _	
80450	Rock Stain	SQFT		X		=	\$ _	
	Reinforced Concrete Crib Wall (Insert Type)	SQFT		X		=	\$ -	
	Transition Railing (Insert Type)	EA		X		=	\$ -	
80440	Prepare and Stain Concrete	SQFT		X		=	\$ -	
339561	Rail Tensioning Assembly	EA.		X		=	\$ -	
3958X	End Anchor Assembly (Type X)	EA	17	X	1,600.00	=	\$ 27,200	
	Maintenance Vehicle Pullout	EA	20	X	39,500.00	=	\$ 790.000	
				Ė		ΔΙ S	 IALTY ITEMS \$	1,323,700

Effective immediately, districts must input estimated item quantities in blue text above in the PRSM database for the pay items listed in the Design Memo, dated April 9, 2018, when Project Report is approved (Milestone 200).

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### SECTION 5: ENVIRONMENTAL

Biological Miligation (on-site)	A - ENVIRO em code	ONMENTAL MITIGATION	Unit	Quantity		Unit Price (\$)			Cost	
Cultural Mitigation   Sation   C   1,800		Riological Mitigation (on-site)		Quantity	Y	Ollit Frice (\$)	=	\$	Cosi _	
Roadway Excavation (rypeZ-2, HW-ADL)		, ,		1		100 000 00			100 000	
Lead Compliance Plan		•							,	
Treated Wood Waste   LB   7,700   x   2,00   s   5   15,400   130870   Temporary Feinc (Isent Type)   LF   x   x   s   s   s   s   s   s   s   s									,	
South   Sout		•								
Section   Sect				1,100		2.00			10,400	
September   Sept									_	
Second   Content   Conte	100070	remporary Reministed out Fence	Li		^	Subtotal			ental Mitigation	\$ 408,400
2000000   Trigolon System   LS	3 - LANDS	SCAPE AND IRRIGATION		_					_	
200900   Irrigation System				-						
2004999   Plant Establishment Work										
DATE   Property   Description   Property   Description		•								
2004.05   Remove Irrigation Facility				1		18,000.00			18,000	
2008-00   Maintain Existing Prinated Areas					Х				-	
					Х		=		-	
201114		•			Х		=		-	
2001142   Rock Blanket					X				-	
		·	CY/TON		Х		=		-	
9951.00   Valer Meter Charges   LS   X	200114 F	Rock Blanket	SQFT/SQYD		X		=	\$	-	
20890X   XC Conduit (Use for Irrigation x-overs)   LF	200122 V	Weed Germination	SQYD		Χ		=	\$	-	
Replace Damaged Landscape with In-kind   LF   1	}95100 V	Water Meter Charges	LS		Х		=	\$	-	
Replace Damaged Landscape with In-kind   LS   1	2087XX X	XX" Conduit (Use for Irrigation x-overs)	LF		X		=	\$	-	
Name	20890X E	Extend X" Conduit (Use for Extension of Irrigation x	- LF		Х		=	\$	-	
Note	F	Replace Damaged Landscape with In-kind	LS	1	Х	150,000.00	=	\$	150,000	
Note						Subtotal	Land	dscap	e and Irrigation	\$ 233,000
Permanent Erosion Control Establishment Work	: - EROSI	ION CONTROL								
Move-In/Move-Out (Erosion Control)	em code		Unit	Quantity		Unit Price (\$)			Cost	
Pict	211111 F	Permanent Erosion Control Establishment Work	LS		Х		=	\$	-	
Compost Sock	210010 <b>N</b>	Move-In/Move-Out (Erosion Control)	EA		X		=	\$	-	
2102XX   Rolled Erosion Control Product (Insert Type)   SQFT	210350 F	Fiber Rolls	LF		X		=	\$	-	
21025X   Bonded Fiber Matrix   SQFT   X	210360 C	Compost Sock	LF		Х		=	\$	-	
210300	2102XX F	Rolled Erosion Control Product (Insert Type)	SQFT		Χ		=	\$	-	
210420	21025X E	Bonded Fiber Matrix	SQFT/ACRE		Х		=	\$	-	
210430	210300 F	Hydromulch	SQFT		Х		=	\$	-	
210610   Compost   CY	210420 S	Straw	SQFT		Χ		=	\$	-	
Substitute   Sub	210430 F	Hydroseed	SQFT		Х		=	\$	-	
SD-NPDES	210610 C	Compost	CY		Х		=	\$	-	
Name	210630 <b>I</b> r	Incorporate Materials	SQFT							
Name		_					Sub	total E	Erosion Control	\$ 
130300		S	Unit	Quantity		Unit Price (\$)			Cost	
130200   Prepare WPCP		Propara SM/DDD		Quantity	v	Omi Frice (\$)	_	æ	Cost	
XXXXX   Temporary Construction Site BMPs		·		1		F 000 00			<u>-</u>	
130100   Job Site Management		·		!		5,000.00			5,000	
130330   Storm Water Annual Report		•		4		440 000 00			440.000	
130310   Rain Event Action Plan   EA		<u> </u>		1		412,000.00			412,000	
130320   Storm Water Sampling and Analysis Day   EA		·							-	
130520   Temporary Hydraulic Mulch   SQYD   X									-	
130550   Temporary Hydroseed   SQYD   X									-	
130505   Move-In/Move-Out (Temporary Erosion Control)   EA									-	
130640   Temporary Fiber Roll   LF		, , , ,							-	
130900   Temporary Concrete Washout		, , , , , , , , , , , , , , , , , , ,							-	
130710   Temporary Construction Entrance					Х				-	
130610   Temporary Check Dam		· · ·			Х		=		=	
130620   Temporary Drainage Inlet Protection		Temporary Construction Entrance	EA		Χ		=	\$	-	
130730   Street Sweeping	130610 T	Temporary Check Dam	LF		Χ		=	\$	-	
Subtotal NPDES   Subt	130620 T	Temporary Drainage Inlet Protection	EA		Х		=	\$	-	
TOTAL ENVIRONMENTAL   \$	130730 S	Street Sweeping	LS		X		=		-	
Supplemental Work for NPDES           066595         Water Pollution Control Maintenance Sharing*         LS         1         x         3,000.00         =         \$         3,000           066596         Additional Water Pollution Control**         LS         x         =         \$         -								Sub	ototal NPDES	\$ 417,000
066595 Water Pollution Control Maintenance Sharing* LS 1 x 3,000.00 = \$ 3,000   066596 Additional Water Pollution Control** LS x = \$ -						тот	AL E	ENVIF	RONMENTAL	\$ 1,058,400
066596 Additional Water Pollution Control** LS x = \$ -	ıpplemen'	ntal Work for NPDES								
	)66595 V	Water Pollution Control Maintenance Sharing*	LS	1	Х	3,000.00	=	\$	3,000	
066597 Storm Water Sampling and Analysis*** LS x = \$ -	)66596 A	Additional Water Pollution Control**	LS		X		=	\$	-	
· · · · · · · · · · · · · · · · · · ·	)66597 S	Storm Water Sampling and Analysis***	LS		Х		=	\$	-	
XXXXXX Some Item LS x = \$ -	XXXXX S	Some Item	LS		X		=	\$	-	
Subtotal Supplemental Work for NDPS \$						Subtotal Suppl	leme	ntal V	Vork for NDPS	\$ 3,000

 $<sup>{}^\</sup>star\!\mathsf{Applies}$  to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

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 $<sup>\</sup>ensuremath{^{**}}\mbox{Applies}$  to both SWPPPs and WPCP projects.

<sup>\*\*\*</sup> Applies only to project with SWPPPs.

### SECTION 6: TRAFFIC ITEMS

6A - Traffi	ic Electrical									
Item code	Linking Contage	Unit	Quantity		Unit Price (\$)		•	Cost		
870200	Lighting System	LS		X		=	\$	=		
870300 872133	Sign Illumination System  Modifying Signal and Lighting Systems	LS LS	1	X	1,860,000.00	=	\$ \$	1,860,000		
860990	Closed Circuit Television System with Foundation	LO	ı	^	1,000,000.00	_	Ψ	1,860,000		
	(New)	EA	12	Х	120,000.00	=	\$	1,440,000		
	Closed Circuit Television System (Upgrade) Closed Circuit Television System for Traffic Signal	EA	1	X	60,000.00	=	\$	60,000		
0009//	(Upgrade)	EA	15	X	90,000.00	=	\$	1,350,000		
872134 87181X	Ramp Metering System (Technology Upgrade) Interconnection Conduit and Cable	LS LF/LS	1	X	750,000.00	=	\$ \$	750,000		
	Furnish Sign Structure (Type X)	LI	35,000	X X	5.00	=	\$	175,000		
	Install Sign Structure (Type X)	LB	35,000	X	2.00	=	\$	70,000		
	60" CIDHC Pile (Sign Foundation)	LF	50	x	1,500.00	=	\$	75,000		
87011X	Inductive Loop Detector	EA/LS		х		=	\$	· -		
872135	Modifying Traffic Monitoring Stations	EA	12	Х	120,000.00	=	\$	1,440,000		
86080X	Weigh-In-Motion - Replace	EA	2	X	1,000,000.00	=	\$	2,000,000		
XXXXX	Furnish and Install New Connector Meter	EA	2	X	1,000,000.00	=	\$	2,000,000		
	Temporary Ramp Detection and Communication	LS	1	Х	200,000.00	=	\$	200,000		
	Census Station	EA	5	Х	100,000.00	=	\$	500,000		
	Upgrade Changeable Message Sign	EA	1	X	100,000.00	=	\$	100,000		
	Furnish and Install New Changeable Message Sigr	EA	2	X	300,000.00	=	\$	600,000		
	Upgrade Communication Hub	EA	3	Х	30,000.00	=	\$	90,000		
	Fiber Optic Conduit System	LS	1	Х	10,000,000.00	=	\$	10,000,000		
	Utility Services including Power Line Installation an	LS	1	X	300,000.00	=	\$	300,000		
870009	Elements During Construction	LS	1	Х	30,000.00	=	\$	30,000		
					Su	ıbto	tal Tr	affic Electrical	\$	23,040,000
6B - Traffi	ic Signing and Striping									
Item code		Unit	Quantity		Unit Price (\$)			Cost		
820840	Roadside Sign - One Post	EA		X		=	\$	-		
820850	Roadside Sign - Two Post	EA		Х		=	\$	-		
5602XX	Furnish Sign Structure (Insert Type)	SQFT		X		=	\$	-		
820890	Install Sign Panel on Existing Frame	SQFT		X		=	\$	-		
846020	•	LF		Х		=	\$	-		
141102		LF		х		=	\$	-		
846025	<u> </u>	SQFT		X		=	\$	-		
820250	Remove Roadside Sign	EA		Х		=	\$	=		
820530	S .	EA		Х		=	\$	-		
820610	S .	EA	4	X	300.00	=	\$	1,200		
	Relocate Roadside Sign - Two Post	EA EA	4	X	400.00 50.00	=	\$	1,600		
	Delineator (Class X) Thermoplastic Traffic Stripe (Enhanced Wet Night)	LF	300	X X	50.00	=	\$ \$	15,000		
040302	Thermoplastic Crosswalk and Pavement Marking	Li		^		_	Ψ	_		
846012	(Enhanced Wet Night Visibility)	SQFT		X		=	\$	-		
	Construction Area Signs Permanent Pavement Delineation	LS LS	1	X	50,000.00	=	\$ \$	50,000		
04/////	remanent avenient beinieation	LO		^		_	Ψ	_		
					Subtotal Traff	fic S	ignin	g and Striping	\$	67,800
6C - Traffi	ic Management Plan									
Item code	<b>-</b>	Unit	Quantity		Unit Price (\$)			Cost		
	Portable Changeable Message Sign	EA/LS	2	X	\$ 30,000	=	\$	60,000		
					Subtotal Tra	affic	Man	agement Plan	\$	60,000
								-		·
6C - Stage	e Construction and Traffic Handling									
Item code		Unit	Quantity		Unit Price (\$)			Cost		
120198	Plastic Traffic Drums	EA		X		=	\$	-		
12016X	` ','	EA		Х		=	\$	=		
	Type II Barricade	EA		Х		=	\$	-		
120120	Type III Barricade	EA		Х		=	\$	-		
129100	Temporary Crash Cushion Module	EA		Х	550 000	=	\$			
120100	Traffic Control System	LS	1	Х	550,000.00	=	\$	550,000		
	Temporary Crash Cushion	LS	1	X	80,000.00	=	\$	80,000		
129000	,	LF	40,000	Χ	12.00	=	\$	480,000		
	Temporary Pavement Marking (Paint)	SQFT		X		=	\$	-		
	Temporary Pavement Marking (Tape)	SQFT		X		=	\$	=		
010177	Delineator (Insert Class)	EA	Subt	X ntal 9	Stage Construction		\$ nd Tr	- raffic Handling	\$	1,110,000
			Subto	nal S	Juage Construction	лі д	iiu II	anio manuling	φ	1,110,000

TOTAL TRAFFIC ITEMS \$ 24,277,800

### **SECTION 7: DETOURS**

Includes constructing, maintaining, and removal

Item code		Unit	Quantity	Unit Price (\$)	Cost	
190101	Roadway Excavation	CY	х	=	\$ _	
19801X	Imported Borrow	CY/TON	x	=	\$ _	
390132	Hot Mix Asphalt (Type A)	TON	x	=	\$ _	
26020X	Class 2 Aggregate Base	Station, Con	nector Metering, x	=	\$ -	
250401	Class 4 Aggregate Subbase	CY	x	=	\$ _	
130620	Temporary Drainage Inlet Protection	EA	x	=	\$ _	
129000	Temporary Rai <b>l</b> ing (Type K)	LF	х	=	\$ _	
128601	Temporary Signal System	LS	x	=	\$ _	
120149	Temporary Pavement Marking (Paint)	SQFT	x	=	\$ -	
80010X	Temporary Fence (Insert Type)	LF	X	=	\$ _	
XXXXXX	Some Item	LS	x	=	\$ -	

TOTAL DETOURS \$ -

SUBTOTAL SECTIONS 1 through 7 \$ 26,684,900

### **SECTION 8: MINOR ITEMS**

8A - Americans with Disabilities Act Items
ADA Items
0.0%
8B - Bike Path Items

 Bike Path Items
 0.0%
 \$ 

 8C - Other Minor Items
 1.0%
 \$ 266,849

Total of Section 1-7 \$ 26,684,900 x 1.0% = \$ 266,849

TOTAL MINOR ITEMS \$ 266,900

### SECTIONS 9: ROADWAY MOBILIZATION

Item code

999990 Total Section 1-8 \$ 26,951,800 x 6% = \$ 1,617,108

TOTAL ROADWAY MOBILIZATION \$ 1,617,200

### **SECTION 10: SUPPLEMENTAL WORK**

Item code		Unit	Quantity		Unit Price (\$)		Cost
066670	Payment Adjustments For Price Index Fluctuations	LS	1	x	2,000.00	=	\$ 2,000
066094	Value Analysis	LS	1	Х	10,000.00	=	\$ 10,000
066070	Maintain Traffic	LS	1	X	150,000.00	=	\$ 150,000
066919	Dispute Resolution Board	LS	1	X	15,000.00	=	\$ 15,000
066921	Dispute Resolution Advisor	LS		X		=	\$ _
090210	Hourly Off-Site Dispute Resolution Board Relat	LS	1	X	5,000.00	=	\$ 5,000
066015	Federal Trainee Program	LS	1	Х	14,000.00	=	\$ 14,000
066610	Partnering	LS	1	Х	50,000.00	=	\$ 50,000
066204	Remove Rock and Debris	LS		Х		=	\$ _
066222	Locate Existing Crossover	LS	8	X	500.00	=	\$ 4,000
20XXXX	Maintain Existing Irrigation/Planted Areas	LS	1	X	50,000.00	=	\$ 50,000

Cost of NPDES Supplemental Work specified in Section 5D = \$ 3,000

Total Section 1-8 \$ 26,951,800 4% = \$ 1,078,072

TOTAL SUPPLEMENTAL WORK \$ 1,381,100

### SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity		Unit Price (\$)		Cost	
066105	Resident Engineers Office	LS	1	Х	350,000.00	=	\$350,000	
066063	Traffic Management Plan - Public Information	LS		Х		=	\$0	
066901	Water Expenses	LS		X		=	\$0	
8609XX	Traffic Monitoring Station (X)	LS		Х		=	\$0	
066841	Traffic Controller Assembly	LS	5	Х	10,000.00	=	\$50,000	
066840	Traffic Signal Controller Assembly	LS		X		=	\$0	
066062	COZEEP Contract	LS	1	Х	600,000.00	=	\$600,000	
066838	Reflective Numbers and Edge Sealer	LS		Х		=	\$0	
066065	Tow Truck Service Patrol	LS		X		=	\$0	
066916	Annual Construction General Permit Fee	LS		Х		=	\$0	
XXXXXX	Some Item	Unit		x		=	\$0	
	Total Section 1-8		\$ 26,951,800		2%	=	\$ 539,036	

TOTAL STATE FURNISHED \$1,539,100

### SECTION 12: TIME-RELATED OVERHEAD

Total of Roadway and Structures Contract Items excluding Mobilization

\$26,951,800 (used to calculate total TRO)

Estimated Time-Related Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity		Unit Price (\$)		Cost
090100 Time-Related Overhead	WD	500	Х	\$2,382	=	\$1,347,600

TOTAL TIME-RELATED OVERHEAD \$1,347,600

### SECTION 13: ROADWAY CONTINGENCY\*

Risk Amount from Risk Register		(for Known Risks	i)	0%			
Additional or Residual Contingency	(for Unkno	own/Undefined Risks	i)	10%		\$3,283,680	
Total Section 1-12	\$	32,836,800	Х	10%	=	\$3,283,680	
					_		
				•	TOTAL	CONTINGENCY*	\$3,283,700

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### II. STRUCTURE ITEMS

Upgrade aı	Bridge 1	Bridge 2		
DATE OF ESTIMATE Bridge Name Bridge Number Structure Type Width (Feet) [out to out] Total Bridge Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	00/00/00  XXXXXXXXXXXXXXXX  57-XXX  XXXXXXXXXXXX	00/00/00  xxxxxxxxxxxxxxxxxxxxxxxxxxxxx	XXXX C C C	) LF ) SQFT
COST OF EACH	\$0	\$0		\$0
DATE OF ESTIMATE Building Name Bridge Number Structure Type Width (Feet) [out to out] Total Building Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	Building 1  00/00/00  xxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00  xxxxxxxxxxxxxxxxx  57-XXX  xxxxxxxxxxxxxxxxx  0	XXXX C C C	) LF ) SQFT
COST OF EACH	<b>\$0</b>	\$0	'	\$0
		TOTAL COST O	F BRIDGES	\$0
		TOTAL COST OF	BUILDINGS	\$0
		Time-Related Overhead	10%	\$0
		STRUCTURES MOBILIZATION	10%	\$0
		STRUCTURES CONTINGENCY*	25%	\$0
	ī	OTAL COST OF STRUCTURES		\$0
Estimate Prepared By:				

XXXXXXXXXXXXXXXX ----- Division of Structures

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Date

EA: 07-36320 PID: 719000312

### III. RIGHT OF WAY

Fill in all of the available information from the Right of Way Data Sheet.

		able illioithation from the right of way bata offee		Current Value Future Use		Escalated Value
A)	A1)	Acquisition, including Excess Land, Fees,	\$	50,000	\$	50,000
		Damages, Goodwill		_		_
	A2)	Acquisition of Offsite Mitigation	\$	0	•	0
	A3)	Railroad Acquisition	\$ - CCTV T#:- C	0	\$ 4-4	O TMC for Tools and
B)	B1)	Upgrade and install fiber communication system Utility Relocation (State Share)	n, CCTV, Traffic Cens \$	sus Station, Connector N		TIVIS for Technol
D)	B2)	Potholing (Design Phase)	\$		\$ \$	
	DZ)	Tottloring (Design Fridase)	Ψ		Ψ	
C)		dvance Engineering Estimate er with State Only Funds)	\$		\$	
D)	RAP and	l/or Last Resort Housing	\$	0	\$	0
E)	Clearanc	ee & Demolition	\$	0	\$	0
F)	Relocation	on Assistance (RAP and/or Last Resort Housing C	osts) \$	0	\$	0
G)	Title and	Escrow	\$	0	\$	0
H)	Environm	nental Review	\$	0	\$	0
I)	Condemi	nation Settlements 0%	\$	0	\$	0
J)	Design A	Appreciation Factor0%	\$	0	\$	0
K)	Utility Re	location (Construction Cost)	\$	40,000	\$	53,905
L)		TOTAL RIC	GHT OF WAY I	ESTIMATE		\$90,000
M)		TOTAL R/	W ESTIMATE:	Escalated		\$104,000
N)		RIGH	T OF WAY SU	PPORT		\$41,000

Support Cost Estimate	Mario Zamorano		
Prepared By	Project Coordinator <sup>1</sup>	Phone	
Utility Estimate Prepared	Michele Graves		
Ву	Utility Coordinator <sup>2</sup>	Phone	_
•	Stilly Cooldinator	riidile	
·	ouncy obolumator	FIIOTE	
R/W Acquisition Estimate Prepared By	Victor Lee	ritote	

Note: Items G & H applied to items A + B

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<sup>&</sup>lt;sup>1</sup> When estimate has Support Costs only

<sup>&</sup>lt;sup>2</sup> When estimate has Utility Relocation <sup>3</sup> When R/W Acquisition is required

### ATTACHMENT E

**Right of Way Data Sheet** 

### Memorandum

Serious Drought! Help Save Water!

To: Cesar Hernandez, Design Manager

Office of Design

District 7, Los Angeles Office

From: Zoltan Elo, Office Chief

Right of Way Appraisals, and Planning & Management

District 7, Los Angeles Office

Date: 1/5/2024 EA: 36320

Data Sheet ID NO: ds6344 Project ID # 0719000312

Subject: Current Estimated Right of Way Costs for **Project Report** 

We have completed an estimate of the Right of Way costs for the above referenced project based on information received from Nathan Sy, PE and the following assumptions and limiting conditions apply:

- The mapping did not provide sufficient detail to determine the limits of the right of way required.
- The transportation facilities have not been sufficiently designed, so our estimator could not determine the damages to any of the remainder parcels affected by the project.
- Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the estimate.

**Right of Way Certificate (RWC) lead time** will require a minimum of NA after maps to appraisal **(MA).** Completed Appraisal maps include HMDD, COS, HW Memo, and RE-49. An executed copy of the new freeway agreement if required for the project. When utility relocation is warranted, utility conflict maps will be required. Additionally a minimum of NA will be required after receiving the last revision to the appraisal map. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed and present a risk to the RWC project delivery milestone. Due to the passage of Map 21 and the Buy America provision, the Right of Way Certification process will be longer, if Utility Relocation is necessary.

### **Current Schedule: PRSM**

PAED (M 200)	MA (M 224)	RWC (M 410)	RTL (M 460)	CCA (M 600)
3/22/2024	4/19/2024	3/7/2025	4/19/2024	10/29/2027

TO Cesar Hernandez ATTN Nathan Sy

**R/W DATA SHEET** 

**ID NO ds6344** 

1/5/2024

SENIOR R/W P&M David Miraaney

ROUTE 23, 101 PM KM Var

EA 36320 Project ID #0719000312

ALT

Date of Data Sheet Project Description

IN THE CITIES OF THOUSAND OAKS AND CAMARILLO, ON ROUTE 101 FROM NORTH OF CONEJO SCHOOL ROAD TO ROUTE 34; AND ON ROUTE 23 FROM THE 101/23 SEPARATION TO NORTH OF HILLCREST DRIVE ALSO IN THE CITY OF LOS ANGELES ON ROUTES 134, 101, AND 170 AND LARTMC.

This cost estimate is valid for the above scoping report only. This is an estimate only and not an appraisal. It may be based on worse case scenarios.

The estimate is subject to change and revision.

The mapping did not provide sufficient nor adequate detail to determine the limits of thr Right of Way required and effects on the improvements.

The transportation facilities have not been sufficiently designed for our estimator to determine the damages to any of the remainder parcels affected by the project.

This cost estimate is pursuant to the following responses supplied by Cesar Hernandez to the Data Sheet Request Form. NO Not known at this time

Utilities are depicted on plans		х	
Railroads are depicted on plans	х		
There are Material and/or Disposal Sites Required			х
Caltrans will do the Right of Way work			х
There will be a Cooperative Agreement			х
This is a reimbursable project	х		
There is Hazardous Waste potential			х

### **RW COST ESTIMATE**

CURRENT VALUE E	SCALATED VALUE
-----------------	----------------

R/ w acq.(incl.contingency G.w-condem.-adm.s'tl.)Permits

\$50,000

\$50,000

Clearance

RAP (cont rate.)

Escrow costs (cont rate.)

**Utility relocation costs** \$40,000 \$53,905

**Estimate of Reimbursed Appraisal Fee** 

\$90,000 \$103,905 **Total estimated cost** 

Escalation Rate Rw .07 Escalation Rate Utilities .08

Cert.date 3/7/25

### **Parcel Count and Py Info**

Data Sheet ID NO: ds6344 ROUTE 23, 101 PM\_KM Var EA 36320 ALT

A B C	EASE PART TCE TOTAL		ACEMENT PARC UNITS I	ELS WITH RAP	POTENTIAL CLEARANCE PARCELS	POTENTI CONDEMNA PARCEL	IAL POTE	NTIAL JESS UTILITY IMPACTS  U4-1  U4-2  U4-3  U4-4
F		Estimate Of	Right Of Way	/ Support	Hours			u5-7
		Activity Codes	Function	Hours	]			u5-8
		225 & 245	Appraisals					
		225 & 245	Acquisitions					u5 <b>-</b> 9
		200	Utilities					
		185.20.40	Utility Potholing	50				
		205	Railroads	245				
		225 & 245	Condemnation		]			
		225 & 245	Clearance					
		225 & 245	Relocation					
		220 & 300	RW Engineering					
			Total	295	]			
1) 2) 3) 4) 5)	Pothole 16" HP gas SCG crossing Pothole 10" HP gas SCG along V Pothole 12" HP gas SCG crossing Pothole 12" HP gas SCG Crossin Pothole 12" HP gas SCG Crossin	g VEN 101 near EN 101 near Ly g Rte 101 at Cit g Rte 101 south	rnn Rd PM 5.19 ration Way PM ! n of Wendy Dr	.33 5.88 PM 7.5		4 4 4 4	2000 2000 2000 2000 2000	\$8,000 \$8,000 \$8,000 \$8,000
	Are utility easements required? Note that the properties of the proof	s Description:	research based on		Const. Co	al Cu Ent ompletion I scalation I	Date	\$40,000 10/29/2027 8%
					ı otal E	scalated (	ວost	\$53,90 <u>5</u>

### RR INFORMATION

Data Sheet ID NO: ds6344 ROUTE 23, 101 PM\_KM Var EA 36320 ALT

Are RR affected YES

Describe the RR facilities affected, and ownership: UPRR (i.e. RR name, RR spurs, branch lines, at grade crossings?)

Will construction work be performed in RR right of way? Y/N If yes, describe:

What types of agreements are anticipated to be required from the RR?

Will Temporary Construction Easement (TCE) rights be required for the project construction? If yes, explain.

Phase 4 costs: RR Flagging related to construction activity. This cost is a phase 4 construction contract cost. Though noted on the RW datasheet, the estimated flagging cost is not a RW cost, and not a part of the RW Capital. This estimate is provided so it can be added to the engineer's estimate for construction – RR flagging estimate is based on the number of days flagging is needed for construction activity.	\$50,000
Phase 9 costs: Purchase of rights for construction, agreements, Preliminary Engineering Contracts, RR rearrangement costs. This figure is included in the RW Capital estimate total.	\$ 50,000

Right of Way Estimate prepared by	Victor Lee	<u>DATE</u> 1/5/24
Estimate prepared by	Mario Zamorano	12/6/23
Utilities Estimate prepared by	Michele Graves	12/14/23

I have personally reviewed this R/W Data Sheet and all supporting information I certify that the probable highest and best use estimated values and assumptions are reasonable and proper subject to the limiting conditions set forth and I find this Data Sheet complete and current.

This Data Sheet is not to be signed by Chief unless accompanied by final scoping report(PR,PSR,PSSR) for review and/or signature.

CHIEF 3/4 5/- 04/05/2024

### **ATTACHMENT F**

### **Environmental Documents**



### CEQA EXEMPTION / NEPA CATEGORICAL EXCLUSION DETERMINATION FORM (rev. 04/2022)

Project Information		
Project Name: Mobility - TMS		
DIST-CO-RTE: 07-VEN-VAR	PM/PM: Various	
<b>EA</b> : 36320	<b>CE Number:</b> 202304006	
<b>Project Description</b>		
from Post Mile (PM) 2.5 to PM 13.9 a communication hubs on LA-105 (PM (LARTMC), and on LA-101 (PM 11.8 network access. Excavation is anticipaximum extent of the directional be performed within Ventura and Los Al right-of-way, therefore no additional	de the Traffic Management System (Tand Ven-23 from PM 3.34 to PM 4.2. R2.0) at I-405 (LAX), on LA-2 (PM R3) at LA-170 (North Hollywood) will be pated to have a maximum depth of 48 oring will be 11.2 miles. All proposed in geles Counties and are within the extright-of-way is required. The location of phases. The detailed project description	Three existing 18.7) at LA-134 upgraded for inches. The mprovements will be isting Caltrans of any needed staging
Caltrans CEQA Determination (	Check one)	
Based on an examination of this p  □ Exempt by Statute. (PRC 210  ⊠ Categorically Exempt. Class  □ No exceptions apply that 2 21084 and 14 CCR 15300  □ Covered by the Common Sere exempt class, but it can be se	prepared an IS or EIR under CEC	n, the project is: seq.) exemption (PRC exceptions. not fall within an ossibility that the
Senior Environmental Planner	or Environmental Branch Chief	
Susan Tse Koo	Susan Tse Koo	12/27/2023
Print Name	Signature	Date
Project Manager		
David Miraaney	David Miraaney	12/27/2023
Print Name	Signature	Date



Caltrans NEPA Determination (C	heck one)	
☐ Not Applicable		
Caltrans has determined that this p as defined by NEPA, and that there CFR 771.117(b). See <u>SER Chapter</u> is categorically excluded from the re and is included under the following:	e are no unusual circumstances as <u>r 30</u> for unusual circumstances. <i>A</i> equirements to prepare an EA or	s described in 23 as such, the project
<ul> <li>☑ 23 USC 326: Caltrans has been the responsibility to make this determined Memorandum of Understanding da Caltrans. Caltrans has determined ☑ 23 CFR 771.117(c): activit ☐ Activity Enter activity numerity FHWA and Caltrans</li> <li>☐ 23 USC 327: Based on an examt Caltrans has determined that the part of the environmental review, consultated for the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the part of the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the part of the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the part of the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 and executed in the caltrans pursuant to 23 USC 327 at December 23, 2016 at December 24, 2016 at December 2</li></ul>	rmination pursuant to 23 USC 326 ted April 18, 2022, executed betwe that the project is a Categorical Exty (c)(Enter activity number) by (d)(Enter activity number) enber listed in Appendix A of the ination of this proposal and support is a Categorical Exclusion unation, and any other actions require project are being, or have been, and the Memorandum of Understa	and the een FHWA and exclusion under:  MOU between orting information, ander 23 USC 327. The by applicable carried out by
Senior Environmental Planner or	Environmental Branch Chief	
Susan Tse Koo	Susan Tse Koo	12/27/2023
Print Name	Signature	Date
Project Manager/ DLA Engineer		
David Miraaney	David Miraansy	12/27/2023
Print Name	Signature	Date
Date of Categorical Exclusion Ch Date of Environmental Commitm	necklist completion (if applicabl	e): N/A

Briefly list environmental commitments on continuation sheet if needed (i.e., not necessary if included on an attached ECR). Reference additional information, as

appropriate (e.g., additional studies and design conditions).

EA: 36320 Page **2** of **6** 



### The project description of work will include the following:

- Installation of 11.2 miles of new communication system with all fiber optic trunklines and digital system along US-101 PM 3.0/13.8 in Ventura County via directional boring at a depth of 12 to 46 inches below grade.
- Installation of new TMS field elements including 12 new Closed-Circuit Television (CCTV) cameras including foundations, two (2) Changeable Message Signs (CMS) including foundations, two (2) new Connector Metering Systems, 15 new CCTV cameras at existing traffic signals.
- Installation of 20 maintenance Vehicle Pullouts (MVPs) along with around 3400 linear feet (LF) of Midwest Guardrail Systems (MGS) and installation of 2 Timber Retaining Walls at around 125 LF.
- Upgrade one (1) CCTV Camera, twelve (12) existing Traffic Monitoring Stations, one (1) existing CMS panel, two (2) Existing Ramp Metering System (RMS), Seven (7) existing Traffic Signals, and (3) existing Communication Hubs in Los Angeles and Ventura counties.
- Life cycle replacement of five (5) existing Traffic Census Stations (CS), and two (2) existing Weigh-In-Motion (WIM) systems with new ones.

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### **Continuation sheet:**

### General

- The Division of Environmental Planning (DEP) will be provided the Project Specifications & Expenditures Review Package for review and comments.
- If the project scope should change for any reason, the DEP will be notified to determine whether current environmental documentation is adequate.

### Cultural

 The location of any needed staging areas will be determined during later phases. If such locations are needed, they will be cleared by either Caltrans Professionally Qualified Staff (PQS) or contractor-provided cultural resource specialists who meet the Secretary of Interior's Professional Qualification Standards.

### Air Quality

- This project is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and must comply with the SCAQMD Fugitive Dust Implementation Rule 403 to minimize temporary emissions during the construction of the project as applicable and appropriate.
- This project is in the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD) and must comply with the VCAPCD Fugitive Dust Implementation of Rule 55 to minimize temporary emissions during the construction of the project as applicable and appropriate.
- It is recommended that the PDT review, evaluate, and consider project measures in Tables 1 and 3 of the Toolbox
   (<a href="https://env.onramp.dot.ca.gov/downloads/env/managedfiles/caltrans-ghgreduction-measures-jun-2021-a11y.pdf">https://env.onramp.dot.ca.gov/downloads/env/managedfiles/caltrans-ghgreduction-measures-jun-2021-a11y.pdf</a>) and that the project commit to include all feasible and relevant measures identified from the Tables. If any measures are proposed outside the Tables in the Toolbox, the PDT shall ensure that those measures are biddable, buildable, and can be successfully implemented.
- All identified reduction measures shall be carried forward in the ECR.
- Construction of the proposed project shall comply with all applicable AQMD/APCD Rules.
- Objectionable odors should also be minimized by conducting certain construction
  activities in areas at least 500 feet away from sensitive receptors if feasible. As part of a
  review of design plans and specifications, the AQB will also coordinate for approval of a
  nonstandard special provision (NSSP) 14-9.05 to mandate contractors' compliance with
  the applicable air district rules including measures related to dust control
- The AQB should be informed of any changes to the proposed scope, or the class of action determined for this project.

### Noise

• The potential construction noise impacts would need to be addressed since there are noise-sensitive receptors in the vicinity of the project. Section 14-8.02, Sound Control Requirements, of Caltrans standard specifications, states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

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### **Biology**

- Vegetation removal will be required and will include the removal of existing ruderal, landscape, and native plants.
- Indirect impacts from roadway runoff will be minimized through the incorporation of all appropriate Stormwater and Erosion Control Best Management Practices.
- All work will be limited to the Caltrans right-of-way, including the prism of the roadway, or the edge of the roadway for purposes of equipment maneuvering and traffic control.
- The project Biologist must be invited to the pre-construction meeting, with one week prior notice.
- This project must employ all appropriate Stormwater and Erosion Control Best
  Management Practices (BMPs) during construction, and these must be incorporated into
  the project specifications as determined by appropriate Caltrans specialists. Prior to the
  start of construction, all drain inlets and outlets must be protected with BMPs to prevent
  construction materials and debris from entering drainages.
- Temporary Construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.
- All pollution and litter laws and regulations will be followed by all personnel on-site.
- There will be no known hazardous wastes or materials within the roadways, construction
  area, and surrounding area; however, if hazardous materials are found onsite, the
  contractor will consult with the Caltrans Hazardous Waste Unit and be responsible for
  collection, containment, and disposal of all waste produced from work done on this
  project, including potentially hazardous waste, in compliance with all applicable Federal,
  State, and local waste laws/regulations.
- If any species of concern are observed during construction activities, all work shall immediately cease, and the District Biologist shall be immediately notified. Work shall not resume until clearance is given by the District Biologist.
- The DEP recommends conducting vegetation removal outside the bird nesting season (February 1st through September 1st). If this is not possible, coordination with the District Biologist should take place in order to minimize the risk of violating the Migratory Bird Treaty Act, and the following minimization measure should be put in place: a buffer of 150 ft. for songbirds and 500 ft. for raptors which must be maintained during all phases of construction. Nesting birds may not be impacted by any construction activity including destruction of habitat or impacts from noise and dust pollution.
- No bioswales or bio strips may be planted with species found on the United States Department of Agriculture (USDA) California State Noxious Weeds List.
- The Division of Landscape and DEP will work jointly to determine the best plant palette for the area, especially in locations where native species are prevalent. It is recommended to focus on drought-tolerant species, and where applicable, native plants as part of the plant palette.

### Visual

- The project will not impact the surrounding aesthetic or visual resources.
- The project will not introduce new light sources.

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### Hazardous Waste

- A site investigation (SI) for ADL will be required for this project during the PS&E phase to adequately evaluate and determine the actual concentrations of lead in soil for the health and safety of workers and so that provisions can be made for handling and disposal of the contaminated soils per the Department of Toxic Substances Control (DTSC) lead agreement with Caltrans.
- It is recommended to assume the top two (2) feet of soil as California Hazardous Waste with disposal at a permitted Class I disposal facility within the State of California.
- Please request a Site Investigation (SI) in a written memo during the early stage of the PS&E phase of the project. The project schedule needs to allow four (4) months to complete the ADL Site Investigation (SI).
- Installation of construction area sign work will be performed in unpaved areas which will involve nominal soil disturbance, and reuse of all excavated soil at the same location.
- A lead compliance plan (LCP) will be required for workers' health and safety.
- The waste generated by the removal of yellow thermoplastic and yellow paint traffic stripes by itself requires disposal at a Class I facility.
- During the PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions.
- The Contractor shall prepare a project specific LCP to protect workers from exposure to hazards from lead while removing and handling the yellow and white traffic stripe residue and a Work Plan for handling and testing of residue prior to transport to and disposal at an appropriate disposal facility.
- An LCP is required as per Cal-OSHA Title 8 California Code of Regulations due to residue from removing white traffic stripes.
- All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. Standard Specification 14-11.15 contains the requirements for the management of the electrical equipment.
- If the project requires imported borrow, the source of the import borrow, shall be tested and free of hazardous waste contamination prior to placement.

EA: 36320 Page **6** of **6** 



## Environmental Commitments Record (ECR)

DIST-CO-RTE: 07 - VEN - 101 PM/PM: 3.000/13.800 EA/Project ID: 07-36320\_/ 0719000312

Project Description: Upgrade Transportation Management System (TMS) elements, install fiber optic lines, and upgrade communication equipment at hubs and at the LARTMC.

Date (Last modification):

Environmental Planner: Mojgan Abbassi Phone: 213-312-7233

Construction Liaison: Joshua Miller Phone: 213-269-1114

Resident Engineer:

Phone:

### PERMITS

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Comments
Permit Requirements Completed on
Permit Requirements Completed by
Permit Expiration
Permit Received
Application Submitted
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### **ENVIRONMENTAL COMMITMENTS**

### PS&E/BEFORE RTL

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply Due Date	Due Date	Date Task Completed by	Task Completed Remarks on	Remarks	Mitigation for significant impacts under CEQA
Hazardous Waste	Hazardous Waste During the PS&E phase and upon receiving a request for Env Doc hazardous waste assessment, we will provide appropriate special provisions.	Env Doc	Std. Spec RE	RE						
Hazardous Waste	Hazardous Waste Please request a Site Investigation (SI) in a written memo Env Doc during the early stage of the PS&E phase of the project.  The project schedule needs to allow four (4) months to complete the ADL Site Investigation (SI).	Env Doc		RE						

### PRE-CONSTRUCTION

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply Due Date	Task Completed by	Task Completed Remarks on	Mitigation for significant impacts under CEQA
Air Quality	It is recommended that the PDT review, evaluate, and consider project measures in Tables 1 and 3 of the Toolbox (https://env.onramp.dot.ca.gov/downloads/env/managedfile s/calitrans-ghgreduction- measures-jun-2021-a11y.pdt) and that the project commit to include all feasible and relevant measures identified from the Tables. If any measures are proposed outside the Tables in the Toolbox, the PDT shall ensure that those measures are biddable, buildable, and can be successfully implemented.	Env Doc		ar T				
Biology	The project Biologist must be invited to the pre-construction NES meeting, with one week prior notice.	NES		Bio <b>l</b> ogist				

# Environmental Commitments Record for Mobility - TMS

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
CONSTRUCTION	NC									
Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Air Qua <b>li</b> ty	Construction of the proposed project shall comply with all applicable AQMD/APCD Rules.	Env Doc		RE						
Air Quality	Objectionable odors should also be minimized by conducting certain construction activities in areas at least 500 feet away from sensitive receptors if feasible. As part of a review of design plans and specifications, the AQB will also coordinate for approval of a nonstandard special provision (NSSP) 14-0,6 to mandate contractors' compliance with the applicable air district rules including measures related to dust control.	Env Doc		RE						
Air Qua <b>l</b> ity	This project is in the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD) and must comply with the VCAPCD Fugitive Dust Implementation of Rule 55 to minimize temporary emissions during the construction of the project as applicable and appropriate.	Env Doc		RE						
Air Qua <b>i</b> lty	This project is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and must comply with the SCAQMD Fugitive Dust Implementation Rule 403 to minimize temporary emissions during the construction of the project as applicable and appropriate.	Env Doc		RE						
Biology	All pollution and litter laws and regulations will be followed by all personnel on-site.	NES		RE						
Biology	All work will be limited to the Caltrans right-of-way, including the prism of the roadway, or the edge of the roadway for purposes of equipment maneuvering and traffic control.	NES		RE						
Biology	If any species of concern are observed during construction activities, all work shall immediately cease, and the District Biologist shall be immediately notified. Work shall not resume until clearance is given by the District Biologist.	NES		RE						
Biology	Indirect impacts from roadway runoff will be minimized through the incorporation of all appropriate Stormwater and Erosion Control Best Management Practices.	NES		RE						
Biology	No bioswales or bio strips may be planted with species found on the United States Department of Agriculture	NES		RE					Page 2	

# Environmental Commitments Record for Mobility - TMS

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed I	Remarks	Mitigation for significant impacts under CEQA
	(USDA) California State Noxious Weeds List.									
Biology	Temporary Construction BMPs will be required such as wind erosion control, sediment tracking control, street sweeping and vacuuming, stabilized construction roadway, spill prevention control, solid waste management, hazardous waste management, sanitary/septic waste management, material delivery and storage, material use, vehicle and equipment cleaning, vehicle and equipment fueling, and vehicle maintenance.	NES		RE						
Biology	The DEP recommends conducting vegetation removal outside the bird nesting season (February 1st through September 1st). If this is not possible, coordination with the District Biologist should take place in order to minimize the risk of violating the Migratory Bird Treaty Act, and the following minimization measure should be put in place: a buffer of 150 ft, for songbirds and 500 ft, for raptors which must be maintained during all phases of construction. Nesting birds may not be impacted by any construction activity including destruction of habitat or impacts from noise and dust pollution.	NES		a.						
Biology	The Division of Landscape and DEP will work jointly to determine the best plant palette for the area, especially in locations where native species are prevalent. It is recommended to focus on drought-tolerant species, and where applicable, native plants as part of the plant palette.	NES		RE						
Biology	There will be no known hazardous wastes or materials within the roadways, construction area, and surrounding area, however, if hazardous materials are found onsite, the contractor will consult with the Caltrans Hazardous Waste Unit and be responsible for collection, containment, and disposal of all waste produced from work done on this project, including potentially hazardous waste, in compliance with all applicable Federal, State, and local waste laws/regulations.	NES		RE						
Biology	This project must employ all appropriate Stormwater and Erosion Control Best Management Practices (BMPs) during construction, and these must be incorporated into the project specifications as determined by appropriate Caltrans specialists. Prior to the start of construction, all drain inlets and outlets must be protected with BMPs to prevent construction materials and debris from entering drainages.	NES		RE						

# Environmental Commitments Record for Mobility - TMS

Category	Task and Brief Description	Source PS Pa	Included in Responsible PS&E Branch/Staff	ole Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Biology	Vegetation removal will be required and will include the removal of existing ruderal, landscape, and native plants.	NES	RE						
Cultural Resources	The location of any needed staging areas will be determined during later phases. If such locations are needed, they will be cleared by either Caltrans Professionally Qualified Staff (PQS) or contractor-provided cultural resource specialists who meet the Secretary of Interior's Professional Qualification Standards.	Section 106	RE						
Hazardous Waste	A lead compliance plan (LCP) will be required for workers' health and safety.	Env Doc	RE						
Hazardous Waste	A site investigation (SI) for ADL will be required for this project during the PS&E phase to adequately evaluate and determine the actual concentrations of lead in soil for the health and safety of workers and so that provisions can be made for handling and disposal of the contaminated soils per the Department of Toxic Substances Control (DTSC) lead agreement with Caltrans.	Епу Doc	RE						
Hazardous Waste	All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. Standard Specification 14-11.15 contains the requirements for the management of the electrical equipment.	SSP	RE						
Hazardous Waste	An LCP is required as per Cal-OSHA Title 8 Calfornia Code of Regulations due to residue from removing white traffic stripes.	Env Doc	RE						
Hazardous Waste	If the project requires imported borrow, the source of the import borrow, shall be tested and free of hazardous waste contamination prior to placement.	Епи Doc	RE						
Hazardous Waste	Installation of construction area sign work will be performed Env Doc in unpaved areas which will involve nominal soil disturbance, and reuse of all excavated soil at the same location.	Env Doc	RE						
Hazardous Waste	It is recommended to assume the top two (2) feet of soil as California Hazardous Waste with disposal at a permitted Class I disposal facility within the State of California.	Епи Doc	RE						
Hazardous Waste	The Contractor shall prepare a project specific LCP to protect workers from exposure to hazards from lead while removing and handling the yellow and white traffic stripe residue and a Work Plan for handling and testing of residue prior to transport to and disposal at an appropriate disposal facility.	Env Doc	RE						
Hazardous Waste	The waste generated by the removal of yellow	Env Doc	RE						

# Environmental Commitments Record for Mobility - TMS

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
	thermoplastic and yellow paint traffic stripes by itself requires disposal at a Class I facility.									
Noise	The potential construction noise impacts would need to be addressed since there are noise-sensitive receptors in the vicinity of the project. Section 14-8.02, Sound Control Requirements, of Caltrans standard specifications, states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.	Env Doc	dss	RE						
Visual	The project will not impact the surrounding aesthetic or visual resources. The project will not introduce new light sources.	Епу Doc		RE						
Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
General	If the project scope should change for any reason, the DEP will be notified to determine whether current environmental documentation is adequate.	Env Doc		ECL						
General	The Department of Environmental Planning (DEP) will be provided the Project Specifications & Expenditures Review Package for review and comments.	Env Doc		ES						
Environmental Branch Chief Susan Tse	Branch Chief			Resident En	Resident Engineer (for Commitments During Construction)	tments Duri	ng Construction)			
Print Name	Signature	Date	I	Print Name		Signature	re	Date	ate	
Project Engineer Patrick P Lui	ser			Project Manager MIRAANEY, DAVID H	ager , DAVID H					
Print Name	Signature	Date		Print Name		Signature	rē	Da	Date	

# **ATTACHMENT G**

# **Hazardous Waste Assesment**

#### Memorandum

To: CESAR A. HERNANDEZ

Senior Transportation Electrical Engineer

Traffic Operations/District 7

Attn: Patrick P. Lui

Date:

File:

PM Various EA: 07-334-363200

December 27, 2023

07- LA-2, 101, 105

07-Ven 23, 101

EFIS: 1847-0719000312

From: HENRY JONES, P.G.

Senior Engineering Geologist

Hazardous Waste Branch – North Region Office of Environmental Engineering (OEE)

#### Subject: UPDATED HAZARDOUS WASTE ASSESSMENT FOR PR

This is in response to your request dated December 11, 2023, for an Updated Hazardous Waste Assessment (UHWA). The Office of ITS is currently preparing a Project Report (PR) for a Transportation Management System (TMS) project on the Ventura Route 101 starting from east of VEN-23 to west of North Lewis Road (VEN-34) in Ventura County. In addition, Ventura Route 23 (VEN-23) will be added, from north of Rancho Road to north of Hillcrest Drive.

This project proposes to upgrade the following items for technology life cycle replacement:

- Two (2) existing Ramp Metering Systems (RMS).
  - Detection Technology, Cabling, Wiring, Communication, Power System
- Seven (7) existing Traffic Signals.
  - Signal Lights, Detection, Loops, Cabling, Wiring, Communication
- Twelve (12) existing Traffic Monitoring Stations (TMS).
  - Detection Technology, Controller/CPU, Cabling, Wiring, Communication, Power System
- One (1) existing Closed-Circuit Television (CCTV) camera.
  - Camera, Cabling, Wiring, Communication, Power System
- One (1) existing Changeable Message Signs (CMS).
  - CMS Panel, Controller/CPU, Cabling, Wiring, Communication, Power System
- Five (5) existing Traffic Census Stations (CS).
  - Detection Technology, Controller/CPU, Cabling, Wiring, Communication, Power System
  - Foundations, Pull Boxes, Conduits

#### This project also proposes to install:

- 11.2 miles of new fiber optic trunk lines.
- Twelve (12) new CCTV cameras including foundations.
- Two (2) new CMS including foundations.
- Two (2) new Connector Metering Systems.
- Fifteen (15) new CCTV cameras for existing Traffic Signals.

<sup>&</sup>quot;Provide a safe and reliable transportation network that serves all people and respects the environment"

EA: 07-363200 (PN: 1847-0719000312)

December 27, 2023

Page 2 of 3

Additionally, this project proposes to:

- Upgrade three (3) existing Communication Hubs on LA-105 (PM R2.0) at I-405 (LAX), on LA-2 (PM R18.7) at LA-134 (LARTMC), and on LA-101 (PM 11.8) at LA-170 (North Hollywood).
- Construct 20 Maintenance Vehicle Pullouts (MVP) with around 3400 linear feet (LF) of Midwest Guardrail Systems (MGS) and construct 2 Timber Retaining Walls at around 125 LF.
- Install communication breakout to two (2) existing TMS.
  - Cabling, Wiring, Communication, Conduit
- Replace the life cycle of two existing Weigh-In-Motion (WIM) systems.

The project limits have also been updated:

07-VEN-101-PM 2.5/13.9 07-VEN-23-PM 3.34/4.20

Based on the information received from your office and available information, our HWA is as follows:

#### **Paved Surfaces**

Installing some new fiber optic trunk lines and traffic Monitoring Stations (TMS), Fifteen (15) new Closed-circuit Television (CCTV) cameras for existing Traffic Signals, communication breakout to two (2) existing TMS works; Upgrade one (1) existing CCTV camera, two (2) existing Ramp Metering Systems (RMS), seven (7) existing Traffic Signals, twelve (12) existing TMS, one (1) existing CMS, and three (3) existing Communication Hubs in Los Angeles County. These works will not pose an aerially deposited lead concern, since they are all done in paved surfaces.

#### ADL concern in unpaved surfaces

#### Major excavation

To setup a new Transportation Management System; installing some new fiber optic trunklines and Traffic Monitoring Stations; Twelve (12) new Closed-Circuit Television (CCTV) cameras, two (2) Changeable Message Signs (CMS), two (2) new Connector Metering Systems, and construct 20 MVPs with around 3400 linear feet (LF) of Midwest Guardrail Systems (MGS) and construct 2 Timber Retaining Walls at around 125 LF works are done in unpaved surface and will generate excess soil. The potential of hazardous waste from Aerially Deposited Lead (ADL) exists within the project limits. A site investigation (SI) for ADL will be required for this project during the PS&E phase to adequately evaluate and determine the actual concentrations of lead in soil for health and safety of workers and so that provisions can be made for handling and disposal of the contaminated soils per the Department of Toxic Substances Control (DTSC) lead agreement with Caltrans. For the Engineer's estimate, it is recommended to assume the top two (2) feet of soil as California Hazardous Waste with disposal at a permitted Class I disposal facility within the State of California. Please request a Site Investigation (SI) in a written memo during the early stage of the PS&E phase of the project. The project schedule needs to allow four (4) months to complete the ADL Site Investigation (SI).

EA: 07-363200 (PN: 1847-0719000312)

December 27, 2023

Page 2 of 3

#### Minor excavation

Replacement of five (5) existing Traffic Census Stations (CS) and the life cycle of two existing Weigh-In-Motion (WIM) systems; Installation of construction area signs work will be performed in unpaved areas which will involve nominal soil disturbance, and reuse of all excavated soil at the same location. A lead compliance plan (LCP) will be required for workers' health and safety. During PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions. Please refer to the latest Contract Cost Database (<a href="http://sv08web/contractcost/">http://sv08web/contractcost/</a>) for the funds that need to be allocated for the lump sum cost of the Contractor's LCP.

#### **Traffic Stripes Removal**

Yellow traffic stripes contain lead and chromium at concentrations that exceed hazardous waste threshold levels established by the California Health and Safety Code and Title 22 of the California Code of regulations. The waste generated by the removal of yellow thermoplastic and yellow paint traffic stripes by-itself require disposal at a Class I facility. During PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions. The Contractor shall prepare a project specific LCP to protect workers from exposure to hazards from lead while removing and handling the yellow traffic stripe residue and a Work Plan for handling and testing of residue prior to transport to and disposal at an appropriate disposal facility. Please refer to the latest Contract Cost Database (<a href="http://sv08web/contractcost/">http://sv08web/contractcost/</a>) for the funds that need to be allocated for the lump sum cost of the Contractor's LCP.

Residue from removing white traffic stripes by-itself will not contain hazardous levels of lead. However, an LCP is required as per Cal-OSHA Title 8 California Code of Regulations. During PS&E phase and upon receiving a request for hazardous waste assessment, we will provide appropriate special provisions. The Contractor shall prepare a project specific LCP to prevent or minimize worker exposure to lead while removing and handling white traffic stripe residue.

#### **Electrical Items**

Removal of existing electrical equipment or components may generate hazardous waste. Electrical equipment includes mercury containing switches, sensors, timers, ballasts with polychlorinated biphenyl (PCB), and other electrical components. All electrical equipment requiring disposal shall be packaged and transported to an appropriate permitted disposal facility. The Standard Specification 14-11.15 contains the requirements for management of the electrical equipment.

#### **Import Borrow**

If the project requires imported borrow, the source of the import borrow, shall be tested and free of hazardous waste contamination prior to placement.

#### **OEE RESOURCE ESTIMATE FOR PROJECT (CC 1847):**

WBS 235.10 = 600 hours (PS&E Phase, Site Investigation, HWA memo and SSP/NSSPs, etc.)

WBS 255.05 = 80 hours (PS&E support)

WBS 270.66 = 100 hours (Construction support)

WBS 280.10 = 40 hours (Project closeout)

EA: 07-363200 (PN: 1847-0719000312)

December 27, 2023

Page 2 of 3

# **ATTACHMENT H**

**Air Quality Analysis** 

## Memorandum

To: SUSAN TSE KOO Date: DECEMBER 1, 2023

SENIOR ENVIRONMENTAL SCIENTIST

ENVIRONMENTAL SCIENTIST

Attn: MOJGAN ABBASSI File: 07-VEN-101-2.5/13.9

07-VEN-23-3.34/4.20

TMS ELEMENTS EA 07-36320 EFIS 0719000312

From: ANDREW YOON

Senior Transportation Engineer

Air Quality Branch

Office of Environmental Engineering

Subject: AIR QUALITY AND GREENHOUSE GAS ASSESSMENT FOR SHOPP MOBILITY
TRANSPORATION MANAGEMENT SYSTEM (TMS) PROJECT ON UNITED STATES ROUTE
101, STATE ROUTE 2, AND INTERSTATE 105 IN VENTURA AND LOS ANGELES
COUNTIES

This memorandum is prepared in response to your request dated October 18, 2023, for an update to the air quality/greenhouse gas (AQ/GHG) assessment previously provided on May 9, 2023, for the subject project. The proposed scope of work and the limits for the project have since been revised; and this update to the AQ/GHG assessment is requested to reflect the revised scope and limits accordingly. According to a request memorandum submitted by the Project Engineer on October 17, 2023, the project has now revised the limits to 07-VEN-101-2.5/13.9 and 07-VEN-23-3.34/4.20; and proposes the following scope of work:

- 11.2 miles of new fiber optic trunk lines;
- Twelve (12) new Closed-Circuit Television (CCTV) cameras including foundations;
- Two (2) new Changeable Message Signs (CMS) including foundations;
- Ten (10) new Traffic Monitoring Stations (TMS);
- Replace five (5) existing Traffic Census Stations (CS);
- Upgrade one (1) existing CCTV camera;
- Upgrade one (1) existing CMS panel;

- Upgrade three (3) existing Communication Hubs on LA-105 (PM R2.0) at I-405 (LAX), on LA-2 (PM R18.7) at LA-134 (LARTMC), and on LA-101 (PM 11.8) at LA-170(North Hollywood);
- Construct 22 Maintenance Vehicle Pullouts (MVP) along with around 3400 linear feet (LF) Midwest Guardrail Systems (MGS);
- Replace the (Satellite Asset) life cycle of two existing Weigh-In-Motion (WIM) systems;
- Two (2) new Connector Metering Systems;
- Fifteen (15) new Closed-circuit Television (CCTV) cameras for existing Traffic Signals;
- Upgrade two(2) existing Ramp Metering Systems (RMS);
- Upgrade fifteen (15) existing Traffic Signals; and
- Upgrade fourteen (14) existing Traffic Monitoring Stations(TMS).

Per 40 CFR 93.126 published in the Federal Register (volume 73, page 4441) on January 24, 2008, Table 2 allows certain projects to be exempt from all emissions analyses. Based on the above-described scope of work provided in your memorandum, the proposed project is deemed listed in Table 2 under the subtitle "Safety" and classification "Traffic control devices and operating assistance other than signalization projects." Therefore, pursuant to 40 CFR 93.126, this project is deemed classified and is exempt from the requirement to determine conformity.

The Transportation Project-Level Carbon Monoxide Protocol (published by Institute of Transportation Studies, University of California, Davis, Revised December 1997) indicates that a project-level air quality analysis is not required for projects exempt pursuant to 40 CFR 93.126; and it is unlikely that the proposed project will result in an adverse impact to ambient CO.

The proposed project is located in Los Angeles County within the South Coast Air Basin (SCAB) which is in a federal nonattainment area for  $PM_{2.5}$  and maintenance area for  $PM_{10}$ . Locations along US 101 and SR-23 are located in Ventura County within the South Central Coast Air Basin (SCCAB) which is in a federal attainment area for  $PM_{2.5}$  and  $PM_{10}$ . The proposed project is exempt from the conformity requirements per 40 CFR 93.126, and it is a type of project that is not anticipated to involve a significant number of or result in an increase in the number of diesel vehicles or increase in vehicle idling. The proposed project is expected to have a neutral influence on  $PM_{10}$  and  $PM_{2.5}$  emissions; and thus, is not anticipated to be of air quality concern for  $PM_{10}$  and  $PM_{2.5}$ . The

proposed project is unlikely to result in adverse impacts to ambient  $PM_{10}$  and  $PM_{2.5}$ .

The proposed project is not anticipated to result in any meaningful changes to traffic volumes, vehicle mix, location of the existing facility, or any other factors that would cause an increase in mobile source air toxic (MSAT) emissions impacts relative to the no-build alternative. It is understood that the project qualifies for a Categorical Exclusion (CE) according to 23 USC 326. Pursuant to the FHWA's Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents dated January 18, 2023, projects that are CE under 23 CFR 771.117 (c) or are exempt under the Clean Air Act pursuant to 40 CFR 93.126, do not require an analysis or discussion of MSAT.

The proposed project is not anticipated to result in increase in operational GHG emissions as no additional roadway capacity will be added. However, per Governor's Executive Order B-30-15, Caltrans requires that construction GHG emissions be quantified. The AQB completed an estimate of construction emissions below based on construction activities data in the Project Initiation Report approved on June 30, 2020.

The emissions from temporary construction activities have been estimated using the Caltrans Construction Emissions Tool (CAL-CET2021) v1.0.2. A summary output of the construction emissions calculations is attached to the memorandum.

Construction Emissions Estimates by Activity (in tons, MT for CO<sub>2</sub>e)

Construction Phases	ROG	со	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>	CO₂e
Land Clearing/Grubbing	0.000	0.000	0.000	0.000	0.000	0
Roadway Excavation & Removal	0.096	0.623	0.643	0.703	0.114	147
Structural Excavation & Removal	0.000	0.000	0.000	0.000	0.000	0
Base/Subbase/Imported Borrow	0.039	0.278	0.266	0.675	0.086	58
Structure Concrete	0.000	0.000	0.000	0.000	0.000	0
Paving	0.043	0.134	0.311	0.023	0.023	61
Drainage/Environment/Landscaping	0.001	0.003	0.006	0.000	0.000	1
Traffic Signalization/Signage/Striping/Painting	0.111	0.537	0.825	0.050	0.049	342
Other Operation	0.000	0.000	0.000	0.000	0.000	0
Total	0.291	1.575	2.051	1.451	0.272	609

Note: CO<sub>2</sub>e=CO<sub>2</sub> equivalents consisting of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, BC, and HFC, in Metric Tons

The proposed project is located in the lower desert portion of Los Angeles County. It is within the boundary of the SCAB and within the jurisdiction of the South Coast Air Quality Management District (SCAQMD); and therefore, this project must comply with the SCAQMD Fugitive Dust Implementation Rule 403 to minimize temporary emissions during construction of the project as applicable and appropriate.

The proposed project is also located in Ventura County for the improvement along US 101 which is within the boundary of the SCCAB and within the jurisdiction of the Ventura County Air Pollution Control District (VCAPCD). This project, therefore, also must comply with the VCAPCD Fugitive Dust Implementation Rule 55 to minimize temporary emissions during construction of the project as applicable and appropriate.

Senate Bill 1 Section 2030(e) directs Caltrans "To the extent deemed cost effective, and where feasible, in the context of both the project scope and the risk level for the asset due to global climate change to better adapt the asset to withstand the negative effects of climate change and make the asset more resilient to impacts such as fires, floods, and sea level rise." In response, Caltrans Division of Environmental Analysis, Office of Environmental Management, developed a GHG Reduction Measures Toolbox

(https://env.onramp.dot.ca.gov/downloads/env/managedfiles/caltrans-ghg-reduction-measures-jun-2021-a11y.pdf) for use in project development. It is recommended that the PDT review, evaluate, and consider project measures in Tables 1 and 3 of the Toolbox and that the project commit to include all feasible and relevant measures identified from the Tables. If any measures are proposed outside the Tables in the Toolbox, the PDT shall ensure that those measures are biddable, buildable, and can be successfully implemented. All identified reduction measures shall be carried forward in the ECR.

Objectionable odors would be mainly related to operation of diesel-powered equipment and off-gas emissions during road-building activities, such as paving and asphalting. SCAQMD Rule 1113 (Architectural Coating) and VCAPCD Rule 74.2 limit the amount of VOC emissions from paving, asphalt, concrete curing, and cement coatings operations. Construction of the proposed project shall comply with all applicable AQMD/APCD Rules. While construction equipment on site would generate some objectionable odors primarily arising from diesel exhaust, these emissions would generally be limited to the project site and would be temporary in nature. Objectionable odors should also be minimized by conducting certain construction activities in areas at least 500 feet away

from sensitive receptors if feasible. As part of review of design plans and specifications in the PS&E phase, The AQB will coordinate for review and approval of a nonstandard special provision (NSSP) 14-9.05 to mandate contractors' compliance with all applicable air district rules including measures related to dust control.

The AQB should be informed of any changes to the proposed scope or the class of action determined for this project. Such changes may require an update or reassessment of air quality issues for the proposed project.

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The content content of the content		10G	ROG	00	NOx	PM10	PM2.5	C02	CH4	N20		EFC.	CO <sub>2</sub> e	- 1	Gasoline Fue	Electricity
Column   C	Dally Average (Ibs/day; metric tons CO <sub>2</sub> e/day; gal fuel/day; kWh electricity/day)	1.249	1.162	6.300	8,206	5.804	1 089	2473	0.048	0.147		280 0	1.22		£ ;	10,01
The classes of the cl	Maximum Datiy Average (Ibs/day; metric tons CO <sub>2</sub> e/day; gal tuel/day; kWh electricity/day) Annual Average (tons/vear: metric tons CO-e/vear: gal fuel/vear: kWh electricity/vear)	0 104	2,062	0.525	0.684	0.484	0.091	3376	0.065	0.233		0.148	203	13.188	5.879	19 100
Column   C																
1975   1975							1000		1			1411111				
Subject of the control of the contro	Source	106	ROG	8	NOx	PM10	PM2.5	CO2	CH4	N20	BC BC	HFC	CO,e		Gasoline Fue	Electricity
Column   C	On-Road	0.029	0.024	0.391	0.364	0.005	0.004		0.002	0.035	0.001		377		17,638	5,015,192
Column   C	Off-Road	0.283	0.267	1,184	1.688	0.140	0.137	245	0.010	0.002	0.022	•	232	21,476	•	
1   1   1   1   1   1   1   1   1   1	Area-Wide Fugitive Dust	1 00	- 0000	į	•	1.307	0.131	•	•	•	•	1	•	•	•	
The protect of the pr	Project Total	0.312	0.291	1.575	2.051	1.451	0.272	618	0.012	0.037	0.023	0.022	609	39.563	17.638	5.015.192
Particular																
The control of the co	Summary by Oneration					Total F	missions and Ca	yd noffon by	Ineration (fons	metric tons CO	e dalfinel kW	- Pectricity)				
Figure 1 and the control of the cont	Project Phases	T0G	ROG	8	NOX	PM10	PM2.5	C02	CH4	N2O	BC	HFC	CO2e	Diesel Fuel	Gasoline Fue	Electricity
And the control of th	Land Clearing/Grubbing	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0			
Figure 1 and the second	Roadway Excavation & Removal	0.103	0.096	0.623	0.643	0.703	0.114	151	0.004	0.007	0.008	0.003	147	11,342	2,285	541,960
Separate Productive Control Co	Structural Excavation & Removal	0.000	0.000	0.000	0.000	00000	0.000	0	0.000	0.000	0000	0.000	0	. !	. ;	
Column	Base/Subbase/Imported Borrow	0.042	0.039	0.278	0.266	0.675	980.0	9	0.002	0.003	0.002	0.001	28	4,522	882	237.027
No. 1974   Proceedings   Processing State   Proce	Paving Collisiate	0.046	0.043	0,134	0.311	0.023	0.023	ê 62	0.001	0.003	0.004	0.002	61	4.271	1,365	332,797
This process   1,15	Drainage/Environment/Landscaping	0.001	0.001	0,003	900'0	0000	0000	-	000.0	000.0	0000		-	88	30	7.02
1879   1871   1872	Traffic Signalization/Signage/Striping/Painting	0.120	0.111	0.537	0.825	0.050	0.049	344	0.005	0.024	600'0		342	19,340	13,062	3,896,383
The color of the	Other Operation	0.000	0.000	0,000	0,000	1.451	0,000	618	0.000	0.000	0.000	0.000	609	39 563	17.638	5 015 192
Note   100	Party.															
Year	Summary by Year					Tota	Emissions and	Consumption	v Year (tons: m	etric tons CO <sub>2</sub> e:	gal fuel: kWh e	ectricity)				
2015   2015		106	ROG	00	×ON		PM2.5	CO2	CH4	N2O COZCI	BC BC	HFC HFC	COse		Gaso ine Fue	Fectricity
2019   2019	2015	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0		2000000	- Freezing
2017   2018   2019   20	2016	0.000	00000	0.000	00000	0.000	0.000	0	00000	00000	0.000	0.000	0	1	,	
Mathematical Control of the Control of Con	2017	0.000	0.000	0.000	0.000	00000	0.000	0	0.000	0.000	0.000	0.000	0	1	1	1
The control of the	2018	00000	00000	0.000	00000	0.000	00000	0 0	0.000	00000	0.000	00000	0 0	1		
2017   2018   2019	2020	00000	000.0	0.000	0.000	0.000	00000		0.000	000.0	0.000	000:0	0			
2223   100	2021	00000	0000	0.000	00000	0.000	0000	0	0000'0	0.000	0.000	00000	0			
2025	2022	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0			
227. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	2023	0.000	0.000	0.000	0.000	0.000	0.000	0 0	0.000	0.000	0.000	0.000	0 0			
1,11,   1,1,1,   1,11,   1,11,   1,11,   1,11,   1,11,   1,11,   1,11,   1,1	2024	0.038	0.036	0.231	0.239	0.260	0.042	. g	0.001	0:003	0.003	0.001	55	4 207	862	136.74
2027         Cut of the control of	2026	0.173	0.162	0.893	1.119	1.149	0.189	273	0.006	0.014	0.012	0.008	267	19,070	5,808	1,400.209
2223	2027	0.101	0.093	0.450	0.693	0.042	0.041	290	0.004	0.020	0.007	0.013	288	16,285	10,968	3,478.23
2029         CONDITION OF COUNTY O	2028	0.000	00000	0.000	00000	0.000	0.000	0 0	0.000	0.000	0.000	0.000	0 0	ı		1
2334   200	2028	00000	00000	00000	00000	0.000	00000	0	0.000	0.000	0.000	00000	0			' '
2023	2031	0.000	0.000	00000	0.000	00000	0.000	0	0.000	00000	00000	0.000	0	1	1	
2033	2032	0000	0.000	0.000	0.000	0.000	0.000	0 (	0.000	0.000	0.000	0.000	0			
2038         CLORD         CLORD <th< td=""><td>2033</td><td>0000</td><td>0.000</td><td>0.000</td><td>00000</td><td>0.000</td><td>0.000</td><td></td><td>0000</td><td>0.000</td><td>0000</td><td>00000</td><td></td><td></td><td></td><td></td></th<>	2033	0000	0.000	0.000	00000	0.000	0.000		0000	0.000	0000	00000				
2035   2037   2038   2039   2030   2	2035	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0	1	1	
2035	2036	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0	,	,	
2340 2350 2360 2360 2360 2360 2360 2360 2360 236	2037	0.000	00000	0.000	00000	0.000	0.000	0 0	0.000	0000	0.000	0.000	0 0			
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2041         0,000	2040	0.000	00000	0.000	00000	0.000	00000	0	00000	00000	0.000	0.000	0	•	•	
2042         Condition         Con	2041	0.000	00000	0.000	00000	00000	0.000	0	0.000	00000	0.000	0.0000	0	1		
2043         Control of	2042	0.000	0.000	0.000	0.000	0.000	0.000	0 (	0.000	0.000	0.000	0.000	0	ı	1	1
2045         Common	2043	0000	0.000	0.000	0.000	0.000	0000	0	0.000	0.000	0.000	000:0				' '
2046         Common	2045	00000	00000	0.000	00000	00000	00000	0	0000	00000	0.000	0.000	0	1	,	
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2049 0.000 0	2047	0.000	0.000	0.000	0.000	0.000	0.000	0 (	0.000	0.000	0.000	0.000	0 0			
2050         0.000	2049	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0			
0.312 0.291 1.575 2.051 0.451 0.272 618 0.012 0.037 0.023 609 39.563 1  Average Emissions and Consumption per Year (fonsivear; metric tons CO <sub>2</sub> e/year; gal fuelyear; kWh electricity/year)	2050	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	0.000	0	1		
Average Emissions and consumption per rear (tons)year, mentic rots cucyelyear, gai tuenyear, kwin encorricityyearj	Total	0.312	0.291	1.575		1.451	0.272	618	0.012	0.037	0 023	0.022		39,563	17,638	5,015,192
20F27 200 E000 0000 F000 F000 F000 F0F0 F0F0			1000	0.00	4	Average Emissic	ons and Consun	nption per Year	(tons/year; met	ic tons CO <sub>2</sub> e/ye	ar; gal fuel/year	kWh electricity/y	ear)	40.400	0101	701 710 7

| TOG | ROG | CO | NOX | PM10 | PM25 | CO2 | CU4 | NO2 | CC2 | CC3 | CC3 | CC3 | CC4 | CC4 | CC4 | CC5 | CC4 | CC5 Project Maximum<sup>a</sup>

				Ā	erage Daily Emis	sions and Cons	umption by Oper	ation (lbs/day; m	Average Daily Emissions and Consumption by Operation (Ibs/day; metric tons CO <sub>2</sub> e/day; gal fuel/day; kWh electricity/day	ay; gal fuel/day;	kWh electricity/c	tay)			
	TOG	ROG	CO	NOx	PM10	PM2.5	C02	CH4	N2O	BC	HFC	CO <sub>2</sub> e	Diesel Fuel	Gasoline Fuel	Electricity
	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	00000	0.000	1		1
	1.135	1.061	6.880	7.106	797.7	1.259	1668	0.044	0.078	0.090	0.038	0.811	63	13	2.994
	0.000	0.000	0.000	0.000	00000	0.000	0	0.000	0.000	00000	00000	0.000	1	,	1
	1.433	1.338	9.433	9.030	22.866	2.919	2037	0.056	0.087	0.053	0.043	0.975	77	15	4.017
	0.000	0.000	0.000	0.000	00000	0.000	0	0.000	00000	00000	00000	0.000	1	,	1
	2.197	2.062	6.380	14.811	1.112	1.090	2936	0.065	0.164	0.201	260.0	1.460	102	33	7.924
	0.140	0.131	0.400	0.834	0.063	0.062	184	0.004	0.010	0.014	900.0	0.092	9	2	0.502
	1.177	1.087	5,267	8.089	0.487	0.478	3376	0.049	0,233	0.085	0.148	1.677	98	64	19,100
	0.000	0.000	0,000	0,000	00000	0.000	0	0,000	0,000	0,000	0,000	0000			
Highest across Operations	2.197	2.062	9.433	14.811	22.866	2,919	3376	0.065	0.233	0.201	0.148	1.677	102	64	19.100

1,000   0,00	1,000   0,00	T0G	ROG	00	NOX	PM10	PM2.5	C02	CH4	NZO	BC	HFC	CO <sub>2</sub> e	Diesel Fue	Gasoline Fue	Electricity
1,000   1,00	1,000   0,00	0.000	0.000	00000	0.000	00000	00000	0	00000	00000	0.000	00000	00000	1	1	1
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0.000         <	0.0000         0.000	0.0000	0.000	00000	0.000	00000	0000	0	0.000	00000	00000	00000	0.000	1		1
0,000         <	1,054   6,000   0,0	0.000	0.000	0.000	0.000	00000	0.000	0	0.000	0.000	0.000	0.000	0.000	1		1
1.054 6.006 7.144 7.269 1.290 1.000 0.000 0.000 0.000 0.000 0.001 0.000	1.0540   0.000   0.0	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	00000	0.000	•		
1,064   6,596   7,144   7,788   1,286   1,286   1,286   1,074   1,075   1,064   1,075   1,064   1,075   1,064   1,075   1,064   1,075   1,064   1,075   1,0	1,056   6,546   6,547   7,144   7,756   1,250   1,25	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.000	0.000	00000	0.000			
1,239   6,8846   8,873   8,804   1,447   2,0289   0,049   0,109   0,005   0,	1,289   6,846   8,873   8,804   1,447   2089   0,046   0,109   0,006   0,006   1,102   73   22   22   23   23   23   23   2	1.139	1.064	906'9	7.144	7.768	1,260	1675	0.044	0.078	060'0	0.039	0.815	63	13	2.041
1,006   5,2296   5,004   0,0487   0,4	1,006   5,236   8,004   0,487   0,487   3366   0,0049   0,0222   0,0068   0,146   1,672   56 64   64   1,672   1,005   1,000	1.326	1.239	6.846	8.573	8.804	1.447	2089	0.049	0.109	0.095	0.061	1.022	73		5.365
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# **ATTACHMENT I**

**Noise Analysis** 

#### Memorandum

Making Conservation a California Way of Life.

April 19, 2023

To: Cesar A. Hernandez

Senior Transportation Electrical Engineer

Traffic Operations/ District 7

File: 07-VEN-101

Date:

07-LA-2,101,105 PM: VARIOUS EA: 07- 363200 EFIS: 0719000312

From: Jin S Lee

Branch Chief/Noise & Vibration Branch Office of Environmental Engineering Division of Environmental Planning

#### Subject: NOISE REVIEW FOR ENVIRONMENTAL CLEARANCE

The following provides a noise analysis for the above-referenced project:

**Project limits**: 07-Ven-101 and 07-LA-2,101,105 (Various Post Miles) in Ventura and Los Angeles Counties.

The Office of ITS is currently preparing a Project Report (PR) for a Transportation Management System (TMS) project on the Ventura Route 101 in Thousand Oaks and Camarillo, from Rancho Road (PM 3.0) to Route 34 (13.8).

The project proposes to set up a new Transportation Management System (TMS), installing

- 11.2 miles of new fiber optic trunk lines.
- Twelve (12) new Closed Circuit Television ( CCTV) cameras including foundations.
- Two (2) Changeable Message Signs (CMS) including foundations.
- Ten (10) traffic Monitoring Stations (TMS).
- Two (2) new Connector Metering Systems.

#### In addition, this project proposes to

- Replace five (5) existing Traffic Census Stations (CS).
- Upgrade one (1) existing CCTV camera.
- Upgrade sixteen (16) existing Ramp Metering Systems (RMS).
- Upgrade one (1) existing CMS panel.
- Relocate Controller Cabinets at ten (10) different locations on new foundations.
- Relocate eight (8) Roadside Signs at different locations.
- Upgrade three (3) existing Communication Hubs in Los Angeles and Ventura counties.

07-VEN-101,07-LA-2,101,105

EA: 07- 363200 EFIS: 0719000312

Page 2

- Construct 22 Maintenance Vehicle Pullouts (MVP) along with around 3400 linear feet (LF) Midwest Guardrail Systems (MGS).
- The (Satellite Asset) life cycle replacement of two existing Weigh In Motion (WIM) systems with new systems is also proposed.

All work will be completed within Caltrans Right of Way.

Based on the scope of this project as listed above, this is not a Type I project as defined in the 2020 Traffic Noise Analysis Protocol and it is not expected to raise traffic noise levels or cause a substantial noise increase. Therefore, a detailed noise study is not required for this project. However, potential construction noise impacts would need to be addressed since there are noise sensitive receptors in the vicinity of the project. Section 14-8.02, Sound Control Requirements, of Caltrans standard specifications states that construction noise levels should not exceed sustained 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. These requirements also state that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

If you have any questions, please contact me at (213) 269-1667 or contact Aye Htoon of my staff at (213) 335-0058.

Jin S. Lee, P.E.

Senior Transportation Engineer Noise and Vibration Branch

# ATTACHMENT J

**Storm Water Data Report** 

		Dist-County-Ro	ute: <u>07-LA/\</u>	/en, Various				
		Post Mile Limit	s: Various					
		Project Type:	TMS Upgrade	)				
		Project ID (EA):	0719000	312 (36320	OO)			
	Caltrans*							
		Phase: ☐ PID	⊠P	A/ED	☐ PS&E			
Regi	onal Water Quality Control Bo	oard(s): Centi	ral Costal Regi	on and Los A	Angeles Regio	n		
1.	Does the project disturb 5 c					Yes	No 🖂	
2.	Does the project disturb 1 c Erosivity Waiver?	r more acres of	soil and not q	ualify for the	Rainfall	Yes □	No ⊠	
3.	Is the project required to im	plement Treatm	ent BMPs?			Yes 🗌	No ⊠	
4.	Does the project impact exis	sting Treatment	BMPs?			Yes 🗌	No ⊠	
				_	-			
	e answer to any of the preced ss otherwise agreed upon by	_		_		ater Data R	eport.	
Onic	33 otherwise agreed aport by	the bistiney he	giorial Design	Johnwaler	Joordinator.			
Appl	icable Caltrans Permit Post C	onstruction Tre	atment Requir	ement: 2	012 🔲 20	022 🖂		
		66 acres	New Impervio		<del>-</del>	<u> </u>		
Estimated Const. Start Date: 10/1/2025 Estimated Const. Completion Date: 10/1/2027								
	-							
Risk	Level: RL 1 □	RL 2 🗌	RL 3 🗌	Not Ap	plicable 🛚			
<b>I</b> s (N	1)WELO applicable? Yes	□ No ⊠						
This	Short Form – Stormwater Da	ta Report has b	een prepared	under the di	irection of the	e following l	Licensed	
	on. The Licensed Person atte					•		
	mmendations, conclusions, and required at PS&E only.	ina aecisions ai	re based. Prote	essionai Eng	ineer or Land	scape Arch	itect	
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[Stat	mp Required at PS&E only]	For Shao-Chia	ang Liu, <i>Distric</i>	 t/Regional Γ	esign SW Cod			
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#### 1. Project Description

- This project proposes to install and upgrade transportation management system (TMS) elements along the route 101 from route 23 (PM 2.5) to Lewis Road (PM 13.9) and the route 23 from Rancho Road (PM 3.34) to Hillcrest Drive (PM 4.2) in Ventura County. This project propose to install new fiber optic conduits, Closed Circuit Television (CCTV) Camera Systems, Changeable Message Signs (CMS), Vehicle Detection Systems (VDS), maintenance vehicle pullouts (MVPs paved with pervious pavement) and Midwest guardrail system (MGS). This project also propose to upgrade existing TMS elements consisting of Traffic Census Stations (CS), CCTV Camera System, Traffic Monitoring Stations, CMS System and Traffic Signals. This project proposes to upgrade communication equipment at North Hollywood (NHD) Hub on route 101 at PM 11.8R, Los Angeles Airport (LAX) Hub on route 105 at PM R2.0 and Los Angeles Regional Traffic Management Center (LARTMC) on route 2 at PM R18.7.
- There are 8,000' breakout fiber optic conduits, 27 new CCTV cameras, 2 new CMS, 2 new VDS, 20 MVPs, and 3400' of MGS.
  - o Camera pole foundation: (2'-6") x (2'-6") = 6.25 SF
  - o Cabinet foundation: (9'-9") x (4'-2") = 41 SF
  - o CMS CIDH pile: 5' diameter: (2'-6") x (2'-6") x 3.14 = 19.63 SF
  - o MVP: 85' x 12' = 1020 SF
  - o MSG: 6" (width)
  - Fiber optic conduits on soil: 8" (width)
  - Total Disturbed Soil Area (DSA): 27 poles x 6.25 SF + 31 cabinets x 41 SF + 2 CIDH pile x 19.63 SF + 20 MVPs x 1020 SF + 3400' MGS x 6" + 8000' conduits x 8"
     = 28,930 SF = 0.66 acres
  - New Impervious Surface (NIS) = 0.03 acres
    - Net New Impervious (NNI) = 0.03 acres
    - Replaced impervious surface (RIS) = 0
- The total project cost of this project is \$42,359,000.

#### 2. Site Data and Stormwater Quality Design Issues

- The project limit is Calleguas Hydrologic unit, Calleguas-Conejo Hydrologic area, Conejo Valley Hydrologic sub-area #408.24
- The project limit is within the Calleguas, Revolon Slough, Calleguas Creek, Los Angeles River and Dominguez Channel Total Maximum Daily Load (TMDL) Watershed Boundary. The TMDLS are as follows:

#### **Calleguas Creek**

Pollutant(s)	Effective Date	LA RWQB Resolution No.	Categorical Implementation Requirements <sup>12</sup>
Title: Calleguas Cree	k Watershed OC P	esticides and Po	CBs TMDL

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Toxics (organochlorine (OC) pesticides, total polychlorinated biphenyls (PCBs) and siltation)	03/14/2019	2005-010	Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain toxic pollutants as listed in the TMDL. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil.
Title: Calleguas Cree	k Watershed Meta	als and Selenium	n TMDL
Metals (Cu, Hg, Ni, Zn) and Se	03/26/2007, revised 06/23/2017	R16-007	Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain metals and Se. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil. Compliance of the TMDL will be achieved through implementation of BMPs.
Title: Revolon Slough	n/Beardsley Wash	Trash TMDL	
Trash	03/06/2008	2007-007	Discharge of trash to receiving waters from Caltrans R/W is prohibited. Caltrans is assigned a WLA and compliance schedule in the RS/BW Trash TMDL. Installation/retrofit of Gross Solid Removal Devices (GSRDs) and/or full capture systems at existing drainage outfalls within Caltrans R/W are required for TMDL compliance. Existing projects with GSRDs do not require additional implementation.

<sup>1</sup> Refer to §4 of the PPDG to determine the specific impervious threshold for stormwater Treatment BMP requirements.

#### **Dominguez Channel**

Pollutant(s)  Title: Dominguez	Effective Date	LA RWQB Resolution No.	Categorical Implementation Requirements <sup>12</sup> s Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Toxic pollutants (dichlorodiphenyl- trichloroethane (DDT), polycyclic aromatic hydrocarbons (PAHs), total polychlorinated biphenyls (PCBs), metals (Cu, Pb, Zn))	03/23/2012	R11-008	Targeted pollutants are to be monitored in the water column in the channel and harbors as well as the sediment in the harbors. The TMDL requires the dischargers of the Los Angeles River and the San Gabriel River to monitor water quality at the mouth of each river. Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain toxic pollutants as listed in the TMDL. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil.

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<sup>2</sup> General TMDL Requirements can be found in Attachment IV of the NPDES Statewide Storm Water Permit.

- 1 Refer to §4 of the PPDG to determine the specific impervious threshold for stormwater Treatment BMP requirements.
- 2 General TMDL Requirements can be found in Attachment IV of the NPDES Statewide Storm Water Permit.

#### Los Angeles River

Pollutant(s)	Effective Date	LA RWQB Resolution No.	Categorical Implementation Requirements <sup>12</sup>
Title: Los Angele	s River Trash	TMDL	
Trash	12/24/2008, revised 06/30/2016	R15-006	Discharge of trash to receiving waters from Caltrans R/W is prohibited. Caltrans is assigned a WLA and compliance schedule in the Los Angeles River Trash TMDL. Installation/retrofit of Gross Solid Removal Devices (GSRDs) and/or full capture systems at existing drainage outfalls within Caltrans R/W are required for TMDL compliance. Existing projects with GSRDs do not require additional implementation.
Title: TMDL for N	letals for the	Los Angeles	River and its Tributaries
Metals (Cu, Pb)	12/22/2005, revised 12/12/2016	R15-004	Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain metals. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil. Compliance of the TMDL will be achieved through implementation of BMPs.
Title: TMDL for II	ndicator Bacte	eria for the L	os Angeles River Watershed
Indicator bacteria	03/23/2012	R10-007	Dry-weather non-storm water and wet-weather storm water discharges may significantly increase bacteria loading to receiving waters. Caltrans shall implement control measures and/or BMPs to prevent the discharge of bacteria from its R/W. Source control measures include street sweeping, illegal dumping clean-up, public education on littering. BMPs include devices which treat storm water through retention/detention, infiltration and/or diversion.
Title: Dominguez	Channel and	Greater Los	s Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL
Toxic pollutants (dichlorodiphenyl- trichloroethane (DDT), polycyclic aromatic hydrocarbons (PAHs), total polychlorinated biphenyls (PCBs),		R11-008	Targeted pollutants are to be monitored in the water column in the channel and harbors as well as the sediment in the harbors. The TMDL requires the dischargers of the Los Angeles River and the San Gabriel River to monitor water quality at the mouth of each river. Caltrans shall implement control measures and/or treatment BMPs to prevent the discharge of sediments which may contain toxic pollutants as listed in the TMDL. Possible treatment options include the interception and infiltration of runoff which will allow water to percolate into soil.

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metals (Cu, Pb, Zn))			
Zn))			

1 Refer to §4 of the PPDG to determine the specific impervious threshold for stormwater Treatment BMP requirements.

2 General TMDL Requirements can be found in Attachment IV of the NPDES Statewide Storm Water Permit.

- There is no drinking water reservoirs and/or Recharge Facilities within the project limit.
- The nearest 303(d) list receiving water body within the project limit are Calleguas Creek Reach 13 (Arroyo Conejo above North Fork Arroyo Conejo), Calleguas Creek Reach 9B (Conejo Creek: Camrosa Diversion to Arroyo Santa Rosa), and Calleguas Creek Reach 6 (Conejo Creek to Hitch Rd).
- Pollutants of concerns are Ammonia, ChemA (tissue), Chlordane, Chloride, Chlorpyrifos, DDT (sediment), DDT (tissue), Diazinon, Dieldrin, Endosulfan (tissue), Indicator Bacteria, Nitrate and Nitrite, Nitrate as Nitrate (NO3), PCBs (Polychlorinated biphenyls), Sedimentation/Siltation, Sulfates, Total Dissolved Solids, Toxaphene (tissue & sediment), Toxicity, and Trash.
- This project does not require 401 certifications.
- There is no ASBS within the project limits.

#### 3. Construction Site BMPs

- The project will require a Water Pollution Control Program (WPCP) since the total DSA will be less than 1 acre.
- The following BMPs are included in the lump sum of Job Site Management:
  - Spill Prevention and Control
  - Material Management
  - Waste Management
  - Solid Waste Management
  - o Sweeping
  - Material Delivery and Storage
  - Material use
  - Stockpile Management
  - Sanitary and Septic Waste Management
  - Vehicle and Equipment cleaning
  - Vehicle and Equipment Fueling and Maintenance
  - Contamination Soil Management
  - Hazardous Waste Management
  - Water Control and Conservation
  - Spill Prevention Control

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- o Illicit Connection/Illegal Discharge Detection and Reporting
- o The following is a list of contract bid items for the project:
  - o Job Site Management
  - o WPCP
- Supplemental Work Items are:
  - Additional Water Pollution Control
- o Additional information will be provided in the PS&E phase.
- Temporary Construction BMPs are estimated at \$420,000 in accordance with the guidelines of Appendix F.
- On February 8, 2024, Arthur Hedayati, District 7 Construction Stormwater Coordinator, concurs with the temporary construction site BMP strategy used (at PA/ED phase) for the scope of work of this project.

#### Required Attachments1

- Vicinity Map
- Evaluation Documentation Form
- SWDR Summary Spreadsheet

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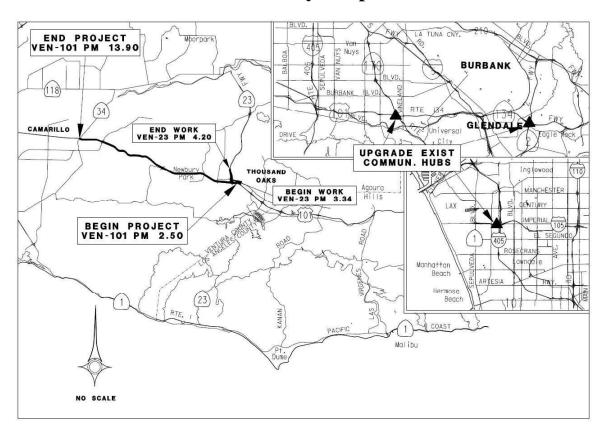
<sup>&</sup>lt;sup>1</sup> Additional attachments may be required as applicable or directed by the District/Regional Design Stormwater Coordinator. (e.g., BMP line item estimate, SW, DPP, and CS Checklists).

#### **Evaluation Documentation Form**

No.	Criteria	Yes	No ✓	Supplemental Information for Evaluation
1.	Begin Project evaluation regarding requirement for implementation of Treatment BMPs	✓		Continue to 2.
2.	Is the scope of the Project to install Treatment BMPs (e.g., Alternative Compliance or TMDL requirement)?		<b>✓</b>	If <b>Yes</b> , go to 8. If <b>No</b> , continue to 3.
3.	Is there a direct or indirect discharge to surface waters?	✓		If <b>Yes</b> , continue to 4. If <b>No</b> , go to 9.
4.	As defined in the WQAR or ED, does the project:  a. discharge to Areas of Special Biological Significance (ASBS), or		✓	If <b>Yes to any</b> , contact the District/Regional Design Stormwater Coordinator or District/Regional NPDES Coordinator to discuss the Department's obligations, go to 8 or 5.
	b. discharge to a TMDL watershed where Caltrans is named stakeholder, or	✓		AL (Dist./Reg. Coordinator initials)
	c. have other pollution control requirements for surface waters within the project limits (e.g. STGA)?		✓	If <b>No</b> to all, continue to 5.
5.	Are any existing Treatment BMPs partially or completely removed?		✓	If Yes, go to 8 AND continue to 6.
	(ATA Condition 1, Section 4.3.1)			If <b>No</b> , continue to 6.
6.	Is this a Routine Maintenance Project?		✓	If <b>Yes</b> , go to 9.  If <b>No</b> , continue to 7.
7.	Does the project result in an increase of 10,000 ft <sup>2</sup> or more (or 5,000 ft <sup>2</sup> for "non-highway facilities projects") of new impervious surface (NIS)?		✓	If <b>Yes</b> , go to 8.  If <b>No</b> , go to 9.
8.	Project is required to implement Treatment BMPs.	Complete (	Checklist T-1	, Part 1.
9.	Project is not required to implement Treatment BMPs.	Document	for Project Fi	les by completing this form and attaching it to the SWDR.

PPDG July 2023 1 of 1

### Vicinity Map



In Ventura and Los Angeles Counties, on Various Routes at Various Locations.

07-VEN-101-PM 2.5/13.9 07-VEN-23-PM 3.34/4.20 LA-2-PM R18.70 (LARTMC) LA-101-PM R11.80 (NHD HUB) LA-105-PM R2.0 (LAX)

36 37 38 39 40	No. No.         Propertions         Treated         Treated         Treated         Provided	ON ON 00'0 00'0 00'0 00'0 00'0 00'0 00'0	ON ON 000 000 000 000 000 000	ON ON 00:00 00:00 00:00 00:00	00 0 00 0 00 0 00 0 00 0 00 0 00 0 00 0	O O O O O O O O O O O O O O O O O O O
36 37 38 39 40 41 42 43 44	Profession Additional Prost Treated Institute Provincial Professional	ON 00:0 00:0 00:0 00:0 00:0	ON 000 000 000 000 000	ON 00:0 00:0 00:0 00:0	ON 00:0 00:0 00:0 00:0	ON 000 000 000
36 37 38 39 40 41 42 43	Heplacon Additional Prost Treated Treated Surface Surface Surface Surface (RE) Treatment Treatme	0000 0000 0000 0000 0000	0000 0000 0000 0000	00.0 00.0 00.0 00.0	00.0 00.0 00.0 00.0	00.0 00.0 00.0
36 37 38 39 40 41 42	Heplacon Additional Prost Treated Treated Surface Surface Surface Surface (RE) Treatment Treatme	00.0 00.0 00.0 00.0 00.0	000 000 000	00'0 00'0 00'0	00.00 00.00 00.00	00.0 00.0
36 37 38 39 40 41	Hecklabed Additional Frost Treated Instance Treated Empervious Treatment Aroa Treatment Area (ac) Aroa Balanco (AC) (ac) (ac) (ac) (ac) (ac) (ac) (ac) (ac	000 000 000	000 000 000	00'0 00'0	00.0 00.0	00.00
36 37 38 39 40	Heplacea   Additional   Prost Treated	0000 0000 0000	0000 0000	00'0	000	00'0
36 37 38 39	Heplacea   Additional   Prost Treated	0000 0000	00'0			
36 37 38	Heptaced Additional Foots Impervious Treatment Area Treatment Surface (RB) (ATA) (ac) Area (ac)	00'0		00'0	00	
36 37	Meplaced Impervious Surface (RIS) (ac)		00		0	00'0
36	Net New Impervious 1 ervious area Surface (RIS) 1 (ac) (ac)	00.00	ŏ	0.00	0.00	0 0
Ц	Net New ervious area NNI) (ac)	ı	0.00	00.0	00.00	00.00
32	Ē.	0.03	00.0	00'0	00.0	00'0
	new mpervious Surface (ac)	0,03	000	00'0	00'0	000
34	Est Const Comp	10/1/2027	10/1/2027	10/1/2027	10/1/2027	10/1/2027
33	Const Start	10/1/2025 10	10/1/2025 10			
3	/IP Const	10/1/	10/1/	10/1/2025	10/1/2025	10/1/2025
35	a DPPIA OGFC Other BMP Co	0	0	0	0	0
31	AH 0G	0	0	0 0	0 0	0
29 30	Compost DPF	0 0	0 0	0 0	0 0	0 0
28	Austin/Del Com Sand Filter Mor	0	0 0	0 0	0 0	0 0
27	Delaware Aus Media San	0	0	0	0	,
26	Austin Vault Med Me Filter	0	0	0	0	0
52	TST Vau	0	0	Q.	0	0
24	o Trash	0	0 0	0	0	0
23	D Capture Housing	۰	0	0	0	0
21 22	GSRD GSRD	0	0	0 0	0 0	0
Н	allery GS	_			_	_
9 20	rench InfilGs		0 0	0 0	0 0	0
	tion milities	Ě	Ľ			Ĺ
17 18	ention Basin	0 0	0 0	0 0	0 0	0 0
16 1.	le Bioretertion Deter	0		0	0	0
15	oSwale Bion	0	0	0	0	0
14	ioStrip Bi	٥	0	0	0	0
13	TMDL BioStrip BioSwalk	Yes	Yes	Yes	Yes	Yes
12		_	_	000	00'0	00'0
Ξ	Bisk Level	WPCP	WPCP	No WPCP	No WPCP	WPCP
10	set Long	PAJED NO WPCP 0.66	PA/ED No WPCP 0.00	oN G:	oN Q:	ON CI
6	ct Proje tion Phas	PAVE	PAVE	PAED	PAED	PAVE
2 8	d_PM Project	3.90 TMS Upgrade	4.20 TMS Upgrade	R18,7 TMS Upgrade	11.R TMS Upgrade	PRO TMS PALED NO WPCP 0.00
9	g PM En.	2.50	3.34 4.20		18H	12.0 R
2	Route Bei	101	23	2 B	LA 101 118R	105 F
7	County	VEN	VEN	LA	Ŋ	4
3	EAProject D County Route Beg_PM End_PM Project Project Long Risk DSA	3632000717000312 VEN 101 2.50 13.90	363200/0717000312 VEN 23	363200/0717000312 LA 2 R18.7	363200/0717000312	363200/0717000312 LA 105 R2.0 R2.0
2	District	7	7	- 4	7	7
-	SWDR District					

# **ATTACHMENT K**

**TMP Data Sheet** 

EA: 363200 EFIS: 0719000312

# TRANSPORTATION MANAGEMENT PLAN DATA SHEET (Revised Preliminary TMP Elements and Costs)

Ven - 23, 101, La - 2,101,105 07-363200	
	Alternative No. PR
On Rte 101 from east of Ven 23 to east of North Lew	· · ·
Project Limit On Rte 23 from north of Rancho Rd to north of Hiller	
Project Description Construct New Communication System, Install N	
Including CCTV, CMS, TMS, HAR System and A	
System and Vehicle Detection Stations and Upgra	nde Hub Facilities
1) Public Information	
a. Brochures and Mailers	\$
🔀 b. Press Release	<u> </u>
c. Paid Advertising	\$
d. Public Information Center/Kiosk	\$
e. Public Meeting/Speakers Bureau	_ *
f. Telephone Hotline	
g. Internet	
h. Others	\$
2) Motorists Information Strategies	
a. Changeable Message Signs (Fixed)	\$
b. Changeable Message Signs (Portable)	\$
c. Ground Mounted Signs	\$
d. Highway Advisory Radio	\$
e. Caltrans Highway Information Network (CHIN)	
f. Others	\$
3) Incident Management	
a. Construction Zone Enhanced Enforcement	
Program (COZEEP)	\$600,000.00
b. Freeway Service Patrol	\$
c. Traffic Management Team	
d. Helicopter Surveillance	\$
e. Traffic Surveillance Stations	
(Loop Detector and CCTV)	\$
f Others	\$

EA: 363200 EFIS: 0719000312

<ul> <li>a. Lane Closure Chart</li> <li>b. Reversible Lanes</li> <li>c. Total Freeway Mainline Closure</li> <li>d. Extended Weekend Closure</li> <li>e. Contra Flow</li> <li>f. Truck Traffic Restrictions</li> <li>g. Reduced Speed Zone</li> <li>h. Connector and Ramp Closures</li> <li>i. Incentive and Disincentive</li> <li>j. Moveable Barrier</li> <li>k. Others</li> <li>5) Demand Management</li> <li>a. HOV Lanes/Ramps (New or Convert)</li> <li>b. Park and Ride Lots</li> <li>c. Rideshare Incentives</li> <li>d. Variable Work Hours</li> </ul>	\$ \$ \$ \$ \$
c. Total Freeway Mainline Closure d. Extended Weekend Closure e. Contra Flow f. Truck Traffic Restrictions g. Reduced Speed Zone h. Connector and Ramp Closures i. Incentive and Disincentive j. Moveable Barrier k. Others  5) Demand Management a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	\$ \$ \$ \$
d. Extended Weekend Closure e. Contra Flow f. Truck Traffic Restrictions g. Reduced Speed Zone h. Connector and Ramp Closures i. Incentive and Disincentive j. Moveable Barrier k. Others  5) Demand Management a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	\$ \$ \$ \$
e. Contra Flow f. Truck Traffic Restrictions g. Reduced Speed Zone h. Connector and Ramp Closures i. Incentive and Disincentive j. Moveable Barrier k. Others  5) Demand Management a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	\$ \$ \$ \$
f. Truck Traffic Restrictions  g. Reduced Speed Zone h. Connector and Ramp Closures i. Incentive and Disincentive j. Moveable Barrier k. Others  5) Demand Management a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	\$ \$ \$ \$
g. Reduced Speed Zone h. Connector and Ramp Closures i. Incentive and Disincentive j. Moveable Barrier k. Others  5) Demand Management a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	\$ \$ \$ \$
h. Connector and Ramp Closures i. Incentive and Disincentive j. Moveable Barrier k. Others  5) Demand Management a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	\$ \$ \$
i. Incentive and Disincentive j. Moveable Barrier k. Others  5) Demand Management a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	\$ \$
j. Moveable Barrier k. Others  5) Demand Management a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	\$ \$
k. Others  5) Demand Management  a. HOV Lanes/Ramps (New or Convert)  b. Park and Ride Lots  c. Rideshare Incentives	\$
5) Demand Management  a. HOV Lanes/Ramps (New or Convert)  b. Park and Ride Lots  c. Rideshare Incentives	\$
a. HOV Lanes/Ramps (New or Convert) b. Park and Ride Lots c. Rideshare Incentives	
b. Park and Ride Lots c. Rideshare Incentives	
c. Rideshare Incentives	•
	<u> </u>
d Variable Work Hours	\$
a. variable work flours	
e. Telecommute	
f. Ramp Metering (Temporary Installation)	\$
g. Ramp Metering (Modify Existing)	\$
h. Others	\$
6) Alternative Route Strategies	
a. Add Capacity to Freeway Connector/Ramps	\$
b. Street Improvement (widening, traffic signal etc)	\$
c. Traffic Control Officers	\$
d. Parking Restrictions	
e. Others	\$
7) Other Strategies	
a. Application of New Technology	\$
e. Others	\$

EA: 363200 EFIS: 0719000312

Pro	oject Notes:		
	/15/2023		
1.	The TMP was developed based on info	ormation provided by the Office	of ITS
	on 12/13/2023.		
2.	A Public Awareness Campaign (PAC)		a Affairs on 12/14/2023.
	PAC includes press release only and the		
3.	Construction shall notify Caltrans' Offi		ffairs at least one
	month prior to the start of construction		
4.	COZEEP cost estimate was provided b		
	COZEEP cost amount of \$600,000 sha		tem 066062.
	All work shall be done within Caltrans		
6.		e charts included in the Maintain	ing Traffic
	Specification.	0 1 11	C.I. TD CD D
7.	Any change to the scope of the work o	f project will require a re-evalua	ition of the TMP Data
	Sheet.		
		_	
	PREPARED BY	Duc Tran	DATE 12/15/2023
		Duc Tran, T. E.	
		7 p: A. / -	12/17/2022
	APPROVAL RECOMMENDED BY	Dywi Amed	DATE <u>12/17/2023</u>
		Dyari Ahmed, S. T. E	
	A DDD OVED DV	Parales	DATE 12/19/2022
	APPROVED BY	V 41. V	DATE <u>12/18/2023</u>
		Kenneth Young,	
		District Traffic Manager	

# Ven, La 101-363200 TMP data sheet

Final Audit Report 2023-12-18

Created: 2023-12-15

By: Duc Tran (S120454@dot.ca.gov)

Status: Signed

Transaction ID: CBJCHBCAABAAugi2r8DUHpPg1X\_dnoyXe69Uzt4PdYII

### "Ven,La101-363200 TMPdatasheet" History

- Document created by Duc Tran (S120454@dot.ca.gov) 2023-12-15 5:37:57 PM GMT
- Document emailed to Dyari Ahmed (dyari.ahmed@dot.ca.gov) for signature 2023-12-15 5:40:51 PM GMT
- Email viewed by Dyari Ahmed (dyari.ahmed@dot.ca.gov)
- Document e-signed by Dyari Ahmed (dyari.ahmed@dot.ca.gov)
  Signature Date: 2023-12-18 6:38:24 AM GMT Time Source: server
- Document emailed to Kenneth Young (kenneth.c.young@dot.ca.gov) for signature 2023-12-18 6:38:25 AM GMT
- Email viewed by Kenneth Young (kenneth.c.young@dot.ca.gov) 2023-12-18 3:26:15 PM GMT
- Document e-signed by Kenneth Young (kenneth.c.young@dot.ca.gov)
  Signature Date: 2023-12-18 11:09:38 PM GMT Time Source: server
- Agreement completed.
  2023-12-18 11:09:38 PM GMT



# **ATTACHMENT L**

Risk Register

#### RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS) FORM

PPM-D07-0001 (REV 05/2022)

The risk register is to be approved and signed-off by the District Deputies listed below for all scalability levels. By signing this form, you are certifying that you have reviewed the risks documented in the register and agree that they have been managed to the extent possible by the PDT.

Project Information ■Capital Project □Major Project ID/District-EA:	Maintenance Project(Check One) Total Capital Cost: \$36,211,000  Project ID: 0719000312/ EA-07-363200
Project Description/ Route/ Post-Mile:	Upgrade TMS elements at Various Locations
Project Manager:	David H Miraaney
Project Risk Manager:	Cardiel Bugarin
□ No Risk Register Certification Required Check box if pro form with PID, PA&ED, PS&E submittal, and RE Handoff F	oject is less than \$1 million in total cost and risk register not prepared. Sign below and submit this
Project Manager Signature	Date:
PID (Required for Capital Projects)	
Project Manager	Date:
Deputy District Director, Planning	Date:
Deputy District Director, Design	Date:
Deputy District Director, Right of Way	Date:
Deputy District Director, Environmental	Date:
Deputy District Director, Traffic Operations	Date:
Deputy District Director, Maintenance	Date:
Deputy District Director, Project Management	Date:
PA&ED (Required for Capital Projects)	00/04/0004
Project Manager	David Minaansy Date: 03/21/2024
Deputy District Director, Design	<u>Dregory Fann</u> Date: 03/21/2024
Deputy District Director, Construction	Assam Abumuhor Date: 03/21/2024
Deputy District Director, Rightof Way	Date: 03/21/2024
Deputy District Director, Environmental	Date: 03/21/2024
Deputy District Director, Traffic Operations	Date: 03/21/2024
Deputy District Director, Maintenance	Mamid Saadatnejadi Date: 03/21/2024
Deputy District Director, Project Management	<u>Date:</u> 03/21/2024
Prior to PS&E (Required for Capital Projects)	
Project Manager	Date:
Deputy District Director, Design	Date:
Deputy District Director, Construction	Date:
Deputy District Director, Rightof Way	Date:
Deputy District Director, Environmental	Date:
Deputy District Director, Traffic Operations	Date:
Deputy District Director, Maintenance	Date:
Deputy District Director, Project Management	Date:

EA-07-363200, EFIS ID: 0719000312			Milestones			Duration	Base RW Cap Est (k): \$90	Adjusted Base for Price Uncertainty on RW Cap Est (k) @ 70th Percentile:		\$94 PM: David H Miraaney
Route & Post Mile: 07-VEN-LIO1-PII 25/139, 07-VEN-Z2-PII 3344.20, LA-2-PII R18,70, LA-101-PII R11 80, LA-105-PII R2.0	<u>a</u>	PASED	PS&E	RTL	CCA	Con Working Days: 500	Base Con Cap Est (k): \$32,837	Adjusted Base for Price Uncertainty on Con Cap Est (k) @ 70th Percentile:	\$34,168	DM: Kelley Ezra
OTATION TO THE TANK THE PROPERTY OF THE PROPER	(M010)	(M200)	(10380)	(M460)	(W600)	Plant Est Days: 0	Base Contingency (k): \$3,284	Base Contingency (k): \$3,284 Risk Impact on Con Cap (k) ® Toth Percentile: \$3395 (10%) RM: Cardlel Bugarin	e: \$3395 (10%)	RM: Cardiel Bugarin
Project Descriptorit. Upgrate I farisportation management System (1 ms) elements, instaintitier optic, pries, and upgrade communication equipment at nuss and at the LAKI INC.	06/30/20	06/17/24	01/07/2025	02/14/2025	10/29/2027	Total Con Days: 500	Base Total Capital Est (k): \$36,211	Risk-Based Total Capital Est (N @ 70th \$37,657	h \$37,657	

																+		Т	
Post Mile:	07-VEN 101-	PM 2.5/13.9, 07.V	VEN 23 PM 3,34/4,20, LA	Route & Post Mile: 07VEN-101-PM 2,5/13.9, 07VEN-23-PM 3,5/4/20, LA-2-PM R18,70, LA-101-PM R11,80, LA-105-PM R2,0		<del>2</del>	PA&ED	PS&E	RTL	CCA			Con Working Days: 500	Jays: 500					DM: Kelley Ezra
Description	1: Upgrade Tra	ransportation Man	nagement System (TMS)	Project Description: Uporade Transportation Management System (TMS) elements, install filter optic fines, and uporade communication equipment at hubs and at the LARTMC	nunication equipment at hubs and at the LARTMC	(M010)	(M200)	(M380)	(M460)	(M600)			Plant E	Plant Est Days: 0	Base Contingency (k): \$	\$3,284 Risk		\$3395 (10%) RM	RM: Cardiel Bugarin
						06/30/20	06/17/24	01/07/2025	02/14/2025	10/29/2027			Total Con Days:	Jays: 500	Base Total Capital Est (K): \$3	\$36,211	Risk-Based Total Capital Est (k) @ 70th Percentile:	\$37,657	
e Summary: 1	The project pr Ramp Metering	roposes installing ng Systems (RMS)	ng a new Transportation i). It also proposes repla	ı Management System (TMS) on VEN-101, which includi acing two existing Weigh-In-Motion (WM) systems with	Stope Source Transport propriet propriet in Propriet CETV) canners. We control that the sease of	AS field elements. Ti n (MGS), constructir	ese elements compri: g 20 new Maintenance	se of 27 Closed-Circuit e Vehicle Pullouts (MV)	Television (CCTV) c: Ps), and creating 6.8	ameras, two Chan locations of vegel	geable Message Sig ation control pads u	ns (CMS), 12 Traffi	: Monitoring Statio MGS.	ns (TMS), and	eight Communication Hub Stations. Add	itionally, the p	roject involves upgrading one CCTV, or	ne CMS panel, fiv	e Traffic Census
									Risk Impact Assessment	Assessment									
				Risk Identification			Continge	Contingency (@70th Percentile):	10%		•					Œ	Response Strategy		
						4.1.4	Risk Impact on Con Capital (@70th Percentile)	oita (@70th Percentile):	\$3,395,054	54	Risk Impact	Impact on Working Days" (@70th Percentile):		140					
Risk No. Status	Туре	Category	Risk Title	Risk Statement	Risk Details with Current Status/Assumptions	Probability of Occurrence	Low (\$)	Most Likely (\$)	High (\$)	Cost Impact	Low	Most Likely	High	Time Impact	Rationale St	Strategy	Response Actions	Risk Owner	Updated
1 Active	Threat	DGN	Scope Change	*	Additional amp meeting unot may be added to this project from another proportion to broath. Protein a supposely bread produced ITAS because will be added. How out on Tradit imagination raggle imp to exided. Be added, How out on Tradit imagination raggle imp to exided be added. How the product is the product by the product proteins. By disting feely into the ground the project my require restinant BIAPs once the MS will be more than 10,000 out.	30%	\$2,000,000	83,000,000	34,000,000	8300,000	99	94	8	Iden 12 refis keep proj	Identifying all items of work improves the relability of the cost estimate. PUT requested to keep this risk unit PSSE when all work for project is clearly, identified.	Work: Wigate identif	Work with all functional units to comprehensively postering work lense. Include funds in the cost perimens to cover this additional expense.	Project Managar & Project Engineer	March 26, 2024
2 Active	Threat	DGN	Prices and Economic Conditions	As a result of a dynamic economy, fluctuations in material prices, equipment costs, and labor rates may occur, which would lead to increased project cost.	Uncertainty in prices and economic climate are expected to vary duning the development of the project. Equipment prices.	25%	\$1,000,000	\$2,000,000	\$3,000,000	8500,000	50	8	40	8 Hbic	bidding is competitive, prices will be optimum.	Accept Follow	Follow the Californs process to list and advertise this project for maximum competition	Project Engineer	March 14, 2024
3 Active	Threat	CON	Differing Site Conditions	V  Tomspechas late conditions, cell and materials are evocumented during constitucion, design modificators may be matured, which woulf lead to recreased proped costs and establish e-leap.	Vinders on an exception are expected impossible in period for the control or and different to expect of an expect of the control or and are routed does with the meaning wall do not be self-or the control or an expected or the control or an expected or the control or and the cont	25%	000'0008	\$1,200,000	\$1,400,000	\$296,833	50	8	94	8 redu	dequately characterizing the project site will adduce the cost of uncertainty.	Expecience increase increase will we some	Epect to use confingency limits to say for work increases arising furn alle condistro waitabase after condusting site visits and investigations. R.E. All work with contrastict and functionals to reach agreement on appropriate compensation.	Construction Serior	March 15, 2024
4 Active	Threat	ROW	Utility Identification and relocation Needs	Properts on utilises are identified after site installation. A additional effort for relations problection in false may be incurred, which woulk lead to project cost increases and solicide delays.	ATT Vericon, Merco CARTO, Merce CASTO, Merce CARTO, Merce	20%	\$100,000	\$150,000	\$200,000	\$30,000	04	90	8	lden 10 esta Port	dentifying all impacted utilities is critical to beside litting the cost of utility relocations. Popoling will minimize it is risk.	Revier Podral Property The PS Apple PS Comps Commps Comment Co	Review possible utility conflicts and conduct porbiding to identify all impeaded utilities care in the PSELF Theres. One administry conflicts content utility compresses and monthing progress. Also access covered selected, which may help in avoiding any possible utility in bostions.	Utilly Engineer	March 20, 2024
5 Active	Threat	MAH	Quality Review	Ferrors and consistons have been unintentionally overboard uning the quality correct (CC) and quality assurance (A), process, corrective actions may be required if during construction, which would bead to increased project oct and schedule delays.	Affords the special plane all powers are the properties of call promote and association of call promote and association to the ROES phase over one as all count which will cause the project plan to be indeputed from promptee. If there optic calle as the project plane is planed and promote planed to the properties of t	20%	000'009\$	\$1,000,000	\$1,500,000	\$200,000	30	40	8	By fa sche mini	by following the QMS process the creat and collects impact on the estimate can be writimized.	Migate review work i	Monitor design progress to conform to the CMS process, by providing complete submittals for review. Expect to use confingancy funds to pay for F work increases arising from machiquate propert plans.	Project Engineer	March 14, 2024
6 Active	Threat	Ne DGN	VandalsemTheft of Electric Components (Additional Design Elements)	Variablem The for Electrical for smedium or their of the centring or mode, to Components institution delectrical destroit displacement, additional consistent on Additional Design in Selection of the Components of Electrical Charles on the Components of Register of Electrical Charles on the Components of Register of Electrical Charles of Electrical Ch	The art is under the debt chall concerned to the me in procure, progress, or main record me one in mean and unch tend productor, breaken me me in the procure of the productor. Prediction are not one or and copies were Address the me the me per instruction of the me was Address the me to produce the order and copies were Address the means to produce the order or me to be decreased many the longer physical wards me their me pro- duction of many the longer physical wards me the me to the project. This may read an end to make the contraction become account.	40%	\$400,000	000'0098	\$800,000	\$240,000	10	52	8	The foca	Their and concident have been on issue on previous similar projects, and his project is processed in an east with a homelysis population.	Condi mitiga includ potent	Conduct Mel studies to develop strategies to formative for since a special contract associations will formative formative to migate the potential for ventralien.	Project Manager and Resident Engineer	March 20, 2024
7 Active	Threat	DGN	Missing boms (Assets or Deficiencies) Within the Project Limits	Lumericipacidemi (sesse or deformas) are forcement with the project-their, a requirement to prodict in class, selected or removate international to expect with nout, had to removed project costs and others. It delines.	More well be experienced and the properties of t	25%	000/10063	000'0058	\$700,000	\$125,000	01	8	8	5 word	IS Desgn has learnifed 95% of the proposed work based on field fight and thind-filling coordination.	Magate Work:	denty work ferms	Project Engineer & ITS	March 15, 2024
8 Active	Threat	S NSO	Structures Involvement for Conduits and Retaining Walls	As a result of special design needs for conduits on structures areafor treibing walls that develope from trend standards or need exit affainbin. IDES may need to provide design documents, which will impact costs and other	Structure mounted their optics on the bridge are planned and the constitution of retaining wells for IMP footborns. Routing conduits on existing about side of the wells and barriers may bring about some indirectified challenges.	20%	8200,000	\$250,000	\$300,000	\$50,000	15	92	82	4 Ass	Asses potential structure work in the following NS&E phase.	Analy: Migate struct, coordi	Analyze the existing structures to revisabonifirm structure scope at the PS&E Phase and coordinate with DES.	DES & Project Engineer	March 14, 2024
9 Active	Threat	DGN	Constructability & Safety issues	F deficiencies are identified in any one of the following areas:  1 Adequate Working Speax. 2 Traffic Handling 3, UNIty Conflucts, effort to correct deficiencies may be required during by conflucts, which would lead to increased project cost and schedule delays.	As construction progresses, issues of constructability will be regularly wretaken.	10%	000'0068	8400,000	\$500,000	\$40,000	10	\$	8	2 Appr	ppropriate modifications to plans will be made. N	R.E. v Mitgate with or	R.E. will monitor construction progress and work. with contractor and functionals to develop eppropriate plans.	Project Engineer & Constructability Review	March 14, 2024
10 Active	Threat	SUP	Staffing & Resources	As a result of hiring new staff and staff retrements, fine analitating of in notice personnel (or staff sugmentation). Considerations by with perpose experience to complete all in required tasks may be limited, which would lead to increased it project costs and duration.	Currons staff may not be available to perform work on this project so needed, regatively, impacting the project support costs and schedule. Also, there may be staff issues related to behavioring, retinements, and now-tries.	15%	\$100,000	\$150,000	\$200,000	\$22,500	p	55	8	Staf Conf Reco	Staffing and productivity are the main contributors to Support Costs. Since this is a Support Cost risk, it isn't captured in the recommended contingency calculations.	Migate Phase adjust	in the PS&E Phase, evaluate the Construction Phase resource requirements and make adjustments as needed.	Project Manager	March 14, 2024
11 Active	Threat	ENV	Hazardous Materials	As a result of horing Avenith Depociated Lead (ACL), or other in hausdoor controlled communication of communication controlled communication controlled communication of the controlled con	the the halvasour because if the mode, and the halvasour because the halvasour because it was the second and second and the mode of the second and the second t	20%	\$50,000	\$100,000	\$150,000	\$20,000	10	15	8	3 Gedd	Elborive handing of hazardous weete on-site in educes fre cost of disposal.	Control (Control (Con	Conduct besting and investigations to observine the bread orontomination. Then, belongs an effective and acceptable plan to dispose of hazordous materials, if any	Hazardous Weste Unit & Project Engineer	March 19, 2024
12 Active	Threat	CON	Railroad	As a need of Rathool modelment, the need to dark and impossible to grave or the good modelment of the set of separately and which would head to increased project cools and duration.	The including opposed process is due as well as the conditions, constituted, excluding a conditional of deback developments is start or the proposity could include a conditional or the conditional or the conditional or the could be conditional to the conditional or the could be compared to the could be conditionally being discoped on the track from show the bridge.	30%	\$40,000	000'098	\$80,000	\$18,000	8	8	021	27 Neg	Megadatura can be time-consuming.	Start t estime estime activit proces	Start the nepotations promptly and include an electricity and include an electricity of highly of the proceed during which it the Refered will be impossed by construction of exchines, in addition, add a cost for the review process.	R/W Agent, Design Engineer, & Project Engineer	March 14, 2024

\$94 PM: David H Miraaney	\$34,168 DM: Kelley Ezra	\$3395 (10%) RM: Cardiel Bugarin	\$37,657
Adjusted Base for Price Uncertainty on RW Cap Est (k) @ 70th Percentile:	Adjusted Base for Price Uncertainty on Con Cap Est (k) @ 70th Percentile:	Base Contingency (k): \$3,284 Risk Impact on Con Cap (k) @ 70th Percentile: \$3395 (10%) RM: Cardiel Bugarin	Risk-Based Total Capital Est (的 @ 70th Percentile:
Base RW Cap Est (k): \$90	Base Con Cap Est (k): \$32,837	Base Contingency (k): \$3,284	Base Total Capital Est (k): \$36,211
Duration	Con Working Days: 500	Plant Est Days: 0	Total Con Days: 500
	ccA	(M600)	10/29/2027
	RTL	(M460)	02/14/2025
Milestones	PS&E	(10380)	01/07/2025
	PA&ED	(M200)	06/17/24
	Od.	(M010)	06/30/20
EA-07-363200, EFIS ID: 0719000312	toute & Post Mile: 07-VEN-101-PM 2.5/113.9, 07-VEN-22-PM 8.344/20, LA-2-PM R18,70, LA-101-PM R11.80, LA-105-PM R2.0	CHANT I THE PERSON OF THE PERS	уюст мексираот, суругае и такъротатоп маладелнет сустем (тм.) евлента, иквантног орос риек, ата цуругае соптиллеамоп еquipment а пыок ала а пле джи имс

		ve Traffic Census				Updated	March 14, 2024	March 14, 2024	March 14, 2024	March 14, 2024	March 14, 2024	March 14, 2024	March 14, 2024	March 14, 2024
	\$37,657	one CMS panel, fiv				Risk Owner	Traffic Engineer & Project Engineer	Traffic Engineer (Electrical)	Project Manager, Project Engineer & R.W.	Resident Engineer, Environmental Planner	Construction Servior	Project Manager Design Serior / Traffic	Environmental Planner	Constitucion Serior & Maint. Serior
	Risk-Based Total Capital Est (k) @ 70th Percentile:	These denotes comprise of 27 Good-Circuit Television (CCTV) cameras. two Changeable Missages Signs (CMS), 12 Traffic Notitoring Stations (TMS), and eight Communication Hub Stations. Additionally, the project involves upgrading one CCTV, one CMS panel. The Traffic Centural Internation Vinide Platacia (MTP), and creating Stations of vergiations of vergiations on vergiations control packs under the proposed MSS.		Response Strategy		Response Actions	A construction staging plan is being prepared that takes into consideration work windows and traffic vicinies and their impact on taffic system resistations. RE to work with contractor and functionals to develop traffic landing beins and debouts that are responsive to the publics debots.	Conduct feet visit to verify the types of equipment and version of software currently in use - Update the equipment and software if needed.	Estables is project footprint that can accommodate for design and construction. Allow adequate time for acquisition from the time that maps, hazardous wasse clearance, environmental clearance, and funding are in place.	Inform the Division of Environmental Planning of any change in scope or means/methods. Inflate the revellablon/teeval.artion process as soon as possible.	RE to work with Contractor to minimize the non working days.	heLide a coordination clause in the project specifications. [PS&E]. Coordinate with permitting agencies to blantify boal projects within the same project firms and adjust the construction schedule to avoid conflicts.	Perform a bird nest sanvey of the srea during PSAE. If existing include the breeding season in the project schedule.	The memoring region to construction (See all work) with favorage and production of contraction is produced by the production of contraction is produced by the contraction of contraction is produced by the contraction of contraction
	\$36,211	Additionally,				Strategy	Mfgate	Migate	Migate	Migate	Appent	Migate	Mégate	Migate
	Base Total Capital Est (k):	and eight Communication Hub Stations.				Rationale	Proper handing of raffic is necessary to minimize incorvenience to the public.	Verlying the compatibility of the existing electronic equipment during design may reduce the impact of the risk.	Identifying the number and type of parcels inneeded will increase the stantains enable. Oost for constitutions essements / access essements will be identified in the RM data street at the PAED phase so that the risk can be mitigated.	While changes are unavoidable, the project's initial assessment of scope, environmental factors, and relevant laws indicates that any necessary adjustments are expected to be minimal.	Some weather related and non working days are expected (on avg. of 10%)	Need coordination to identify conflicting projects to adjust the constitution schedule and accept this risk.	Adhere to ancidence and minimization measures froughout her proces. Project project project project project and all must plan around lay date. Schedule and alboard sufficient time for but has survey (between 27/24/1) and it any special status buts are observed, modify project schedule to boxen red, modify project schedule to accommodate the hoesing asseron.	Since propor protocologisches are not est in prograft to protocologisches are not est in prograft to protocologisches in he tool import mogic of internoches in he tool might make in structure of the protocologisches der notice in the protocologisches in the protocologis
	Total Con Days: 500	ations (TMS),			140	Time impact	e	2		-	2	2	2	2
	Total C	raffic Monitoring Stosed MGS.			Risk Impact on Working Days* (@70th Percentile):	High	8	*8	40	51	82	8	92	82
		Signs (CMS), 12 T ds under the prop			pact on Working Day	Most Likely	5	8	06	2	15	15	82	ē
		eable Message tion control pa			Risk	Low	10	92	50	ю	10	10	91	9
	10/29/2027	cameras, two Chang 8 locations of vegeta	Risk Impact Assessment		054	Cost impact	\$16,000	\$10,000	\$7,500	87,500	86,000	\$4,000	\$4,000	34,000
	02/14/2025	it Television (CCTV) (Ps), and creating 6.	Risk Impaci	10%	\$3,395,054	High (\$)	\$100,000	\$120,000	\$100,000	\$100,000	\$50,000	\$50,000	\$60,000	000'05\$
	01/07/2025	se of 27 Closed-Circu s Vehicle Pullouts (M)		Contingency (@70th Percentile):	ital (@70th Percentile):	Most Likely (5)	280,000	\$100,000	875,000	875,000	840,000	\$40,000	\$40,000	840,000
	06/17/24	sse elements compris 120 new Maintenance		Continge	Risk Impact on Con Capital (@70th Percentile)	Low (\$)	260,000	000'005	250,000	000'05\$	000'063	000'06\$	220,000	000'065
	06/30/20	MS field elements. Th m (MGS), constructing				Probability of Occurrence	20%	10%	10%	10%	15%	10%	10%	901
unication equipment at hubs and at the LARTMC		Scope Summary: The reject proposes installing a new Transportation Management System (TMS) on VEHSOS, which includes bying down 112 miles of the copic has and installing 70 TMS field elements. These elements comprise of 21 Glassed-Struat Television (CCTV) cancers. Into Changeable Management Systems with new ones, placing 3,400 linear feel of littowest Cuantual System (MSS), constructing 25 new flashments visible Fullware (MNS) and creating 16% placement of the opposes replacing with new ones, placing 3,400 linear feel of littowest Cuantual System (MSS), constructing 25 new flashments visible Fullware (MNS) and creating 3,64 particular of very section of very sec				Risk Details with Current Status/Assumptions	Traffic frough he construction sile must be maintained be the traffic from the proper of the construction of the construction. The way propers of an Express of an Expres	Assaus read, resided dutrint exponent may not be. There is a possibly first all the casing equational and counts others used recognishes of the beneath counterface of the counterface o	Assumed all proposed work will remain within Califrans RW and no additional RW will be required.	The final Environmental Document was approved on 207/2023 and the project's environmental chaintness has been celeograted as a CEVE.	Natural disester such as fire (based on previous year in the area) may require supportance of work. The contractor will have to be granted some weather redated or non-working table. Assumed 25 weather delaye day a year.	Ehe 35900, 12088, 2863) 3310, 22690, 34370, 55300 and 23830 are until planned or programmed applicate which is project limit. There could also be projects within the project schoolabel during the same time-fame.	Seed stact botton est for realing te levy TAS element. These are bosen to the seed seaten to be found. The bottom when befores an other man fall behalfs can be found. The before the seaten is from Fedurary is through Sepanite 15s.	Ourself, thes are suiting uninhered productor, and examplements with the project work bottom.
Project Description: Upgrade Transportation Management System (TMS) elements, install fiber optic lines, and upgrade communication equipment at hubs and at the LARTING		Management System (TMS) on VEN-101, which includacing two existing Weigh-in-Motion (WM) systems wit		Risk Identification		Risk Statement	Bocause traffic management systems need to be protected and maintained froughout the construction zone, modifications to the traffic handing glace may occur, which would result in additional project costs and schools	Because newly missible decircin equipment may not be compatible or side by communicate with five existing systems, replacement or upgrabb to the existing equipment may be required during construction, which may lead to an increase in project costs and exchedule delays.	Because detailed Right of Way (RW) requirements are not yet established due to the preformery restore of design and standished tode largering, additional right of way reads may be required, which would lead to increased project coof and exheckly delays:	I project plans, locations, environmental conditions, or laws change, additioned reviews and environmental studies may be n required. Each go increased project costs and delays, candicitient if environmental regulations or laws within the project limits are absend.	If weather delays are encountered, additional contract nonworking days and extension of contract duration may be required, which would lead to increased project costs and schedule delays.	If other adjacent Others andor local projects are in construction at the same time as this project, difficulties in condinating failfor and work activities between the projects may occur, which would lead to increased project costs and duration.	As a result of clasting areas for TINS elements construction and monking on estaing shouters uncovering neating birds (proteinsturburs his Alganon) from And 1 condition has had a special frough Act of the hadden area your, which would be also somethe delays change areas and increased project costs.	I unablesed or look-dustrompronts are accurated with it project east daily contribution sofoliosial-defer in the contribution of the contribution
nagement System (TMS		ng a new Transportatior 5). It also proposes rept				Risk Title	Traffic Control and Handling	Existing Electronic Equipment & Software Compatibility	Right of Way Needs	Environmental Revalidation	Weather related and Non-working Days	Construction Coordination	Nesting Birds & Other Natural Habitat	Unshabered / Homekes
rsportation May		oposes installir Systems (RMS				Category	TR	DGN	ROW	ENV	NOO	NOO	ENV	NOO
'Jourade Tran		np Metering				Type	Threat	Threat	Threat	Threat	Threat	Threat	Threat	Threat
Description: L		summary: Th				Status	Active	Active	Active	Active	Active	Active	Active	Active
Project D		Scope S Stations,				Risk No.	55	22	9	91	4	81	19	28

#### EA 363200 Risk Register Certification

Final Audit Report 2024-03-21

Created: 2024-03-21

By: Ryan Nai (s148568@dot.ca.gov)

Status: Signed

Transaction ID: CBJCHBCAABAA3VtQF1JU2ORXaHEWafmv3\_cw7PyeIAbJ

#### "EA 363200 Risk Register Certification" History

- Document created by Ryan Nai (s148568@dot.ca.gov) 2024-03-21 1:54:58 PM GMT
- Document emailed to David Miraaney (david.miraaney@dot.ca.gov) for signature 2024-03-21 1:57:18 PM GMT
- Document emailed to Greg Farr (greg.farr@dot.ca.gov) for signature 2024-03-21 1:57:18 PM GMT
- Document emailed to Issam Abumuhor (issam.abumuhor@dot.ca.gov) for signature 2024-03-21 1:57:19 PM GMT
- Document emailed to Angela Perez (angela.perez@dot.ca.gov) for approval 2024-03-21 1:57:19 PM GMT
- Document emailed to Zoltan Elo (zoltan.elo@dot.ca.gov) for signature 2024-03-21 1:57:19 PM GMT
- Document emailed to Dawn Montano (dawn.kukla@dot.ca.gov) for signature 2024-03-21 1:57:19 PM GMT
- Document emailed to Son Dao (son.dao@dot.ca.gov) for signature 2024-03-21 1:57:19 PM GMT
- Document emailed to Jackie Tan (jackie.tan@dot.ca.gov) for approval 2024-03-21 1:57:19 PM GMT
- Document emailed to Hamid Saadatnejadi (hamid.saadatnejadi@dot.ca.gov) for signature 2024-03-21 1:57:19 PM GMT
- Document emailed to Karen Fong (karen.fong@dot.ca.gov) for approval 2024-03-21 1:57:20 PM GMT



Email viewed by Dawn Montano (dawn.kukla@dot.ca.gov) 2024-03-21 - 1:57:28 PM GMT

Email viewed by Karen Fong (karen.fong@dot.ca.gov)
2024-03-21 - 2:28:25 PM GMT

Email viewed by David Miraaney (david.miraaney@dot.ca.gov) 2024-03-21 - 2:36:09 PM GMT

Document e-signed by David Miraaney (david.miraaney@dot.ca.gov)
Signature Date: 2024-03-21 - 2:36:28 PM GMT - Time Source: server

Document e-signed by Dawn Montano (dawn.kukla@dot.ca.gov)
Signature Date: 2024-03-21 - 2:44:08 PM GMT - Time Source: server

Email viewed by Issam Abumuhor (issam.abumuhor@dot.ca.gov) 2024-03-21 - 3:05:15 PM GMT

Document e-signed by Issam Abumuhor (issam.abumuhor@dot.ca.gov)
Signature Date: 2024-03-21 - 3:05:26 PM GMT - Time Source: server

Email viewed by Jackie Tan (jackie.tan@dot.ca.gov)
2024-03-21 - 3:34:51 PM GMT

Document approved by Jackie Tan (jackie.tan@dot.ca.gov)

Approval Date: 2024-03-21 - 3:38:29 PM GMT - Time Source: server

Email viewed by Son Dao (son.dao@dot.ca.gov) 2024-03-21 - 3:47:58 PM GMT

Document e-signed by Son Dao (son.dao@dot.ca.gov)
Signature Date: 2024-03-21 - 3:48:11 PM GMT - Time Source: server

Email viewed by Greg Farr (greg.farr@dot.ca.gov)
2024-03-21 - 3:57:06 PM GMT

Document e-signed by Greg Farr (greg.farr@dot.ca.gov)
Signature Date: 2024-03-21 - 4:03:02 PM GMT - Time Source: server

Document approved by Karen Fong (karen.fong@dot.ca.gov)

Approval Date: 2024-03-21 - 4:57:18 PM GMT - Time Source: server

Email viewed by Hamid Saadatnejadi (hamid.saadatnejadi@dot.ca.gov) 2024-03-21 - 5:46:17 PM GMT

Document e-signed by Hamid Saadatnejadi (hamid.saadatnejadi@dot.ca.gov)

Signature Date: 2024-03-21 - 5:46:57 PM GMT - Time Source: server



Email viewed by Angela Perez (angela.perez@dot.ca.gov)
2024-03-21 - 6:09:13 PM GMT

Document approved by Angela Perez (angela.perez@dot.ca.gov)

Approval Date: 2024-03-21 - 6:17:15 PM GMT - Time Source: server

Email viewed by Zoltan Elo (zoltan.elo@dot.ca.gov) 2024-03-21 - 9:00:01 PM GMT

Document e-signed by Zoltan Elo (zoltan.elo@dot.ca.gov)
Signature Date: 2024-03-21 - 9:00:11 PM GMT - Time Source: server

Document emailed to Joon Kang (joon.kang@dot.ca.gov) for signature 2024-03-21 - 9:00:13 PM GMT

Document e-signed by Joon Kang (joon.kang@dot.ca.gov)
Signature Date: 2024-03-21 - 10:47:32 PM GMT - Time Source: server

Agreement completed. 2024-03-21 - 10:47:32 PM GMT



### ATTACHMENT M SHOPP Project Performance Output

		OHS	SHOPP Project - Accor	Accomplishment - Performance Measures - Benefits	ent -	Perforn	Jance	Measur	res - B	enefit	S					
Dist	District: 07 Tool ID: 19118 V	<b>Project ID:</b> 0719000312 ▼	EA:	36320 <		S	Co-Rte-PM:	All	All Locations			>			View/Print PIR (Performance) Report	se) Report
Multi-Objective Worksheet	jective Bridge Pavement	Drainage Facilities	Signs and Lighting Mobility	bility TTMS		Roadside	≥ Bic	Bicycle and Pedestrian Infrastructure	edestrian		Sustainability /Climate Change		Advance Mitigation /Mitigation		Major Damage & Green-house Gases	Relinquishment
			Perfor	Performance & Accomplishments (PPC V	Accom	plishme	nts (PPC	À								
ActID	D Activity Detail	Performance Objective	Unit of Measurement	Quantity	Pre- Good F	Pre- Fair Pre-Poor	oor New	Post- Good	Post- F	Post- Agr Poor with Disi	HQ Program Review - Agree with District?	HQ F	Review Char Date After	Performance Change Date After Review	Comment	
1 E07	Guard Rail (201.010, .015)	No Performance Objective in the SHSMP	Linear Feet	3400.000	$\vdash$	3400.000	8	3400.000		$\vdash$				M	ABGR to MGS upgrade	
2 E23	Collisions Reduced (201.015)	Collision Severity Reduction	Fatal/Serious Injury Collisions	8.000	$\vdash$	8.000	8	8.000		$\vdash$	Yes	0	08/18/23	Ba	Based upon the new methodology-8/10/23	
3 E55	Proactive Safety Vehicles	Proactive Safety	Annual Fatal & Serious Injury Collisions	0.500		0.500	00	0.500			Yes	0	08/18/23	Ba	Based upon the new methodology-8/10/23	
4 E56	Proactive Safety Pedestrians	Proactive Safety	Annual Fatal & Serious Injury Collisions	0.290		0.290	06	0.290			Yes	0	08/18/23	Mc	Modified Proactive Safety Estimation Tool	
5 F01	Census Station (201.315)	No Performance Objective in the SHSMP	Each	2.000		3.000	00 2.000	3.000								
6 F02	6 F02 Changeable Message Sign (201.315)	No Performance Objective in the SHSMP	Each	3.000		1.00	1.000 2.000	1.000		Н						
7 F03	7 F03 CCTV (201.315)	No Performance Objective in the SHSMP	Each	29 000		2.00	2 000 27 000	1,000		1,000						
8 F04	Communications (Fiber Optics - 201.315)	No Performance Objective in the SHSMP	Linear Miles	11.200		_	11.200							lus	nstall 11.2 miles of fiber optic communication	u
9 F05	9 F05 Vehicle Detection (201.315)	No Performance Objective in the SHSMP	Each	16.000	2.000	12,000	00 2.000	14.000		Н						
10 F06	10 F06 Ramp Meter (201.315)	No Performance Objective in the SHSMP	Each	2.000	2.000			2.000								
11 F14	11 F14 Weigh in Motion System (201.321)	Weigh-In-Motion Scales	Stations	2 000		2 000	00	2,000						dN	Jpgrade 2 existing WIM stations	
12 F38	12 F38 Central Systems (Hub - 201.315)	No Performance Objective in the SHSMP	Each	1.000		1 000	00	1.000						dn	Upgrade and install IP equipment in HUB building	ilding
13 F38	Central Systems (Hub - 201.315)	No Performance Objective in the SHSMP	Each	1.000		1.000	00	1.000		Н				dn	Upgrade and install IP equipment in LARTMC building	C building
14 F38	14 F38 Central Systems (Hub - 201.315)	No Performance Objective in the SHSMP	Each	1.000	Н	1.000	00	1.000						dn	Upgrade and install IP equipment inside North Hollywood HUB	th Hollywood HUB
15 F39	15 F39 Traffic Signals (201.315)	No Performance Objective in the SHSMP	Each	15.000	8.000	7.000	00	15.000								
16 F45	16 F45 TMS Structure Component	Transportation Management System Structures Each	es Each	33.000		_	33.000									
17 F46	17 F46 TMS Technology Component	Transportation Management Systems	Each	70.000	12.000	25.00	25.000 33.000	36.000		1.000						
18 G07	18 G07 Worker Safety - Safe Access	Roadside Safety Improvements	Locations	20 000		20.000	00	20.000						20	20 MVPs	
19 G10	19 G10 Worker Safety - Vegetation Control	Roadside Safety Improvements	Locations	6.800		6.800	00	6.800						o o	Vegetative Management Control is measured per 500 LF of MGS as one location; 3400 LF = 6.8 locations	d per 500 LF of MGS as
20 H32	20 H32 Is any Location Within the Project Limits Ped/Bike Accessible?	ole? No Performance Objective in the SHSMP	Yes/No	No						_				No		
21 H55	21 H55 Justification for Bicycle and Pedestrian Infrastructure Not Applicable Bike/Ped Prohib	pplicable Bike/Ped Prohib	1,2,3							H				Pre	Proposed TMS on freeway	
22 N01	22 N01 Qualitative	No Performance Objective in the SHSMP				L								Pro	Proposed TMS on freeway	

## (Last Saved -01/30/24 @ 1:18 PM by Kathleen Hamer)

Programmi	rogramming Performance Summary (All Locations) aaa	ary (All L	ocations)	aaa												
Program Code	rogram Code Activity Category	Asset Class Asset	Asset	Performance Value	Performance Measure	Unit	Pre-Good	Pre-Fair	Pre-Poor	Pre-Good Pre-Fair Pre-Poor Pre-Total Post Good		New	Post Good+New	Post-Fair	Post-Fair Post-Poor Post-Tota	Post-Tot
201.315	201.315 Mobility - TMS	Primary TMS	TMS	70.0	70.0 Field element(s)	Field element(s)	32.4%	%0:0	%9'29	37.0	51.4%	47.1%	%9'86	%0.0	1.4%	70.0

- 1. The crosswak for reporting performance in the "Programming Performance Summany" was developed to assist the districts on performance reporting requirements for CTC and PCRs. For discrepancies or errors, please notify AM Tool admins via e-mail at CT-TAM@dot.ca.gov. 2. The data summarized in the table represents the performance reported or to be reported in CTPS.
  - 3. Programming only requires the breakdown of Good, Fair and Poor for Primary and Supplementary Asset Classes.
- 4. Reporting of bridge pre and post conditions may comian errors if the project RTL is before 2024/25.

  5. Reporting of the post good may differ wherever projects contain abandoned/removed culverts as the culvert no longer exists at post construction, is deleted from the pre-total value for posting of the post good may differ wherever projects contain abandoned/removed culverts as the culvert no longer exists at post construction, is deleted from the pre-total and post good may define the projects contain abandoned/removed culverts as the culvert no longer exists at post contains a part of the projects. When the reporting requirements for CTC changes, the logic in the AM Tool will change.

  7. During the transmit projects with a primary addivity category of Proactive Safety (under program codes 015, 112, or 235) will continue to be presented here in the units of measure corresponding to the activities historically reported to date. A change in units to "Annual Falal and Serious Injury Collisions" for future programming requests is being planned.

# TMS Worksheet - Project ID 19118 - EA 36320-VEN-101-2.5/13.9 (PPC)

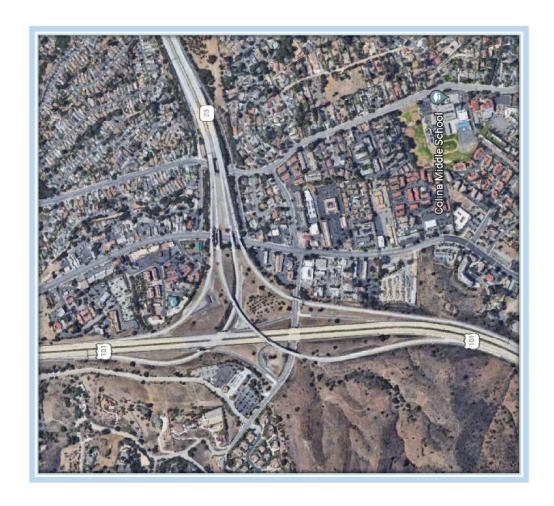
New 1889
May 1         May 2         May 3         May 4         May 3         May 3 <th< th=""></th<>
NAME         NAME <th< td=""></th<>
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New   5884   New   1884   New   New   Candon   New
New No.         New No.         New Location         New Location         New Location         New Location         New Location         New No.         New Location         New No.         New Location         New No.         New Location         New No.         New Location         New Location         New Location         New Location         New No.         New Location         New Location         New No.         New Location         New No.         New No.         New Location         New No.         New Location         New No.
Mayor         Mayor <th< td=""></th<>
Name         Name <th< td=""></th<>
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18
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Traffic Signals
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Traffic Signable   Traffic Monitoring Detection Stations (VDS) - Traffic Monitoring Detection Stations (VDS) - Traffic Monitoring Detection Stations (VDS) - 4481
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Traffic Monitoring Detection Stations (VDS) -         OT-FRIN-49S-HO         OT/ENIOT E-6449         Ivm Rid         Inchite Monitoring Detection Stations (VDS) -         4481         OT/ENIOT E-6449         IVENTU PARK 1         SB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) -         4482         OT/ENIOT E-6449         IVENTU PARK 1         SB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) -         4482         OT/ENIOT E-6449         VENTU PARK 2         SB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) -         4482         OT/ENIOT E-6449         VENTU PARK 2         SB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) -         4484         OT/ENIOT E-6449         VENTU PARK 2         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) -         OT-FRIAL-4485-HO         OT/ENIOT E-6449         Ventury 2         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) -         OT-FRIAL-4480-HO         OT/ENIOT E-6449         Ventury 2         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) -         OT-FRIAL-4480-HO         OT/ENIOT E-6449
Traffic Monitoring Detection Stations (VDS) - 4495   O7VENTO 1-54495   VENTO PARK 1   SB   Technology Component   Poor
Traffic Monitoring Detection States (VDS) - 44451   O7VENTOT 1-44451   VENTOT PARK 1   Section 2   O7VENTOT 1-44451   VENTOT PARK 1   Section 2   O7VENTOT 1-44451   VENTOT PARK 1   Section 3   Sec
Traffic Monitoring Detection Stateors (VDS) - 4455   G7VENTU PARK 1   Traffic Monitoring Detection Stateors (VDS) - 4454   G7VENTU PARK 2   G7VENTU PARK 2   S   Technology Component   Poor
Traffic Monitoring Detection Stations (VDS) - 4482         4482
Traffic Monitoring Detection Stations (VDS) - 1         4494 bit of VOVENTOT -E4484   VENTU PARK 2         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) - 1         4492   OVENTOT -E4485   RORCHARD         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) - 1         OT-FRIAL4461-H0 (OVENTOT -E448)   Venery D.         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) - 1         OT-FRIAL4461-H0 (OVENTOT -E448)   Venery D.         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) - 1         OT-FRIAL4461-H0 (OVENTOT -E448)   Venery 2         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) - 1         OT-FRIAL4461-H0 (OVENTOT -E448)   Venery 2         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) - 2         OT-FRIAL4461-H0 (OVENTOT -E448)   Venery 2         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) - 3         OT-FRIAL4619   Venery 2         NB         Technology Component         Poor           Traffic Monitoring Detection Stations (VDS) - 4480         OT-FRIAL4511   RTE 23 CN         NB         Technology Component         Good         Good         Good
Traffic Monitoring Detection Stations (VDS) -         4462         O7/EN101 E-4462 (No Port NOT) E-4462 (No Port NOT)         OR/EN101 E-4462 (NO PORT NOT)
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OT-FRN-4491-HQ         OT/VENIOT -E4491         Vendy 1         NB         Technology Component         Poor           OT-FRN-4482-HQ         OTVENIOT 0 -E4481         Vendy 2         NB         Technology Component         Poor           OT-FRN-4482-HQ         OTVENIOT 0 -E4481         Pleasant Valley         SB         Technology Component         Poor           OT-FRN-487-HQ         OTVENIOT 0 -E4481         Pleasant Valley         NB         Technology Component         Poor           4480         OTVENIOT E-4450         IVNN 1         SB         Other         Good         Good           0T-FRN-4571-HQ         OTVENIOT E-4451         TRTE 23 CN         NB         Other         Good         Good
OT-FRIAL48CHO         OT/VENIOT -E4480         Venido 2         NB         Technology Component         Poor           OT-FRIAL48CHO         OT/VENIOT -E4480         Pleasant Valley         SB         Technology Component         Poor           OT-FRIAL48THO TO TOVENIOT -E4481         Pleasant Valley         SB         Technology Component         Poor           ABRO         OT/VENIOT -E4480         L/NN 1         SB         Technology Component         Good         Good           OT/FRIAL5TI-HO         OT/VENIOT -E4490         I/NN 1         SB         Other         Good         Good
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OT-FRM-4857-HQ         OT/FRM-4857-HQ         OT/FRM-4857-HQ         OT/FRM-4857-HQ         OT/FRM-4857-HQ         OT/FRM-4857-HQ         OT/FRM-4857-HQ         OT/FRM-4857-HQ         OT/FRM-8577-HQ         OT/FRM-
4480         07VENIO1 *E480         LYNN 1         SB         Other         Good         Good           07*FRM-4571-HQ         07VENIO1 *E4571         RTE 23 CN         NB         Other         Good         Good
07-FRM-4571-HQ         OT/ENIO1 - E-4571         RTE 23 CN         NB         Other         Good         Good         Good
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New New New New Location New Limbs technology and Structure New New
New New New Location New TMS Technology and Structure New New New

		Proje	Project Summary Technology	ology			
Project Location***	Nº of TMS assets	Pre-Good	Pre-Poor	Pre-New	Post-Good	Post-Poor	Post-New
VEN-101-3 0/13 8 (Primary Location)	02	12	25	33	36	1	33
		Proje	Project Summary Structures	tures			
Project Location***	Nº of TMS assets	Pre-Good	Pre-Poor	Pre-New	Post-Good	Post-Poor	Post-New
VEN-101-3 0/13-8 (Primary Location)	33	0	0	33	0	0	33

#### **ATTACHMENT N**

#### **Connector Metering Proposal Study**

#### **CONNECTOR METERING PROPOSAL STUDY**



#### VEN 23 SB CONNECTORS TO NB AND SB 101 (PM R 3.75)

**CALTRANS** 

District 07
Freeway Operations
Ramp Metering and Traffic Signal Unit
April 2022

Prepared By: Fady Al-Awar, P.E. Transportation Engineer (Range D)

Reviewed By: Wahib Jreij, P.E. Senior Transportation Engineer

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- 2. AM VOLUME & OCCUPANCY COUNTS (WEEKENDS) (3/26 & 4/10/2022)
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- 4. PM VOLUME & OCCUPANCY COUNTS (WEEKENDS) (3/26 & 4/10/2022)
- 5. COUNT SUMMARY

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- 6. AM VOLUME & OCCUPANCY COUNTS (WEEKDAYS) (3/(29,30) & 4/14/2022)
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- 9. PM VOLUME & OCCUPANCY COUNTS (WEEKENDS) (4/2 & 4/17/2022)
- 10. COUNT SUMMARY

#### **Introduction and Purpose:**

This traffic study is aimed to justify connector metering from Southbound Moorpark Freeway (Route 23) to Northbound/Southbound Ventura Freeway (Route 101) in the City of Thousand Oaks, in Ventura County California.

The Office of Project Management, has requested a traffic operation analysis and improvement recommendation, including volume counts and occupancy percentage study at the 2 connectors, as a requirement for the connector metering to be included in the PS&E under EA 34620.

This traffic study was conducted to determine the average hourly volume in the AM and PM peak periods in addition to the high occupancy vehicle (HOV) users with respect to the total connector demand volume.

#### **Description and Existing Condition:**

Southbound Route 23 to Northbound Route 101 is a two-lane connector with an approximate 1/2-mile length and about 175 vehicles storge capacity. This connector is heavily traveled in the AM period, motorists using this connector are travelling through the 118/405 area, with some diverting to avoid the congestion along Routes 101 and 405. Some connector metering elements were installed, as a part of a previous capital project, but completion of missing hardware is required for the operation of connector metering at this location.

Southbound Route 23 to Southbound Route 101 is a two-lane connector with an approximate 1-mile length and about 350 vehicles storge capacity. This connector is also heavily traveled in the AM period, motorists using this connector are coming from the 118/405 area and/or by-passing the congestion along Routes 101 and 405. Vehicles are often travelling at high-speed when using this connector.

#### **Data Collection:**

This study details several traffic characteristics: Traffic Volume Counts and HOV Occupancy percentages at Southbound Route 23 to Northbound/Southbound Route 101 connectors. Traffic data for SB 23 to NB 101 connector was collected on March 23<sup>rd</sup>, 24<sup>th</sup> and April 12<sup>th</sup>, 2022 for weekday samples and March 26<sup>th</sup> and April 10<sup>th</sup>, 2022, for weekend ones. Similarly, data for SB 23 to SB 101 connector was collected on March 29<sup>th</sup>, 30<sup>th</sup> and April 14<sup>th</sup>, 2022, for weekdays and April 10<sup>th</sup> and 17<sup>th</sup> 2022, for weekends. The study was conducted during the AM and PM peak congestion periods, from 6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM on weekdays and from 9:00 AM to 12:00 PM and 3:00 PM to 6:00 PM on weekends respectively, (Attachments 1 thru 10).

#### **Observations, Findings and Analysis:**

Summaries of the main findings based on field observations and volume counts are as follows:

#### SB Route 23 to NB Route 101 Connector

- During the AM peak period, SB Route 23 to NB Route 101 traffic was moderate to heavy, while in the PM period, the traffic flow was free to moderate with no observed congestion or delay.
- Between 7:30 AM and 8:30 AM, the traffic merging onto NB 101 from SB 23 was backed up along the connector due to the heavy freeway congestion along NB 101.
- SB Route 23 traffic volume onto NB Route 101 was higher during the AM than the PM peak period on weekdays as well as weekends. Below are the average volumes and HOV percentages. For more details, see Attachment 5.
  - ✓ Average peak hourly volume in the AM period on weekdays is 1841 vph.
  - ✓ Average peak hourly volume in the AM period on weekends is 1156 vph.
  - ✓ Average peak hourly volume in the PM period on weekdays is 1386 vph.
  - ✓ Average peak hourly volume in the PM period on weekends is 1192 vph.
  - ✓ Average percentage of HOV users in the AM period on weekdays is 11%
  - ✓ Average percentage of HOV users in the AM period on weekends is 18%
  - ✓ Average percentage of HOV users in the PM period on weekdays is 10%
  - ✓ Average percentage of HOV users in the PM period on weekends is 15%
  - ✓ Numbers of trucks, motorcycles, and buses along this connector are insignificant.

#### SB Route 23 to SB Route 101 Connector

- During the AM peak period, SB Route 23 to SB Route 101 traffic was heavy, while in the PM period, the traffic flow was free to moderate with no observed congestion or delay.
- Between 7:30 AM and 8:30 AM, the traffic merging onto SB 101 from SB 23 was backed up along the connector due to the heavy freeway congestion along SB 101.
- SB Route 23 traffic volume onto NB Route 101 was higher during the AM than the PM peak period on weekdays as well as weekends. Below are the average volumes and HOV percentages. For more details, see Attachment 10.
  - ✓ Average peak hourly volume in the AM period on weekdays is 3557 vph.
  - ✓ Average peak hourly volume in the AM period on weekends is 1327 vph.
  - ✓ Average peak hourly volume in the PM period on weekdays is 1609 vph.
  - ✓ Average peak hourly volume in the PM period on weekends is 1179 vph.
  - ✓ Average percentage of HOV users in the AM period on weekdays is 9%

- ✓ Average percentage of HOV users in the AM period on weekends is 24%
- ✓ Average percentage of HOV users in the PM period on weekdays is 15%
- ✓ Average percentage of HOV users in the PM period on weekends is 11%
- ✓ Numbers of trucks, motorcycles, and buses at this connector are insignificant.

#### **Recommendation and Conclusion**

It is recommended to implement metering at both connectors from SB Route 23 to NB and SB Route 101, as part of project EA 34620, based on the following:

- NB and SB 101 traffic flow is heavily congested on weekdays during the AM and PM peak periods in the vicinity of Route 23; 7:30 to 8:30 AM for SB 101 and 5:30 to 7:00 PM for NB 101.
- High traffic volume along the connector backs up onto Route 23 as it merges onto Route 101, during the AM and PM peak periods
- HOV by-pass lanes are not recommended due to low HOV volume along both connectors on weekdays and low to moderate on weekends, during both AM and PM peak periods.
- Both connector locations are included in the 10-year Ramp Metering Development plan (RMDP).

In conclusion, SB Route 23 to NB and SB Route 101 connectors should be metered, to mitigate the existing traffic congestion and improve the overall traffic flow in the vicinity of those freeway interchanges.

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1927
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	170
DAY OF THE WEEK / DATE:	WEDNESDAY / 3 - 23 - 22	% OF HOV TO TOTAL DEMAND	8%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	16401
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	16491

TI PE	IME RIC		AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600	-	615	238	3		1	242		33	
615	-	630	243	3		2	248		38	
630	_	645	285	7		1	293		41	
645	-	700	460	6		2	468	1251	44	156
700	-	715	328	7		2	337	1346	47	170
715	-	730	444	5		1	450	1548	33	165
730	-	745	428	4		2	434	1689	42	166
745	-	800	484	8		2	494	1715	39	161
800	-	815	472	6		2	480	1858	48	162
815	_	830	511	7		1	519	1927	21	150
830	_	845	418	6	1	2	427	1920	27	135
845	-	900	421	5		3	429	1855	21	117

3 HOURS GRAND TOTAL (VEHS)

15109

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	2047
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	177
DAY OF THE WEEK / DATE:	THURSDAY / 3 - 24 - 22	% OF HOV TO TOTAL DEMAND	7%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	17275
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	1/2/5

T PE	IMI RIC		AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600	_	615	358	3		2	363		53	
615	_	630	466	3			469		42	
630	_	645	290	7		1	298		38	
645	_	700	434	6		1	441	1571	44	177
700	_	715	358	3			361	1569	41	165
715	_	730	389	3		1	393	1493	40	163
730	_	745	508	5	2	3	518	1713	30	155
745	_	800	503	3	1	4	511	1783	35	146
800	-	815	468	9		2	479	1901	19	124
815	-	830	516	7	1	1	525	2033	18	102
830	_	845	524	6		2	532	2047	22	94
845	_	900	416	5		4	425	1961	19	78

3 HOURS GRAND TOTAL (VEHS)

16071

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1548
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	378
DAY OF THE WEEK / DATE:	TUESDAY / 4 - 12 - 2022	% OF HOV TO TOTAL DEMAND	18%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	4600E
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	16005

T PE	IMI RIC		AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600	-	615	214	2		3	219		22	
615	-	630	254	3		2	259		16	
630	-	645	304	7		1	312		28	
645	-	700	432	11		4	447	1237	21	87
700	-	715	383	4	1	6	394	1458	35	313
715	-	730	447	6		3	456	1443	27	355
730	-	745	481	7		3	491	1469	28	378
745	-	800	521	2		3	526	1501	16	369
800	-	815	499	5		2	506	1502	13	363
815	_	830	522	5	1	1	529	1533	17	341
830	-	845	552	3		2	557	1548	18	305
845	-	900	578	4		1	583	1510	20	293

3 HOURS GRAND TOTAL (VEHS)

13201

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1204
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	215
DAY OF THE WEEK / DATE:	SATURDAY / 3 - 26 - 22	% OF HOV TO TOTAL DEMAND	13%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	11931
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	11331

	ME RIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
900	- 915	292	2		2	296		22	
915	- 930	281	2		1	284		26	
930	- 945	309	5			314		25	
945	- 1000	282	3		3	288	1182	41	114
1000	- 1015	306	2		2	310	1196	28	120
1015	- 1030	289	1		2	292	1204	60	154
1030	- 1045	247	2			249	1139	53	182
1045	- 1100	295	1		1	297	1148	64	205
1100	- 1115	281	2		2	285	1123	38	215
1115	- 1130	279	3		1	283	1114	42	197
1130	- 1145	291	2		2	295	1160	32	176
1145	- 1200	285	2			287	1150	40	152

3 HOURS GRAND TOTAL (VEHS)

10416

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1107
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	293
DAY OF THE WEEK / DATE:	SUNDAY / 4 - 10 - 22	% OF HOV TO TOTAL DEMAND	22%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	9679
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	90/9

ll .	ME RIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
900	- 915	132	2		1	135		54	
915	- 930	138	1		1	140		49	
930	- 945	149		1	1	151		51	
945	- 1000	168	2		1	171	597	53	207
1000	- 1015	176	1		1	178	640	43	196
1015	- 1030	192	1		2	195	695	51	198
1030	- 1045	218			2	220	764	62	209
1045	- 1100	224	2		2	228	821	58	214
1100	- 1115	262			3	265	908	80	251
1115	- 1130	271	2		1	274	987	78	278
1130	- 1145	265	1		1	267	1034	64	280
1145	- 1200	298	1		2	301	1107	71	293

3 HOURS GRAND TOTAL (VEHS)

7553

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1349
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	161
DAY OF THE WEEK / DATE:	WEDNESDAY / 3 - 23 - 22	% OF HOV TO TOTAL DEMAND	10%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	12672
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	12673

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	320	1		3	324		34	
1515 - 1530	343	2		3	348		37	
1530 - 1545	340		1		341		39	
1545 - 1600	322	2			324	1337	33	143
1600 - 1615	333	3			336	1349	40	149
1615 - 1630	231	2			233	1234	35	147
1630 - 1645	316	3		1	320	1213	35	143
1645 - 1700	323	1		2	326	1215	51	161
1700 - 1715	301	4		5	310	1189	40	161
1715 - 1730	338	1		1	340	1296	33	159
1730 - 1745	283	2		1	286	1262	22	146
1745 - 1800	310	3		1	314	1250	24	119

3 HOURS GRAND TOTAL (VEHS)

11345

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1346
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	159
DAY OF THE WEEK / DATE:	THURSDAY / 3 - 24 - 22	% OF HOV TO TOTAL DEMAND	9%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	12953
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	12953

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	291	1	1	1	294		29	
1515 - 1530	329	3	1		333		25	
1530 - 1545	316	5		2	323		28	
1545 - 1600	323	2		2	327	1277	25	107
1600 - 1615	327	2		1	330	1313	33	111
1615 - 1630	364	1		1	366	1346	42	128
1630 - 1645	303	1		2	306	1329	36	136
1645 - 1700	329	3		1	333	1335	48	159
1700 - 1715	327	2		1	330	1335	30	156
1715 - 1730	324	2		2	328	1297	23	137
1730 - 1745	301	3		1	305	1296	26	127
1745 - 1800	302			2	304	1267	18	97

3 HOURS GRAND TOTAL (VEHS)

11795

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1462
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	200
DAY OF THE WEEK / DATE:	TUESDAY / 4 - 12 - 2022	% OF HOV TO TOTAL DEMAND	10%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	44462
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	14163

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	321	2	1		324		26	
1515 - 1530	358	2		1	361		28	
1530 - 1545	362	1		2	365		21	
1545 - 1600	329	2		3	334	1384	25	100
1600 - 1615	331	3		2	336	1396	38	112
1615 - 1630	348	2		3	353	1388	45	129
1630 - 1645	358	3	1	3	365	1388	38	146
1645 - 1700	344	6		2	352	1406	43	164
1700 - 1715	361	2		1	364	1434	48	174
1715 - 1730	370	1		3	374	1455	57	186
1730 - 1745	342	6		3	351	1441	52	200
1745 - 1800	369	2		2	373	1462	41	198

3 HOURS GRAND TOTAL (VEHS)

12754

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1170
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	238
DAY OF THE WEEK / DATE:	SATURDAY / 3 - 26 - 22	% OF HOV TO TOTAL DEMAND	16%
NO. OF CONNECTOR LAI	NES 2	TOTAL DEMAND PER 3 HOURS	44240
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	11240

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	291	2		1	294		43	
1515 - 1530	285	3		2	290		48	
1530 - 1545	281	1	1	1	284		59	
1545 - 1600	299	2		1	302	1170	42	192
1600 - 1615	279	2		2	283	1159	40	189
1615 - 1630	271	1		3	275	1144	52	193
1630 - 1645	270	3		2	275	1135	64	198
1645 - 1700	248	2		2	252	1085	58	214
1700 - 1715	226	3		1	230	1032	62	236
1715 - 1730	196	1	1	3	201	958	54	238
1730 - 1745	201	2		2	205	888	35	209
1745 - 1800	186	1		1	188	824	25	176

3 HOURS GRAND TOTAL (VEHS)

9395

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1214
CONNECTOR NAME:	SB 23 to NB 101	PEAK 1 HOUR HOV VOL.	219
DAY OF THE WEEK / DATE:	SUNDAY / 4 - 10 - 2022	% OF HOV TO TOTAL DEMAND	13%
NO. OF CONNECTOR LAI	NES 2	TOTAL DEMAND PER 3 HOURS	44252
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	11252

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	279	2			281		75	
1515 - 1530	247	2			249		55	
1530 - 1545	232			2	232		51	
1545 - 1600	218	1			219	994	38	219
1600 - 1615	274	1		2	275	990	24	168
1615 - 1630	281	1		4	282	1023	38	151
1630 - 1645	272	1		1	273	1063	35	135
1645 - 1700	286	2		1	288	1132	28	125
1700 - 1715	248	2		2	250	1107	51	152
1715 - 1730	301	1		2	302	1127	41	155
1730 - 1745	328			1	328	1183	30	150
1745 - 1800	314	2		2	316	1214	42	164

3 HOURS GRAND TOTAL (VEHS)

9833

# **CONNECTOR COUNT SUMMARY** (SB 23 to NB 101)

			Date			Ave	Average
Field Data	Mar – 23 Wednesday	Mar – 24 Thursday	Apr – 12 Tuesday	Mar – 26 Saturday	Apr – 10 Sunday	Weekdays	Weekends
Peak hourly volume in the AM peak period, 6:00 AM to 9:00 AM (vph) on Weekdays, 9:00 AM to 12:00 PM (vph) on Weekends, per 2 lanes	1927	2047	1548	1204	1107	1841	1156
Peak hourly volume in the PM peak period, 3:00 PM to 6:00 PM (vph) on Weekdays, 3:00 PM to 6:00 PM (vph) on Weekends, per 2 lanes	1349	1346	1462	1170	1214	1386	1192
Average HOV Percentage users in the AM, 6:00 AM to 9:00 AM on Weekdays, 9:00 AM to 12:00 PM on Weekends, per 2 lanes	%8	9%L	18%	13%	22%	11%	18%
Average HOV Percentage users in the PM, 3:00 PM to 6:00 PM on Weekdays, 3:00 PM to 6:00 PM on Weekends, per 2 lanes	10%	9%	10%	16%	13%	10%	15%

**ATTACHMENT 5** 

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	3442
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	326
DAY OF THE WEEK / DATE:	TUESDAY / 3 - 29 - 22	% OF HOV TO TOTAL DEMAND	11%
NO. OF CONNECTOR LAI	NES 2	TOTAL DEMAND PER 3 HOURS	27268
OBSERVER(S) FA	ADY AL-AWAR	SOV + HOV (VEHS)	21200

T PE	IME RIC		AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600	-	615	322	2		1	325		43	
615	-	630	334	3		2	339		54	
630	-	645	406			1	407		66	
645	-	700	604	14		1	619	1690	75	238
700	-	715	610	5		2	617	1982	80	275
715	-	730	693	7		2	702	2345	61	282
730	-	745	654	3	2	2	661	2599	72	288
745	-	800	917	8	3	2	930	2910	107	320
800	-	815	843	3		3	849	3142	86	326
815	-	830	928	4		1	933	3373	49	314
830	_	845	721	6		3	730	3442	45	287
845	-	900	701	2	2	3	708	3220	55	235

3 HOURS GRAND TOTAL (VEHS)

24703

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	3461	
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	305	
DAY OF THE WEEK / DATE:	WEDNESDAY / 3 - 30 - 2022	% OF HOV TO TOTAL DEMAND	9%	
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	20500	
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	28568	

T PE	IME RIC		AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600	-	615	487	3		3	493		74	
615	-	630	543	3		4	550		71	
630	-	645	457	5		1	463		64	
645	-	700	626	18		5	649	2155	78	287
700	-	715	615	9		8	632	2294	83	296
715	-	730	649	6	1	2	658	2402	68	293
730	-	745	781	8	2	3	794	2733	74	303
745	-	800	891	10	2	6	909	2993	80	305
800	-	815	838	42			880	3241	81	303
815	-	830	817	5		3	825	3408	57	292
830	-	845	840	5		2	847	3461	53	271
845	-	900	725	3		2	730	3282	58	249

3 HOURS GRAND TOTAL (VEHS)

25969

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	3767	
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	214	
DAY OF THE WEEK / DATE:	THURSDAY / 4 - 14 - 2022	% OF HOV TO TOTAL DEMAND	5.5%	
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	00044	
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	29044	

T PE	IMI RIC		AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600	_	615	261	2	1	3	267		25	
615	_	630	382	5		3	390		28	
630	_	645	479	7		1	487		35	
645	_	700	714	13		2	729	1873	48	136
700	-	715	548	3	2	3	556	2162	56	167
715	-	730	755	15	1	5	776	2548	53	192
730	_	745	898	2		5	905	2966	57	214
745	-	800	914	4		1	919	3156	41	207
800	-	815	1012	2		5	1019	3619	42	193
815	-	830	919	3	1	1	924	3767	39	179
830	_	845	822	2		2	826	3688	41	163
845	-	900	868	5		1	874	3643	49	171

3 HOURS GRAND TOTAL (VEHS)

27422

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1548
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	378
DAY OF THE WEEK / DATE:	SATURDAY / 4 - 2 - 2022	% OF HOV TO TOTAL DEMAND	18%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	46290
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	16389

T PE	IME RIC		AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
600	_	615	326	3		2	331		71	
615	-	630	336	3		5	344		62	
630	-	645	343	1		2	346		84	
645	-	700	376	2		3	381	1402	89	306
700	-	715	382	3		2	387	1458	78	313
715	-	730	322	2		5	329	1443	104	355
730	-	745	366	3		3	372	1469	107	378
745	-	800	407	2		4	413	1501	80	369
800	_	815	386	1		1	388	1502	72	363
815	-	830	354	3		3	360	1533	82	341
830	-	845	382	3		2	387	1548	71	305
845	-	900	371	1		3	375	1510	68	293

3 HOURS GRAND TOTAL (VEHS)

13366

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1105
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	552
DAY OF THE WEEK / DATE:	SUNDAY / 4 - 17 - 2022	% OF HOV TO TOTAL DEMAND	30%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	12073
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	120/3

	ME RIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
900	- 915	191	2		1	194		62	
915	- 930	175	1		1	177		72	
930	- 945	173			2	175		80	
945	- 1000	196	2		3	201	747	78	292
1000	- 1015	193	1		1	195	748	68	298
1015	- 1030	236			2	238	809	82	308
1030	- 1045	260	1	1	3	265	899	101	329
1045	- 1100	255			2	257	955	132	383
1100	- 1115	264	1		2	267	1027	128	443
1115	- 1130	282	1		2	285	1074	131	492
1130	- 1145	261				261	1070	151	542
1145	- 1200	290	1		1	292	1105	142	552

3 HOURS GRAND TOTAL (VEHS)

8434

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1559
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	305
DAY OF THE WEEK / DATE:	TUESDAY / 3 - 29 - 2022	% OF HOV TO TOTAL DEMAND	15%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	45056
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	15056

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	380	2		2	384		51	
1515 - 1530	408	3		1	412		47	
1530 - 1545	392	1		3	396		60	
1545 - 1600	365	1		1	367	1559	52	210
1600 - 1615	367	6	1	2	376	1551	57	216
1615 - 1630	363	1	1	1	366	1505	54	223
1630 - 1645	327	2	1	2	332	1441	61	224
1645 - 1700	353	1		1	355	1429	73	245
1700 - 1715	283	1	1	1	286	1339	58	246
1715 - 1730	376	2			378	1351	97	289
1730 - 1745	302	1		1	304	1323	77	305
1745 - 1800	332	4		2	338	1306	62	294

3 HOURS GRAND TOTAL (VEHS)

12804

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1610
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	303
DAY OF THE WEEK / DATE:	WEDNESDAY / 3 - 30 - 2022	% OF HOV TO TOTAL DEMAND	15%
NO. OF CONNECTOR LAN	IES 2	TOTAL DEMAND PER 3 HOURS	45270
OBSERVER(S) FA	ADY AL-AWAR	SOV + HOV (VEHS)	15279

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	397	1		2	400		45	
1515 - 1530	434	2		2	438		37	
1530 - 1545	399	3		1	403		64	
1545 - 1600	367	1		1	369	1610	62	208
1600 - 1615	326	2		1	329	1539	57	220
1615 - 1630	396	4		3	403	1504	53	236
1630 - 1645	326	3		4	333	1434	75	247
1645 - 1700	364	2		1	367	1432	68	253
1700 - 1715	302	1		1	304	1407	80	276
1715 - 1730	362	2		2	366	1370	80	303
1730 - 1745	312	3		2	317	1354	68	296
1745 - 1800	313	2		2	317	1304	58	286

3 HOURS GRAND TOTAL (VEHS)

12954

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1659
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	308
DAY OF THE WEEK / DATE:	THURSDAY / 4 - 14 - 2022	% OF HOV TO TOTAL DEMAND	15%
NO. OF CONNECTOR LAN	IES 2	TOTAL DEMAND PER 3 HOURS	45040
OBSERVER(S) FA	ADY AL-AWAR	SOV + HOV (VEHS)	15940

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	398	2		2	402		41	
1515 - 1530	431	3		3	437		53	
1530 - 1545	418	1	1	2	422		63	
1545 - 1600	394	2		2	398	1659	75	232
1600 - 1615	382	3		2	387	1644	61	252
1615 - 1630	334	4		3	341	1548	53	252
1630 - 1645	372	5		4	381	1507	62	251
1645 - 1700	368	2		3	373	1482	67	243
1700 - 1715	370	1		2	373	1468	72	254
1715 - 1730	315	3	1	2	321	1448	86	287
1730 - 1745	336	2		1	339	1406	83	308
1745 - 1800	372	4		1	377	1410	48	289

3 HOURS GRAND TOTAL (VEHS)

13572

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1130
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	388
DAY OF THE WEEK / DATE:	SATURDAY / 4 - 2 - 2022	% OF HOV TO TOTAL DEMAND	4%
NO. OF CONNECTOR LAI	NES 2	TOTAL DEMAND PER 3 HOURS	42244
OBSERVER(S) FA	ADY AL-AWAR	SOV + HOV (VEHS)	12344

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	283	1		2	286		83	
1515 - 1530	272	2		5	279		85	
1530 - 1545	255	3		2	260		88	
1545 - 1600	293	2		2	297	1122	68	324
1600 - 1615	289	3		2	294	1130	72	313
1615 - 1630	268	2		1	271	1122	81	309
1630 - 1645	254	3		2	259	1121	84	305
1645 - 1700	221	2		1	224	1048	92	329
1700 - 1715	243	3		2	248	1002	101	358
1715 - 1730	203	2		3	208	939	111	388
1730 - 1745	221	1		3	225	905	82	386
1745 - 1800	198	3		3	204	885	64	358

3 HOURS GRAND TOTAL (VEHS)

9274

COUNTY - ROUTE - DIR:	VEN - 23 - SB	PEAK 1 HOUR SOV VOL.	1227
CONNECTOR NAME:	SB 23 to SB 101	PEAK 1 HOUR HOV VOL.	296
DAY OF THE WEEK / DATE:	SUNDAY / 4 - 17 - 2022	% OF HOV TO TOTAL DEMAND	18%
NO. OF CONNECTOR LA	NES 2	TOTAL DEMAND PER 3 HOURS	42202
OBSERVER(S) F	ADY AL-AWAR	SOV + HOV (VEHS)	12303

TIME PERIOD	AUTOS	TRUCKS	BUSES	MC	15 MIN. SOV VOL.	1 HOUR SOV VOL.	15 MIN. HOV VOL.	1 HOUR HOV VOL.
<b>1500</b> - 1515	272			2	274		102	
1515 - 1530	254			3	257		75	
1530 - 1545	268	2		1	271		62	
1545 - 1600	251			2	253	1055	57	296
1600 - 1615	283	1		1	285	1066	65	259
1615 - 1630	279	1		2	282	1091	68	252
1630 - 1645	262			1	263	1083	61	251
1645 - 1700	283	1		1	285	1115	58	252
1700 - 1715	256			3	259	1089	68	255
1715 - 1730	318			2	320	1127	51	238
1730 - 1745	306	2		4	312	1176	62	239
1745 - 1800	332	2		2	336	1227	51	232

3 HOURS GRAND TOTAL (VEHS)

10029

## **ATTACHMENT 10**

# CONNECTOR COUNT SUMMARY (SB 23 to SB 101)

			Date			Ave	Average
Field Data	Mar – 29 Tuesday	Mar – 30 Wednesday	Apr – 14 Thursday	Apr – 02 Saturday	Apr – 17 Sunday	Weekdays	Weekends
Peak hourly volume in the AM peak period, 6:00 AM to 9:00 AM (vph) on Weekdays, 9:00 AM to 12:00 PM (vph) on Weekends, per 2 lanes	3442	3461	3767	1548	1105	3557	1327
Peak hourly volume in the PM peak period, 3:00 PM to 6:00 PM (vph) on Weekdays, 3:00 PM to 6:00 PM (vph) on Weekends, per 2 lanes	1559	1610	1659	1130	1227	1609	1179
Average HOV Percentage users in the AM, 6:00 AM to 9:00 AM on Weekdays, 9:00 AM to 12:00 PM on Weekends, per 2 lanes	11%	%6	%9	18%	30%	%6	24%
Average HOV Percentage users in the PM, 3:00 PM to 6:00 PM on Weekdays, 3:00 PM to 6:00 PM on Weekends, per 2 lanes	15%	15%	15%	4%	18%	15%	11%

#### EA 36320 Project Report 2nd Level Approvals

Final Audit Report 2024-04-08

Created: 2024-04-05

By: Everett Lee (s150940@dot\_ca\_gov)

Status: Canceled / Declined

Transaction ID: CBJCHBCAABAAY\_TPrR6B8HAIX-4k3ImETqL3BbbLq3Cw

#### "EA 36320 Project Report 2nd Level Approvals" History

- Document created by Everett Lee (s150940@dot.ca.gov) 2024-04-05 0:06:49 AM GMT
- Document emailed to Derek Higa (derek.higa@dot.ca.gov) for approval 2024-04-05 0:08:06 AM GMT
- Document emailed to Rafael Molina (rafael.molina@dot.ca.gov) for approval 2024-04-05 0:08:06 AM GMT
- Document emailed to Dan Murdoch (dan.murdoch@dot.ca.gov) for signature 2024-04-05 0:08:06 AM GMT
- Document emailed to Kelly Ewing-Toledo (kelly.ewing-toledo@dot.ca.gov) for approval 2024-04-05 0:08:06 AM GMT
- Document emailed to Kelly Lamare (kelly.m.lamare@dot.ca.gov) for approval 2024-04-05 0:08:06 AM GMT
- Document emailed to Karen Fong (karen.fong@dot.ca.gov) for approval 2024-04-05 0:08:06 AM GMT
- Email viewed by Dan Murdoch (dan.murdoch@dot.ca.gov)
- Email viewed by Derek Higa (derek.higa@dot.ca.gov) 2024-04-05 4:05:03 AM GMT
- Email viewed by Kelly Lamare (kelly.m.lamare@dot.ca.gov)
  2024-04-05 5:04:14 AM GMT
- Document approved by Derek Higa (derek.higa@dot.ca.gov)

  Approval Date: 2024-04-05 2:06:44 PM GMT Time Source: server



Email viewed by Kelly Ewing-Toledo (kelly.ewing-toledo@dot.ca.gov) 2024-04-05 - 2:06:52 PM GMT

Document approved by Kelly Ewing-Toledo (kelly.ewing-toledo@dot.ca.gov)

Approval Date: 2024-04-05 - 2:19:31 PM GMT - Time Source: server

Document e-signed by Dan Murdoch (dan.murdoch@dot.ca.gov)
Signature Date: 2024-04-05 - 9:41:21 PM GMT - Time Source: server

Document approved by Kelly Lamare (kelly.m.lamare@dot.ca.gov)

Approval Date: 2024-04-05 - 10:34:18 PM GMT - Time Source: server

Document approved by Karen Fong (karen.fong@dot.ca.gov)

Approval Date: 2024-04-08 - 6:03:36 AM GMT - Time Source: server

2024-04-08 - 9:23:16 PM GMT

Document declined by Rafael Molina (rafael.molina@dot.ca.gov)

Decline reason: Revisions are needed, thank you.

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#### 07-363200 PR with attachments - Ven\_101 - 4.12.2024

Final Audit Report 2024-04-12

Created: 2024-04-12

By: Everett Lee (s150940@dot.ca.gov)

Status: Signed

Transaction ID: CBJCHBCAABAAA1XJtdPXDxXgX-TRktuzqTvzqqc2Dp4Z

#### "07-363200 PR with attachments - Ven\_101 - 4.12.2024" History

Document created by Everett Lee (s150940@dot.ca.gov) 2024-04-12 - 4:55:06 PM GMT

Document emailed to Rafael Molina (rafael.molina@dot.ca.gov) for signature 2024-04-12 - 5:03:16 PM GMT

Document e-signed by Rafael Molina (rafael.molina@dot.ca.gov)
Signature Date: 2024-04-12 - 5:46:43 PM GMT - Time Source: server

Agreement completed. 2024-04-12 - 5:46:43 PM GMT



#### EA 07-363200 Project Report

Final Audit Report 2024-05-10

Created: 2024-04-25

By: Everett Lee (s150940@dot.ca.gov)

Status: Signed

Transaction ID: CBJCHBCAABAAOxftJ3Y7LcrDjNd8C\_gzBwHpyC95wJ9x

#### "EA 07-363200 Project Report" History

Document created by Everett Lee (s150940@dot.ca.gov) 2024-04-25 - 8:38:33 PM GMT

- Document emailed to Monica Benavides (monica.benavides@dot.ca.gov) for approval 2024-04-25 8:43:44 PM GMT
- Document approved by Monica Benavides (monica.benavides@dot.ca.gov)

  Approval Date: 2024-04-26 8:40:41 PM GMT Time Source: server- IP address: 149.136.33.246
- Document emailed to Gloria Roberts (gloria.roberts@dot.ca.gov) for signature 2024-04-26 8:40:48 PM GMT
- Email viewed by Gloria Roberts (gloria.roberts@dot.ca.gov) 2024-04-26 8:59:17 PM GMT- IP address: 146.75.146.0
- Email viewed by Gloria Roberts (gloria.roberts@dot.ca.gov) 2024-05-04 1:02:04 PM GMT- IP address: 172.226.2.116
- Email viewed by Gloria Roberts (gloria.roberts@dot.ca.gov) 2024-05-10 4:27:11 PM GMT- IP address: 166.205.132.35
- Document e-signed by Gloria Roberts (gloria.roberts@dot.ca.gov)

  Signature Date: 2024-05-10 11:49:55 PM GMT Time Source: server- IP address: 68.101.120.203
- Agreement completed.
   2024-05-10 11:49:55 PM GMT

