

The following is the Table of Contents for the **Small Business Minor B Package** documents:

Table of Contents	1 Page
Invitation for Price Quote–Cover Letter	1 Page
General Bidders Instructions/Checklist	2 Pages
Proposed Form of Agreement, STD 213	2 Pages
Specifications	28 Pages
Link to the 2023 Edition of the Standard Specifications	Page 29

The Bid Package contains 15 Project Plans for this project.

California Department of Transportation

ADMINISTRATION

DIVISION OF PROCUREMENT AND CONTRACTS

1727 30th STREET, MS 65

SACRAMENTO, CA 95816-7006

PHONE (916) 227-6000

TTY 711

<https://dot.ca.gov/programs/procurement-and-contracts/>**Invitation for Price Quote (IFPQ)****Contract No. 06A3082****Quote Due Date: May 8, 2024****Prospective Contractors:**

California Department of Transportation (Caltrans/Department) has issued the enclosed Invitation for Price Quote (IFPQ) for services described in the enclosed proposed contract.

Please read the entire contract package and all attachments carefully. If you desire to submit a quote, complete the Price Quote sheet and email it to the Analyst listed in the IFPQ. Your signature affixed to and dated on the quote proposal shall constitute a certification under penalty of perjury, unless exempted, that you have complied with the nondiscrimination program requirements of Government Code Section 12990 and Title 2, California Code of Regulations, Section 11102, and the nondiscrimination program requirements of Title VI of the Civil Rights Act of 1964, 49 Code of Federal Regulations (CFR) Part 21, and 23 CFR Part 200.

Award of this contract will be to the lowest responsible contractor whose quote complies with all requirements as described in this IFPQ.

If your bid is more than \$461,000.00, it will be rejected per Public Contract Code Section 10105(b).

Contractor must be a Certified Small Business at the time of the quote date.

Invitation for Price Quote

California Department of Transportation

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<https://dot.ca.gov/programs/procurement-and-contracts/>**General Contractors Instructions/Checklist****Solicitation No. 06A3082**

A complete bid or bid package will consist of the items identified below.

Complete this checklist to confirm the items in your bid package. Place a check mark or "X" next to each item that you are submitting to Caltrans. All attachments identified below (unless noted otherwise) are required and must be attached in your Bid Package submittal (links to documents are not acceptable), or your bid may be considered non-responsive. It is the prospective contractor's responsibility to confirm receipt of their bid before the time the bid is due. Omission of documents or bids lost during transmission will be deemed non-responsive.

Return this checklist with your bid package.

Quotes omitting this information may be regarded as non-responsive and rejected.

Do **not** submit company advertisements, brochures, informational pamphlets, or any other document unless specifically noted in the IFPQ Requirements and/or as listed below.

- ☐ Price Quote Proposal for Unit Items (ADM-1509). Complete and sign the Price Quote Proposal for Unit Item Sheet(s).
- ☐ Subcontractor List (DES-OE-0102.2.C) can be downloaded at <https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=DESOE0102.2C>. List all subcontractors, including DVBES, as applicable to the requirements of this solicitation.
- ☐ Contract Requirements (ADM-0378) can be downloaded at <https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=ADM0378F>.
- ☐ Small Business Status (DES-OE-0102.4) can be downloaded at <https://forms.dot.ca.gov/v2Forms/servlet/showForm2?frmid=DOTDESOE0102.4>.
- ☐ California Company Preference (DES-OE-0102.9) can be downloaded at <https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=DESOE0102.9>.
- ☐ Certified DVBE Summary (ADM-4015) can be downloaded at <https://forms.dot.ca.gov/v2Forms/servlet/showForm2?frmid=DOTADM4015>.
- ☐ Contractor Certification Clauses (CCC 04/2017) can be downloaded at <https://www.dgs.ca.gov/OLS/Resources/Page-Content/Office-of-Legal-Services-Resources-List-Folder/Standard-Contract-Language>.
- ☐ California Civil Rights Laws Certification (ADM-0076) can be downloaded at <https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=ADM0076>.
- ☐ Darfur Contracting Act Certification (ADM-0077) can be downloaded at <https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=ADM0077>.
- ☐ DOT DES-OE-0102.14 In-Use Off-Road Diesel-Fueled Vehicle List can be downloaded at <https://forms.dot.ca.gov/v2Forms/servlet/showForm2?frmid=DOTDESOE010214>.

The following forms and information will be required at the time of contract award and signature.

- ☐ Payment Bond (ADM-2009) can be downloaded at
<https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=ADM2009>.
- ☐ Certificate(s) of Insurance
- ☐ Postconsumer-Content Certification (CalRecycle 74) can be downloaded at
<https://calrecycle.ca.gov/buyrecycled/stateagency/certify>.

Payee Data Record (STD 204) can be downloaded at

- ☐ <https://www.documents.dgs.ca.gov/dgs/fmc/pdf/std204.pdf>. This form is designed to allow vendors to self-report information needed for accurate and complete reporting of vendor payment income. Completion of this form is required by all vendors providing goods and/or services to the State of California.

Contract Will Not Be Executed Without These Documents.

STANDARD AGREEMENT

STD 213 (Rev. 04/2020)

AGREEMENT NUMBER
06A3082

PURCHASING AUTHORITY NUMBER (If Applicable)

1. This Agreement is entered into between the Contracting Agency and the Contractor named below:

CONTRACTING AGENCY NAME

California Department of Transportation

CONTRACTOR NAME

2. The term of this Agreement is:

START DATE

TBD

THROUGH END DATE

3. The maximum amount of this Agreement is:

4. The parties agree to comply with the terms and conditions of the following exhibits, which are by this reference made a part of the Agreement.

Exhibits	Title	Pages
	PROPOSED FORM OF AGREEMENT	
	DO NOT COMPLETE	
	Continued on the following sheets, each bearing the Agreement/Contract number.	
+	The provisions on the following pages hereof constitute a part of the Agreement	
-		
+		
-		

Items shown with an asterisk (*), are hereby incorporated by reference and made part of this agreement as if attached hereto.

These documents can be viewed at <https://www.dgs.ca.gov/OLS/Resources>

IN WITNESS WHEREOF, THIS AGREEMENT HAS BEEN EXECUTED BY THE PARTIES HERETO.

CONTRACTOR

CONTRACTOR NAME (if other than an individual, state whether a corporation, partnership, etc.)

CONTRACTOR BUSINESS ADDRESS

CITY

STATE

ZIP

PRINTED NAME OF PERSON SIGNING

TITLE

CONTRACTOR AUTHORIZED SIGNATURE

DATE SIGNED



1. Contractor agrees to indemnify, defend, and save harmless the State, its officers, agents, and employees from any and all claims and losses accruing or resulting to any and all contractors, subcontractors, materialmen, laborers and any other person, firm or corporation furnishing or supplying work services, materials or supplies in connection with the performance of this contract, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by Contractor in the performance of this contract.
2. Contractor, and the agents and employees of Contractor, in the performance of the Agreement, shall act in an independent capacity and not as officers or employees or agents of State of California.
3. The State may terminate this agreement and be relieved of the payment of any consideration to Contractor should Contractor fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination the State may proceed with the work in any manner deemed proper by the State. The cost to the State shall be deducted from any sum due Contractor under this agreement, and the balance, if any, shall be paid Contractor upon demand.
4. Without the written consent of the State, this Agreement is not assignable by Contractor either in whole or in part.
5. Time is of the essence in this Agreement.
6. No alteration or variation of the terms of this contract shall be valid unless made in writing and signed by the parties hereto, and no oral understanding or agreement not incorporated herein, shall be binding on any of the parties hereto.
7. The consideration to be paid Contractor, as provided herein, shall be in compensation for all of Contractor's expenses incurred in the performance hereof, including travel and per diem, unless otherwise expressly so provided.



Caltrans[®]

**STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION**

**NOTICE TO BIDDERS
AND
SPECIAL PROVISIONS**

**FOR CONSTRUCTION ON STATE HIGHWAY IN FRESNO COUNTY AT VARIOUS
LOCATIONS.**

In District 06 On Route 168, 180

Under

Standard Specifications dated 2023

Project plans approved January 28, 2024

Standard Plans dated 2023

**Identified by
Contract No. 06A3082
06-Fre-168,180-VAR
Project ID 0622000178**

Small Business Minor B Solicitation

**Quotes open: Wednesday, May 8, 2024
Dated: April 24, 2024**

Revised 12/29/2023

SPECIAL NOTICES

California Civil Rights Laws

Any person that submits a bid or proposal to, or otherwise proposes to enter into or renew a contract with a State agency with respect to any contract in the amount of one hundred thousand dollars (\$100,000) or more shall certify, under penalty of perjury, at the time the bid or proposal is submitted or the contract is renewed, that they satisfy all of the conditions set forth in California Public Contract Code Section 2010 and they shall execute the Certification attached.

Assumption of Risk and Indemnification Regarding Exposure to Environmental Health Hazards

In addition to, and not a limitation of, Contractor's indemnification obligations contained elsewhere in this Agreement, Contractor hereby assumes all risks of the consequences of exposure of Contractor's employees, agents, Subcontractors, Subcontractors' employees, and any other person, firm, or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement, to any and all environmental health hazards, local and otherwise, in connection with the performance of this Agreement. Such hazards include, but are not limited to, bodily injury and/or death resulting in whole or in part from exposure to infectious agents and/or pathogens of any type, kind, or origin. Contractor also agrees to take all appropriate safety precautions to prevent any such exposure to Contractor's employees, agents, Subcontractors, Subcontractors' employees, and any other person, firm, or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement. Contractor also agrees to indemnify and hold harmless Caltrans, the State of California, and each and all of their officers, agents, and employees, from any and all claims and/or losses accruing or resulting from such exposure. Except as provided by law, Contractor also agrees that the provisions of this paragraph shall apply regardless of the existence or degree of negligence or fault on the part of Caltrans, the State of California, and/or any of their officers, agents, and/or employees.

Mandatory Organic Waste Recycling

It is understood and agreed that pursuant to Public Resources Code Sections 42649.8 et seq., if Contractor generates two (2) cubic yards or more of organic waste or commercial solid waste per week, Contractor shall arrange for organic waste recycling services or commercial waste recycling services that separate/source organic waste recycling. Contractor shall provide proof of compliance, i.e. organic waste recycling services or commercial waste recycling services that separate/source organic waste recycling, upon request from Caltrans Contract Manager.

ADA Compliance

All entities that provide electronic or information technology or related services that will be posted online by Caltrans must be in compliance with Government Code Sections 7405 and 11135 and the Web Content Accessibility Guidelines (WCAG) 2.0 or subsequent version, published by the Web Accessibility Initiative of the World Wide Web Consortium at a minimum Level AA success. All entities will respond to and resolve any complaints/deficiencies regarding accessibility brought to their attention.

Satisfying a Self-Insured Retention (SIR)

All insurance required by this Agreement must allow, but not require, the State to pay any SIR and/or act as Contractor's agent in satisfying any SIR. The choice to pay any SIR and/or act as Contractor's agent in satisfying any SIR is at the State's discretion. If the State chooses to pay any SIR and/or act as Contractor's agent in satisfying any SIR, Contractor shall reimburse the State for the same.

Available Coverages/Limits

In the event the insurance coverages obtained by Contractor is broader in scope than, and/or the limits are higher than, those required under the Agreement, all such broader coverage and/or higher limits available to the Contractor shall also be available and applicable to the State.

Electronic Signatures

Each party agrees that the electronic signatures, whether digital or encrypted, of the parties included in this Agreement are intended to authenticate this writing and to have the same force and effect as manual signatures for this Agreement. Documents that are referenced by this Agreement may still require manual signatures.

Executive Order N-6-22 – Russia Sanctions

On March 4, 2022, Governor Gavin Newsom issued Executive Order N-6-22 (the EO) regarding Economic Sanctions against Russia and Russian entities and individuals. "Economic Sanctions" refers to sanctions imposed by the U.S. government in response to Russia's actions in Ukraine, as well as any sanctions imposed under state law. By submitting a bid or proposal, Contractor represents that it is not a target of Economic Sanctions. Should the State determine Contractor is a target of Economic Sanctions or is conducting prohibited transactions with sanctioned individuals or entities, that shall be grounds for rejection of Contractor's bid/proposal any time prior to contract execution, or, if determined after contract execution, shall be grounds for termination by the State.

Standard Title VI/Nondiscrimination Assurances (DOT Order No. 1050.2A)

California Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC Sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Bid Bonds

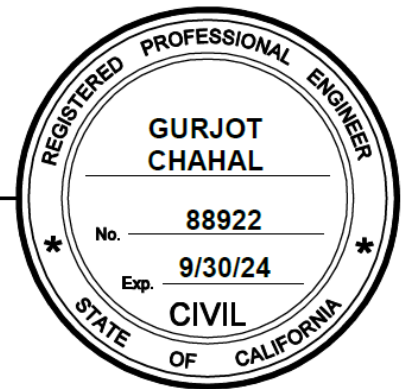
Bid bonds are only required for agreements over \$461,000.00. Contractors are no longer required to purchase and submit a Bid Bond when bidding on Minor B Projects. Section 2-1.34 of the 2023 Standard Specifications is not applicable to Minor B Projects.

**The special provisions contained herein
have been prepared by or under the
direction of the following Registered
Person.**

HIGHWAYS

Gurjot S Chahal
REGISTERED CIVIL ENGINEER

01/11/2024



ELECTRICAL

Norma Gallegos
REGISTERED ELECTRICAL ENGINEER

01/18/2024

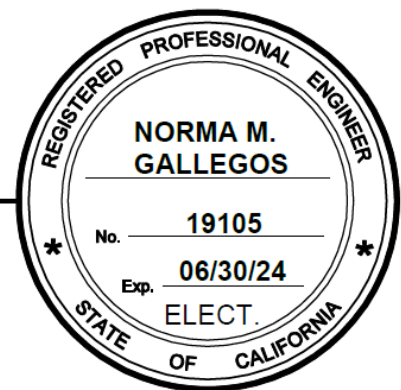


TABLE OF CONTENTS

NOTICE TO BIDDERS	1
SPECIAL PROVISIONS	3
DIVISION I GENERAL PROVISIONS	3
1 GENERAL	3
2 BIDDING.....	3
3 CONTRACT AWARD AND EXECUTION.....	5
4 SCOPE OF WORK	6
5 CONTROL OF WORK	6
6 CONTROL OF MATERIALS	8
7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC.....	12
8 PROSECUTION AND PROGRESS	13
9 PAYMENT	14
DIVISION II GENERAL CONSTRUCTION.....	16
12 TEMPORARY TRAFFIC CONTROL	16
15 EXISTING FACILITIES	27
DIVISION X ELECTRICAL WORK.....	28
86 GENERAL	28
87 ELECTRICAL SYSTEMS.....	28
LINK TO THE 2023 EDITION OF THE STANDARD SPECIFICATIONS.....	29

STANDARD PLANS LIST

The standard plan sheets applicable to this Contract include those listed below. The applicable revised standard plans (RSPs) listed below are included in the project plans.

ABBREVIATIONS, LINES, SYMBOLS, AND LEGEND

A3A	Abbreviations (Sheet 1 of 3)
A3B	Abbreviations (Sheet 2 of 3)
A3C	Abbreviations (Sheet 3 of 3)
A10A	Legend - Lines and Symbols (Sheet 1 of 5)
A10B	Legend - Lines and Symbols (Sheet 2 of 5)
A10C	Legend - Lines and Symbols (Sheet 3 of 5)
A10D	Legend - Lines and Symbols (Sheet 4 of 5)
A10E	Legend - Lines and Symbols (Sheet 5 of 5)

TEMPORARY CRASH CUSHIONS, RAILING AND TRAFFIC SCREEN

T1A	Temporary Crash Cushion, Sand Filled (Unidirectional)
T1A1	Temporary Crash Cushion, Sand Filled (Unidirectional)
T1B	Temporary Crash Cushion, Sand Filled (Bidirectional)
T2	Temporary Crash Cushion, Sand Filled (Shoulder Installations)
T3A	Temporary Railing (Type K)
T3B	Temporary Railing (Type K)
T3C	Temporary Barrier System (Cross Bolt)
T3D	Temporary Barrier System (Cross Bolt)
T3E	Temporary Barrier System (Cross Bolt)

TEMPORARY TRAFFIC CONTROL SYSTEMS

T9	Traffic Control System Tables for Lane and Ramp Closures
T10	Traffic Control System for Lane Closure on Freeways and Expressways
T14	Traffic Control System for Ramp Closure

ROADSIDE SIGNS

RS1	Roadside Signs - Typical Installation Details No. 1
RS2	Roadside Signs - Wood Post - Typical Installation Details No. 2
RS3	Roadside Signs - Laminated Wood Box Post - Typical Installation Details No. 3
RS4	Roadside Signs - Typical Installation Details No. 4

OVERHEAD AND ROADSIDE SIGNS PANELS

S89	Roadside Sign - Formed Single Sheet Aluminum Panel
S93	Framing Details for Framed Single Sheet Aluminum Signs, Rectangular Shape
S94	Roadside Framed Single Sheet Aluminum Signs, Rectangular Shape
S95	Roadside Single Sheet Aluminum Signs, Diamond Shape

ELECTRICAL SYSTEMS - LEGEND AND ABBREVIATIONS

ES-1A	Electrical Systems (Legend)
ES-1B	Electrical Systems (Legend)
ES-1C	Electrical Systems (Legend)

ELECTRICAL SYSTEMS - SIGNAL HEADS, SIGNAL FACES AND MOUNTINGS

ES-4A	Electrical Systems (Signal Head Mounting)
ES-4C	Electrical Systems (Signal Heads and Mountings)
ES-4D	Electrical Systems (Signal Head Mounting)

ELECTRICAL SYSTEMS - SIGNAL AND LIGHTING STANDARDS

ES-7B	Electrical Systems (Signal and Lighting Standard, Type 1 and Equipment Identification Characters)
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ELECTRICAL SYSTEMS - FLASHING BEACONS

ES-7J Electrical Systems (Flashing Beacon on a Type 1, Type 15-FBS and Type 40 Standard)

ELECTRICAL SYSTEMS - SIGNAL AND LIGHTING STANDARD DETAILS

ES-7M Electrical Systems (Signal and Lighting Standard, Detail No. 1)

ES-7N Electrical Systems (Signal and Lighting Standard, Detail No. 2)

ES-7O Electrical Systems (Signal and Lighting Standard, Detail No. 3)

ELECTRICAL SYSTEMS - ISOFOOTCANDLE CURVES AND FOUNDATION DETAILS

ES-11 Electrical Systems (Foundation Installations)

ELECTRICAL SYSTEMS - SPLICE INSULATION METHODS, KINKING AND BANDING DETAILS

ES-13A Electrical Systems (Splice Insulation Methods Details)

ES-13B Electrical Systems (Kinking and Banding Detail)

CANCELED STANDARD PLANS LIST

The standard plan sheets listed below are canceled and not applicable to this contract.

Plan No.	Date Canceled	Plan No.	Date Canceled	Plan No.	Date Canceled
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No Canceled Standard Plans

NOTICE TO BIDDERS

Quotes open: May 8, 2024

Dated: April 24, 2024

General work description: Repair/replace Metering System (RMS).

The Department of Transportation (Department) will receive quotes for Construction On State Highway In Fresno County at Various Locations.

District-County-Route-Post Mile: 06-Fre-168,180-VAR

Contractor must have either a Class A license or a combination of the following Class C licenses which constitutes a majority of the work: C-10

Contractor must be a certified Small Business under Section 2-1.04.

Department establishes no DVBE Contract goal but encourages bidders to obtain DVBE participation.

Bids must be on a unit price basis.

Complete the work within 20 working days.

The estimated cost of the project is \$230,000.00

The Department will receive quotes until 2:15 p.m. on the quotes open date at:

Analyst's Email: arlena.tedder@dot.ca.gov

*Put SB Contract # in the Subject Line of the Email

Quotes received after this time will not be accepted.

No pre-bid meeting is scheduled for this project.

Quote Packages, including **Invitation for Quote**, **Notice to Bidders**, **Special Provisions**, and **Project Plans** are available in electronic format only. These documents may be viewed and obtained at:

Cal eProcure website: <https://caleprocure.ca.gov/pages/index.aspx>

Standard Specifications dated 2023

Standard Plans dated 2023

Present bidders' inquiries to the District at:

District 06 Construction Duty Senior

Central Region Construction

2015 E. Shields Avenue

Fresno CA 93726

Email: CR.Bidders.Questions@dot.ca.gov

Questions about alleged patent ambiguity of the plans, specifications, or estimate must be asked before bid opening. After bid opening, the Department does not consider these questions as bid protests.

Department will open bids under Section 2-1.43.

There will be no public opening of quotes. Quotes results will not be listed on the Internet.

Request quote results at:

Analyst's Name: Arlena Tedder

Email: arlena.tedder@dot.ca.gov

Phone: (279)234-2434

District office addresses are provided in the **Standard Specifications**.

Prevailing wages may be required on this Contract under Section 7-1.02K(2). The Director of the California Department of Industrial Relations (DIR) determines the general prevailing wage rates. Obtain the wage rates at the DIR website, <http://www.dir.ca.gov>, or from the Department's Labor Compliance Office of the district in which the work is located at <https://dot.ca.gov/programs/construction/labor-compliance>.

Department has made available Notices of Suspension and Proposed Debarment from the Federal Highway Administration. For a copy of the notices, go to <http://ppmoe.dot.ca.gov/des/oe/contractor-info.html>. Additional information is provided in the Excluded Parties List System at <https://www.dol.gov/ofccp/regs/compliance/preaward/debarlst.htm>.

Standard Specifications and Standard Plans may be viewed at Department's Division of Design website at <https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications>.

SPECIAL PROVISIONS

AA

DIVISION I GENERAL PROVISIONS
1 GENERAL

Replace the definition of *Bid Item List* in Section 1-1.07B with:

Bid Item List: List of bid items and the associated quantities on the **Quote Proposal for Unit Quote Items**.

Replace the definition of *Director* in Section 1-1.07B with:

Director: Department’s District Director.

Add the following to Section 1-1.07B:

Quote: Bid for an agreement with bidders limited to only Small Businesses under Section 2-1.04.

Add the following to the table in Section 1-1.11:

Reference or agency or department unit	Website	Address	Telephone Number
Office of Civil Rights	https://dot.ca.gov/programs/civil-rights	1823 14th Street Sacramento, CA 95811	(916) 324-0449

AA

2 BIDDING

Replace Section 2-1.04 with:

2-1.04 Bidder Eligibility

Bidder must be certified as a small business at the time and date of bid opening and on the date of contract award or have submitted a complete application to the Department of General Services (DGS), Office of Small Business and DVBE Services. The complete application and any required substantiating documentation must be received by DGS by 5:00 p.m. on the bid opening date.

Replace Section 2-1.06A with:

2-1.06A General

Standard Specifications and **Standard Plans** may be viewed at Bidders’ Exchange website.

The **Bid Package** may be viewed and obtained at the Cal eProcure website.

The **Bid Package** includes the **Invitation for Bid**, **Notice to Bidders**, Special Provisions, Project Plans, Revised Standard Plans, and a web link to the Standard Specifications and Standard Plans.

Replace the 3rd paragraph of Section 2-1.06B with:

If an **Information Handout** or cross sections are available, you may view and obtain them at the Cal eProcure website.

Add the following to Section 2-1.10

Submit the form with your bid.

Replace section 2-1.11 with:

2-1.11 IN-USE OFF-ROAD DIESEL-FUELED VEHICLE LIST

Section 2-1.11 applies to non-informal-bid contracts.

Complete and submit the In-Use Off-Road Diesel-Fueled Vehicle List form under section 2-1.33.

On the In-Use Off-Road Diesel-Fueled Vehicle List form, list each fleet used by you or your subcontractor to perform work and is subject to 13 CCR § 2449 et seq. Submit a copy of a valid Certificate of Reported Compliance (13 CCR § 2449, subdivision (n)) for each fleet listed on the form within 10 days of bid opening. Failure to list a fleet used by you or your subcontractor to perform work on the In-Use Off-Road Diesel-Fueled Vehicle List form may result in a nonresponsive bid. Failure to submit the Certificate of Reported Compliance for a fleet listed on the In-Use Off-Road Diesel-Fueled Vehicle List form may result in a nonresponsive bid.

Replace Section 2-1.15 with:

2-1.15 Disabled Veteran Business Enterprises (DVBE)

2-1.15A General

Take necessary and reasonable steps to ensure that DVBEs have opportunity to participate in the Agreement.

Comply with Military and Veterans Code Sections 999 et seq.

Department encourages bidders to obtain DVBE participation to ensure Department achieves its State-mandated overall DVBE goal.

If you obtain DVBE participation:

1. Complete and submit the Certified DVBE Summary form under with your bid. List all DVBE participation on this form.
2. List each first tier DVBE subcontractor in the Subcontractor List form, regardless of percentage of the total bid.

If a DVBE joint venture is used, submit the joint venture agreement with the Certified DVBE Summary form.

List each first tier DVBE, subcontractor on the Subcontractor List (DES-OE-0102C) regardless of percentage of the total bid.

DVBEs must be certified by the bid opening date and remain certified through contract award.

Delete Section 2-1.18.

Delete Section 2-1.27.

Replace Section 2-1.33 with:

2-1.33 Bid Document Completion and Submittal

Complete forms in the **Bid Package**. Submit the forms with your bid.

Failure to submit the forms and information as specified may result in a nonresponsive bid.

the Contract. This bond must be equal to at least 100 percent (100%) of the total bid (Pub. Cont. Code Section 7103).

A performance bond is not required.

Replace Section 3-1.11 with:

3-1.11 Payee Data Record

Complete and sign the **Payee Data Record** form included in the contract documents.

Replace Section 3-1.18 with:

3-1.18 Contract Execution

The successful bidder must sign the **Standard Agreement** form to execute the contract.

The bidder's security may be forfeited for failure to execute the contract within the time required.

Add to Section 3:

3-1.20 Budget Disclaimer

If sufficient program funds are not allocated to complete this contract as awarded, the contract may be amended to reflect any reduction in funds or be terminated.

[illegible]

4 SCOPE OF WORK

Delete Section 4-1.07C.

Delete Section 4-1.07D.

[illegible]

5 CONTROL OF WORK

Replace section 5-1.13E with:

5-1.13E Prompt Payment

Section 5-1.13E applies to all contracts.

Pay your subcontractors within 7 days of receipt of each progress payment under Pub Cont Code §§ 10262 and 10262.5. Pay other entities, such as material suppliers, within 30 days of receipt of each progress payment.

Each month, after the 15th and prior to 20th, submit the following payment information through the Department's prompt payment monitoring system at <https://caltrans.dbesystem.com>:

1. Subcontractor's or entity's business name
2. Description of work performed
 - 2.1. Bid item numbers or change order numbers
 - 2.2. Written narrative of work performed
3. Value of work performed
4. Amount paid to subcontractor or entity
5. Withhold amount, if applicable
6. Explanation of withhold reasoning, if applicable

Your subcontractors and other entities may validate payments received using the prompt payment monitoring system.

If a subcontractor's or other entity's work is in dispute, provide a written withhold notification to the subcontractor or entity and the Engineer no later than 7 days after receipt of the corresponding progress payment that includes the following:

1. Value of the disputed work
2. Amount of the withhold being taken
3. Bid item numbers or change order numbers associated with the disputed work
4. Explanation of the deficiencies of the disputed work and how the corresponding value was calculated
5. Corrective actions to be taken for release of withheld amount

The Department may request additional documentation from you to evaluate whether you applied the withhold in good faith.

If the Department determines your withhold was not applied in good faith or that you failed to submit the required withhold notification, the Department may withhold the same amount from your future progress pay estimate. The Department may also apply a 2 percent penalty on the withhold amount for every month payment is not made.

Add to the end of section 5-1.32:

Personal vehicles of your employees must not be parked on the traveled way or shoulders, including sections closed to traffic.

Add to Section 5-1.38:

The Engineer will only consider a request for relief of maintenance and protection responsibility if the Engineer has suspended the work under Section 8-1.06.

Replace Section 5-1.42 with:

5-1.42 Requests For Information (RFI)

Submit an RFI upon recognition of any event or question of fact arising under the Contract.

The Engineer responds to the RFI within three (3) days. Proceed with the work unless otherwise ordered. You may protest the Engineer's response by:

1. Submitting a potential claim record, using the **Supplemental Potential Claim Record** form, within three (3) days after receiving the Engineer's response
2. Complying with Section 5-1.43

Replace Section 5-1.43 with:

5-1.43 Potential Claims and Dispute Resolution

5-1.43A General

Minimize and mitigate impacts of potentially claimed work or event.

For each potential claim, assign an identification number determined by chronological sequencing and the first date of the potential claim.

Use the identification number for each potential claim on the **Supplemental Potential Claim Record** form.

Failure to comply with this procedure is a waiver of the potential claim and a waiver of the right to a corresponding claim for the disputed work in the administrative claim procedure.

aware that a maximum quantity of material may be excavated at the site based on the minimum number of samples taken before excavating at the site under section 6-1.03B(3).

2. Land use history of the local material location and surrounding property
3. Sampling protocol
4. Number of samples per volume of local material
5. QA and QC requirements and procedures
6. Qualifications of sampling personnel
7. Stockpile history
8. Name and address of the analytical laboratory that will perform the chemical analyses
9. Analyses that will be performed for lead and pH
10. Other analyses that will be performed for possible hazardous constituents based on:
 - 10.1. Source property history
 - 10.2. Land use adjacent to source property
 - 10.3. Constituents of concern in the ground water basin where the job site is located

The plan must be sealed and signed by an engineer who is registered as a civil engineer in the State or a professional geologist licensed as a professional geologist by the State.

If the plan requires revisions, the Engineer provides comments. Submit a revised plan within 7 days of receiving comments. Allow 7 days for the review.

6-1.03B(3) Analytical Test Results

At least 15 days before placing local material, submit analytical test results for each local material obtained from a noncommercial source or a source not regulated under CA jurisdiction. The analytical test results must include:

1. Certification signed by an engineer who is registered as a civil engineer in the State or a professional geologist licensed as a professional geologist by the State stating:

The analytical testing described in the local material plan has been performed. I performed a statistical analysis of the test results using the US EPA's ProUCL software with the applicable 95 percent upper confidence limit. I certify that the material from the local material source is suitable for unrestricted use at the job site, it has a pH above 5.0, does not contain soluble lead in concentrations equal to or greater than 5mg/l as determined by the Waste Extraction Test (WET) Procedures, 22 CA Code of Regs § 66261.24(a)(2) App II, does not contain lead in concentrations above 80 mg/kg total lead, is free from all other contaminants identified in the local material plan, and will comply with the job site's basin plan and water quality objectives of the RWQCB.

2. Chain of custody of samples
3. Analytical results no older than 1 year
4. Statistical analysis of the data using US EPA's ProUCL software with a 95 percent upper confidence limit
5. Comparison of sample results to hazardous waste concentration thresholds and the RWQCB's basin plan requirements and water quality objectives for the job site location

6-1.03B(4) Sample and Analysis

Sample and analyze local material from a (1) noncommercial source or (2) a source not regulated under CA jurisdiction:

1. Before bringing the local material to the job site
2. As described in the local material plan
3. Under US EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)

The sample collection must be designed to generate a data set representative of the entire volume of proposed local material.

Before excavating at the (1) noncommercial material source or (2) a source not regulated under CA jurisdiction, collect the minimum number of samples and perform the minimum number of analytical tests for the corresponding maximum volume of local material as shown in the following table:

Minimum Number of Samples and Analytical Tests for Local Material

Maximum volume of imported borrow (cu yd)	Minimum number of samples and analytical tests
< 5,000	8
5,000–10,000	12 for the first 5,000 cu yd plus 1 for each additional 1,000 cu yd or portion thereof
10,000–20,000	17 for the first 10,000 cu yd plus 1 for each additional 2,500 cu yd or portion thereof
20,000–40,000	21 for the first 20,000 cu yd plus 1 for each additional 5,000 cu yd or portion thereof
40,000–80,000	25 for the first 40,000 cu yd plus 1 for each additional 10,000 cu yd or portion thereof
> 80,000	29 for the first 80,000 cu yd plus 1 for each additional 20,000 cu yd or portion thereof

Do not collect composite samples or mix individual samples to form a composite sample.

Analyze the samples using the US EPA's ProUCL software with a 95 percent upper confidence limit. All chemical analysis must be performed by a laboratory certified by the SWRCB's Environmental Laboratory Accreditation Program (ELAP).

The analytical test results must demonstrate that the local material:

1. Is not a hazardous waste
2. Has a pH above 5.0
3. Has an average total lead concentration, based upon the 95 percent upper confidence limit, at or below 80 mg/kg
4. Is free of possible contaminants identified in the local material plan
5. Complies with the RWQCB's basin plan for the job site location
6. Complies with the RWQCB's water quality objectives for the job site location

6-1.03C Local Material Management

Do not place local material until authorized.

If the Engineer determines the appearance, odor, or texture of any delivered local material suggests possible contamination, sample and analyze the material. The sampling and analysis is change order work unless (1) hazardous waste is discovered or (2) the analytical test results indicate the material does not comply with section 6-1.03B(3).

Dispose of noncompliant local material at an appropriately permitted CA Class I, CA Class II or CA Class III facility. You are the generator of noncompliant local materials.

Replace section 6-1.04 with:

6-1.04 BUY AMERICA

6-1.04A General

Buy America requirements do not apply to the following:

1. Tools and construction equipment used in performing the work
2. Temporary work that is not incorporated into the finished project

6-1.04B Crumb Rubber (Pub Res Code § 42703(d))

Furnish crumb rubber with a certificate of compliance. Crumb rubber must be:

1. Produced in the United States
2. Derived from waste tires taken from vehicles owned and operated in the United States

6-1.04C Steel and Iron Materials

Steel and iron materials must be melted and manufactured in the United States except:

1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials
2. If the total combined cost of the materials produced outside the United States does not exceed the greater of 0.1 percent of the total bid or \$2,500, the material may be used if authorized

Furnish steel and iron materials to be incorporated into the work with certificates of compliance and certified mill test reports. Mill test reports must indicate where the steel and iron were melted and manufactured.

All melting and manufacturing processes for these materials, including an application of a coating, must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied.

6-1.04D Manufactured Products

Iron and steel used in precast concrete manufactured products must meet the requirements of section 6-1.04C regardless of the amount used.

Iron and steel used in other manufactured products must meet the requirements of section 6-1.04C if the weight of steel and iron components constitute 90 percent or more of the total weight of the manufactured product.

6-1.04E Construction Materials

The following construction materials must be produced in the United States under standards in 2 CFR 184.6:

1. Non-ferrous metals
2. Plastic and polymer-based products such as:
 - 2.1. Polyvinylchloride
 - 2.2. Composite building materials
3. Glass
4. Fiber optic cable including drop cable
5. Optical fiber
6. Lumber
7. Engineered wood
8. Drywall

All manufacturing processes for these materials as defined in 2 CFR 184.6 must occur in the United States.

Furnish construction materials to be incorporated into the work with certificates of compliance with each project delivery. Manufacturer's certificate of compliance must identify where the construction material was manufactured and attest specifically to compliance with its 2 CFR 184.6 standard.

Minor additions of articles, materials, supplies, or binding agents to these construction materials do not change the categorization of the construction material.

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7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Add to Section 7-1.02K(2):

Payment of prevailing wages is not required if the contract amount is:

1. \$25,000 or less for a public works construction project.
2. \$15,000 or less for the alteration, demolition, repair, or maintenance of a public works project.

If satisfactory certified payroll records are not submitted by the time the final invoice is submitted, the Department will withhold all payments due and owing the Contractor pending receipt of the records.

Add after the first paragraph of Section 7-1.02K(3):

Payroll records are not to be submitted if prevailing wages are not required.

Add to the last paragraph of Section 7-1.02K(3):

If progress payments are not made, and you have not submitted adequate records by the time you submit the final invoice, the Department will withhold all payments due and owing the Contractor pending receipt of such records.

Replace Section 7-1.02K(6)(j)(iii) with:

7-1.02K(6)(j)(iii) Unregulated Earth Material Containing Lead

Section 7-1.02K(6)(j)(iii) includes specifications for handling, removing, and disposing of unregulated earth material containing lead. Management of this material exposes workers to health hazards that must be addressed in your lead compliance plan. This material contains average lead concentrations below 80 mg/kg total lead and below 5 mg/L soluble lead and is not regulated by DTSC as a hazardous substance or a hazardous waste. This material does not require disposal at a permitted landfill or solid waste disposal facility. The RWQCB has jurisdiction over reuse of this material at locations outside the job site limits.

Unregulated earth material exists throughout the job site.

Lead is typically found within the top 2 feet of material within the highway. Reuse all of the excavated material on the right-of-way.

Handle the material under all applicable laws, rules, and regulations, including those of the following agencies:

1. Cal/OSHA
2. CA RWQCB, Region 5F-Central Valley
3. CA Department of Toxic Substance Control

Manage the material as shown in the following table.

Earth Material Management

Location	Depth	Management requirements
All locations	2 feet	Reuse all earth material on job site

Delete the 24th paragraph of section 7-1.04.

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8 PROSECUTION AND PROGRESS

Replace Section 8-1.02A with:

8-1.02A General

Before or at the preconstruction conference, submit a progress schedule on a form of your choice.

On the schedule, show the order in which you propose to carry out the work, the start dates of the several salient features of the work (including procurement of materials, plant, and equipment), and the contemplated dates for completing those salient features.

If the contract is more than 60 working days, submit an update of the schedule on or before the last day of each month, showing the status of work actually completed during the period preceding the 20th of the month.

Subsequent to the time that submittal of a progress schedule is required, no progress payments will be made for any work until a satisfactory schedule has been submitted to the Engineer.

Delete Sections 8-1.02B and 8-1.02C.

Replace *Reserved* in section 8-1.04F with:

8-1.04F Flexible Start

The 1st paragraph of section 8-1.04B does not apply.

Within 10 days after receiving notice that the Contract has been approved by the Engineer, submit a request for authorization to start job site activities. The request must include:

1. Progress schedule
2. Date you and the Engineer have agreed upon to start job site activities

The Department does not allow changes to the request after it is authorized.

Except for measuring controlling field dimensions and locating utilities, do not start job site activities until your WPCP or SWPPP, whichever applies, is received and authorized and the following submittals are received:

1. Notice of Materials To Be Used form.
2. Contingency plan for reopening closures to traffic.

If you obtain authorization to start job site activities for the date you requested, start job site activities on the requested date. If you fail to submit a request for authorization to start job site activities as specified or if the request is not authorized, start job site activities within 15 days after receiving notice of Contract approval. Start work before August 5, 2024.

Replace Section 8-1.13 with:

8-1.13 Contractor's Control Termination

The Department may terminate your control of the work for failure to do any of the following:

1. Supply an adequate workforce
2. Supply material as described
3. Pay subcontractors
4. Prosecute the work as described in the Contract

The Department may also terminate your control for failure to maintain insurance coverage.

For a Federal-aid project, the Department may terminate your control of the work for failure to include "Required Contract Provisions, Federal-Aid Construction Contracts" in subcontracts.

The Department gives you notice at least five (5) business days before terminating control. The notice describes the failures and the time allowed to remedy the failures. If failures are not remedied within the time provided, the Department takes control of the work.

The Department may complete the work if the Department terminates the Contractor's control or you abandon the project. The Department determines the unpaid balance under the Contract.

At any time before final payment of all claims, the Department may convert a Contractor's control termination to a Contract termination.

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9 PAYMENT

Replace Section 9-1.16A with:

9-1.16A General

For a contract with more than 20 working days, you may request that progress payments be made. If approved by the Engineer, submit a fully itemized invoice, in triplicate, covering the actual work performed. The invoice must reference the Department of Transportation and the contract number.

For a contract with 20 working days or less, payment will be made after contract acceptance.

No progress payment will be made when, in the opinion of the Engineer, the work is not proceeding in accordance with the specifications, or when the total value of the work done since the last estimate is less than \$5,000.

Delete Sections 9-1.16C and 9-1.16D.

Replace Section 9-1.17 with:

9-1.17 Payment After Contract Acceptance

9-1.17A General

Reserved

9-1.17B Reserved

9-1.17C Final Invoice

Submit a fully itemized invoice, in triplicate, within 30 days after Contract acceptance, covering the actual work performed. The invoice must reference the Department of Transportation and the contract number.

Submit claims statements with the final invoice. Claims not submitted with the final invoice will not be considered.

Submit required final utilization reports to Engineer. Failure to provide the required forms with the final invoice will result in 25 percent (25%) of the dollar value of the bill being withheld from payment until the form is submitted. The amount will be returned to Contractor when satisfactory final utilization forms are submitted.

9-1.17D Final Payment and Claims

9-1.17D(1) General

If you do not submit a claim statement, Engineer immediately processes the final invoice and the Department pays the amount due. This final payment is conclusive except as specified in Sections 5-1.27 and 9-1.21.

If you submit a claim statement, Engineer immediately processes the final invoice and the Department pays the amount due for the undisputed work. This payment is conclusive as to the amount of work completed and the amount payable except as affected by the claims or as specified in Sections 5-1.27 and 9-1.21.

9-1.17D(2) Claim Statement

9-1.17D(2)(a) General

Submit additional information as to the basis and amount of the claim within 15 days of a request by Engineer. Failure to submit requested information or to provide access to records of the information is cause for denial of the claim.

9-1.17D(2)(b) Overhead Claims

Claims for overhead expenses must be supported by an audit report by an independent Certified Public Accountant. Claims are subject to audit by the State at its discretion.

9-1.17D(2)(c) Declaration

Submit a declaration that includes the following language with the claim statement:

I declare under penalty of perjury, according to the laws of the State of California, that the foregoing claims, with specific reference to the California False Claims Act (Govt Code § 12650 et seq.) and to the extent the project contains federal funding, the U.S. False Claims Act (31 USC § 3729 et seq.), are true and correct, and that this declaration was signed on _____(date)_____, 20__ at _____, California.

9-1.17D(2)(d) Waiver

A claim is waived if:

1. Claim does not have a corresponding **Supplemental Potential Claim Record** identification number
2. Claim does not have the same nature, circumstances, and basis of claim as the corresponding **Supplemental Potential Claim Record**
3. Claim is not included in the claim statement
4. You do not comply with the claim procedures
5. You do not submit the declaration specified in Section 9-1.17D(2)(c)

9-1.17D(3) Final Determination of Claims

Failure to allow timely access to claim supporting data when requested waives the claim.

Department's costs in reviewing or auditing a claim not supported by the Contractor's accounting or other records are damages incurred by the State within the meaning of the California False Claims Act.

After claim review, Engineer makes a preliminary determination of claims and furnishes it to Contractor. Within 30 days of notification of the preliminary determination, make a presentation in support of remaining claims to a person designated by Director. Director makes the final decision on payable compensation due the Contractor and furnishes it to Contractor.

Department pays the amount due within 30 days. The final estimate is conclusive as to the amount of work completed and the amount payable except as specified in Sections 5-1.27 and 9-1.21.

Replace section 9-1.22 with:

9-1.22 Resolution of Claims

Resolution of claims will be through the State of California Victims Compensation and Government Claims Board under (Gov. Code Div. 3.6, Part 3).

[illegible]

DIVISION II GENERAL CONSTRUCTION**12 TEMPORARY TRAFFIC CONTROL**

Replace section 12-3.20 with:

12-3.20 TEMPORARY BARRIER SYSTEMS**12-3.20A General****12-3.20A(1) Summary**

Section 12-3.20 includes specifications for placing, maintaining, repairing, and removing temporary barrier systems.

Temporary barrier system consists of:

1. New or undamaged used interconnected barrier segments
2. Segment connection hardware
3. Stakes and anchor bolts

12-3.20A(2) Definitions

clear area width: Minimum width throughout the length of the barrier system that must be maintained clear of obstructions, objects, and work resources during non-working hours. The width is measured perpendicular from the non-traffic side toe.

set back distance: Space measured between the closest toe of temporary barrier and the edge of traveled way for each direction of traffic.

12-3.20A(3) Submittals

Submit as informational submittal for each type of temporary barrier system:

1. Certificate of compliance.
2. Manufacturer's installation instructions except for Type K temporary railing and temporary concrete barrier with cross bolt.
3. Manufacturer's QC test results and daily production log, through the Data Interchange for Materials Engineering (DIME) website. QC test results must include the concrete mix design number, barrier stamped ID, and must be submitted within 3 business days of QC test completion.

Submit test reports for cross bolts that certify compliance with the applicable ASTM requirements. The test reports must be from a laboratory that is accredited to International Standards Organization/International Electrotechnical Commission 17025 by the American Association for Laboratory Accreditation (A2LA) or the ANSI-ASQ National Accreditation Board.

Submit a signed manufacturer's replacement evaluation report within 10 days of damage to a temporary steel barrier system.

12-3.20A(4) Quality Assurance**12-3.20A(4)(a) General**

Temporary barrier systems must comply with MASH Test Level 3 except for Type K temporary railing.

Except for Type K temporary railing and temporary concrete barrier with cross bolt, temporary barrier systems must:

1. Be on the Authorized Materials List for highway safety features
2. Comply with the manufacturer's drawings shown on the Department's Division of Safety Programs website and the manufacturer's installation instructions

If a discrepancy exists, governing ranking in descending order is:

1. These specifications
2. Manufacturer's drawings
3. Manufacturer's installation instructions

QC sampling, testing, and inspection personnel must have an ACI Concrete Field-Testing Technician, Grade I certification.

Temporary concrete barrier segments must:

1. Comply with the requirements for tier 3 precast concrete in section 90-4
2. Be fabricated at a plant on the Authorized Facility Audit List

Concrete must be sampled and tested at the minimum frequencies shown in the following table:

Concrete QC Tests		
Quality characteristic	Test method	Minimum testing frequency
Compressive strength	ASTM C172/C172M, ASTM C31/C31M, and ASTM C39/C39M	Once per 300 cu yd of concrete cast, or every day of casting, whichever is more frequent
Slump	ASTM C143/C143M	
Temperature at time of mixing	ASTM C1064/C1064M	
Density	ASTM C138	Once per 600 cu yd of concrete cast or every 7 days of batching, whichever is more frequent
Air content	ASTM C231/C231M or ASTM C173/C173M	If concrete is air entrained, once for each set of cylinders, and when conditions warrant

A daily production log of PC activities must be maintained under section 90-4.01C(4).

12-3.20A(4)(b) Quality Control

Replace damaged temporary concrete barrier segments with exposed reinforcing steel or concrete spalls 1-1/2 inches in depth and 4 inches in width or greater.

Replace damaged temporary steel barrier segments with permanent bends, tearing, or buckling as described in the signed manufacturer's replacement evaluation report.

Realign temporary barrier system within 2 days of impact or displacement when displaced more than 3 inches except when the temporary barrier system is displaced into a traveled lane realign immediately.

12-3.20B Materials

12-3.20B(1) General

Temporary barrier segment must:

1. Be a minimum 31-1/2 inches in height
2. Have at least two lifting holes
3. Be designed to be used with temporary traffic screen when required

Temporary barrier segment may have your name or logo on each barrier segment. The name or logo must be no more than 4 inches in height and must be located no more than 12 inches above the bottom of the barrier segment.

12-3.20B(2) Temporary Concrete Barriers

12-3.20B(2)(a) General

Temporary concrete barrier segment must:

1. Be precast concrete with a minimum 4,000-psi compressive strength.
2. Have reinforcement steel that complies with section 52.
3. Have a finished surface that complies with section 51-1.03F(2).

4. Include the manufacturer's name, lot number, and month and year of manufacture stamped on the top of each barrier segment except for Type K temporary railing. The stamped information must be:
 - 4.1. No more than 6 inches in height.
 - 4.2. No more than 12 inches in length.
 - 4.3. From 3/16 to 1/4 inch in depth.
 - 4.4. Centered on the top width of the barrier segment.

Segment connection hardware must be one of the following:

1. Steel bar loops and connecting pins
2. "J" hook steel plates
3. Cross bolts

Steel bar loops must comply with ASTM A36/A36M.

Connecting pins must comply with ASTM A307. A round bar of the same diameter may be substituted for the connecting pins. The round bar must:

1. Comply with ASTM A36/A36M
2. Have a minimum length of 26 inches
3. Have a 3-inch-diameter, 3/8-inch-thick plate welded on the upper end using a 3/16-inch fillet weld

"J" hook steel plates must be a minimum 18 inches in height.

Cross bolt hardware includes:

1. Cross bolts
2. Nuts complying with ASTM A563
3. Hardened washer complying with ASTM F436, Type 1
4. Plate washer complying with ASTM A36/A36M and galvanized post fabrication under section 75-1.02B

Cross bolts must:

1. Be a 7/8-inch bolt or threaded rod and comply with one of the following:
 - 1.1. HS threaded rod ASTM 193, Grade B7
 - 1.2. HS threaded rod ASTM A449, Type 1
 - 1.3. HS nonheaded anchor bolt ASTM F1554, Grade 105, Class 2A
2. Have a permanent grade symbol and manufacturer's identifier

Epoxy adhesive must have a minimum 1650 psi bond strength, except for temporary barrier with "J" Hooks.

12-3.20B(2)(b) Temporary Concrete Barrier with "J" Hooks

The steel stakes must be 1-1/2 inches in diameter and 48 inches long.

Anchor hardware must include:

1. Anchor bolt insert 1-inch diameter, 6-inch long
2. Hex head bolt 1-inch diameter with a minimum length of 11 inches plus thickness of asphalt overlay
3. Plate washer 3/8-inch by 3-inch by 3-inch
4. Retainer ring

12-3.20B(2)(c) Temporary Concrete Barrier with Cross Bolt

Reinforcement steel must comply with ASTM A615/ASTM A706, Grade 60.

Reinforcement steel must be galvanized under section 52-3, when shown.

Combinations of reinforcing steel and welded wire reinforcement are authorized. Welded wire reinforcement must comply with ASTM A1064.

Temporary barrier segments must comply with the tolerances shown in the following table:

Precast Barrier Tolerance	
Dimension	Tolerance
Length	±1 in
Insert Placement	±1/2 in
Horizontal Alignment	±1/8 in per 10 feet of length
Deviation of Ends	
Horizontal Skew	±1/4 in
Vertical Batter	±1/8 in per foot of depth

Stakes must:

1. Comply with ASTM A36/A36M-14 or ASTM A529-14 Grade 50
2. Be 1-1/2-inch-diameter-by-48-inch-long
3. Have a plate 1/2-by-3-1/2-by-3-1/2-inch welded 2 inches down from the upper end using a 1/4-inch fillet weld under AWS D1.1 or D1.4

Anchor bolts must:

1. Be a threaded rod, 1-1/8-inch-diameter-by-10-1/2-inch-long
2. Comply with ASTM 307
3. Include a nut complying with ASTM A563
4. Include a plate washer:
 - 4.1. 1/2-by-3-1/2-by-3-1/2-inch with a 1-1/4-inch diameter hole in the center
 - 4.2. Complying with ASTM A36/A36M
 - 4.3. Galvanized post fabrication under section 75-1.02B

12-3.20B(2)(d) Type K Temporary Railing

Anchor bolts must:

1. Be a threaded rod, 1-inch-diameter-by-15-1/2-inch-long
2. Comply with ASTM 307
3. Include a nut complying with ASTM A563
4. Include a plate washer:
 - 4.1. 3/8-by-2-1/2-by-3-inch with a 1-1/8-inch diameter hole in the center
 - 4.2. Complying with ASTM A36/A36M
 - 4.3. Galvanized post fabrication under section 75-1.02B

12-3.20B(2)(e)–12-3.20B(2)(g) Reserved

12-3.20B(3) Temporary Steel Barriers

Temporary steel barriers segment must:

1. Be galvanized steel.
2. Have a joint connection.
3. Include permanent identification information with no more than 6 inches in height and 12 inches in length and centered on the top width of the segment. The identification information must include:
 - 3.1. Manufacturer's name.
 - 3.2. Serial number.
 - 3.3. Lot number.
 - 3.4. Month and year of manufacture.

12-3.20B(4)–12-3.20B(9) Reserved

12-3.20B(10) Temporary Terminal Sections

Reserved

12-3.20C Construction

12-3.20C(1) General

Clean temporary barrier segments at time of installation and at least every 6 months thereafter.

Install the temporary barrier system based on the requirements shown in the following table:

Minimum Clear Area Width

Barrier	Configuration	Height differentials 3 feet or less (ft)	Height differentials greater than 3 ft up to 8 feet (ft)	Edge of deck or height differentials greater than 8 feet (ft)	Fixed objects, falsework members, or temporary supports ^a (ft)
12'-6" temporary concrete barrier with "J" hooks	Freestanding	3	4	8	7
	3 stakes per segment traffic side	1	1	2	3
	2 anchor bolts per segment traffic side	1	1	2	3
20-foot temporary concrete barrier with "J" hooks	Freestanding	3	4	8	7
	4 stakes per segment traffic side	1	1	2	3
	3 anchor bolts per segment traffic side	1	1	2	3
50-foot temporary steel barrier	Staked or anchored at both ends only	6	7	9	10
	Staked or anchored every 250 feet	5	6	8	9
	Staked or anchored every 33 feet	1	1	3	4
10-foot, 20-foot & 30-foot temporary concrete barrier with cross bolts	Freestanding	1	2	5	5
20-foot Type K temporary railing	Freestanding	2	3	8	7
	2 stakes or 2 anchor bolts per segment traffic side	1	1	3	4
	4 stakes or 4 anchor bolts per segment	N/A	N/A	3	3

^aThe minimum clear area width to a falsework or temporary support footing can be 2 feet less than the clear area width shown. Measure clear area width to the footing edge closest to traffic.

Stake temporary barrier systems when placed on an asphalt concrete surface.

Anchor temporary barrier systems when placed on a concrete surface. For bridge decks, confirm the anchor will not penetrate closer than 1-1/2 inches from the bottom of the deck before placement. When temporary barrier is not shown, request the Engineer to verify the bridge deck thickness.

Stake or anchor a minimum 20 feet of temporary concrete barrier at each end of the temporary barrier system. For:

1. Temporary concrete barrier with "J" hooks, place a minimum of 6 stakes or anchors at each end, 3 on each side.
2. Temporary concrete barrier with cross bolts, place a minimum of 6 stakes or anchors at each end, 3 on each side.
3. Type K temporary railing, place 4 stakes or anchors at each end, 2 on each side.

For installations on concrete surfaces, drill holes and bond threaded rods or dowels under section 51-1.03E(5). Do not drill the top of supporting beams or girders, bridge expansion joints, or drains.

Install stakes and anchor bolts so the heads do not project above the top of the temporary barrier pocket profile.

For the approach zone before the protected area, place a minimum:

1. 60 feet temporary barrier on facilities with a posted speed of 45 mph or less
2. 100 feet temporary barrier on facilities with a posted speed greater than 45 mph

Offset the approach end of a temporary barrier system a minimum of 15 feet from the edge of an open traffic lane, use the offset rate shown in the following table:

Temporary Barrier System Offset Rate

Posted speed (mph)	Rate ^a
0 to 45	10:1
46 to 60	15:1
61 to 70	20:1

^aRate is longitudinally to transversely with respect to the edge of the traveled way

If a 15-foot minimum offset cannot be achieved, offset the temporary barrier the maximum distance available and install an array of temporary crash cushion modules or an authorized temporary crash cushion system at the barrier approach end.

Install a reflector on the top or face of barrier segments placed within 10 feet of a traffic lane. Space reflectors at approximately 20-foot intervals. Apply adhesive for mounting the reflector under the reflector manufacturer's instructions.

Install a Type P marker panel complying with section 82 at:

1. Each end of a temporary barrier system placed adjacent to a two-lane, two-way highway
2. The end facing traffic for a temporary barrier system installed adjacent to a one-way roadbed
3. The end of the skew nearest the traveled way when a temporary barrier system is placed on a skew

Maintain a minimum height of 31-1/2 inches above surface for temporary barrier. For paving activities adjacent to temporary barrier, do not pave within 2 feet of the barrier segments unless authorized. For paving under the temporary barrier, remove and reset the barrier.

Remove temporary barrier systems when no longer required for the work. Remove stakes and anchor bolts so that minimal damage is done to surface.

After removing the temporary barrier systems:

1. Restore the area to its previous condition or construct it to its planned condition if temporary excavation or embankment was used to accommodate the temporary barrier.
2. Remove all threaded rods or dowels to a depth of at least 1 inch below the top of a concrete surface. Fill the resulting holes with mortar under section 51-1 except cure the mortar by the water method or by the curing compound method using curing compound no. 6.

3. Repair a damaged asphalt surface by providing a clean, smooth edge around the damaged area. Repair any heaving caused by stake removal to provide a uniform surface. Remove loose debris and use compressed air to clean out the stake hole. Comply with manufacturer's requirements except fill the stake hole with grout to existing pavement elevation under section 51-1.

If the Engineer orders a lateral move of a temporary barrier system and repositioning is not shown, the lateral move is change order work except for work area access, clear area width compliance, or because of your means and methods to perform the work.

12-3.20C(2) Temporary Concrete Barriers

12-3.20C(2)(a) General

Before placing temporary concrete barrier on the job site and after each described relocation, paint the exposed surfaces of the segments with white paint complying with specifications for acrylic emulsion paint for exterior masonry.

Place and maintain the abutting ends of segments in alignment without substantial offset from each other.

Install temporary barrier systems with the last segment extending a minimum of 60 feet past the length of the protected area.

12-3.20C(2)(b) Temporary Concrete Barrier with "J" Hooks

Install a minimum 200 feet of temporary concrete barrier with "J" hooks.

Place the temporary barrier system on a concrete or asphalt concrete surface. The asphalt concrete surface must have a minimum 2 inches of asphalt concrete over 6 inches of compacted subbase.

Install two parallel temporary barrier systems, one for each direction of travel, when placed between two-way traffic. Maintain the minimum clear area as shown in the table titled "Minimum Clear Area Width" between the two systems. Maintain a minimum 1-foot set back distance.

12-3.20C(2)(c) Temporary Concrete Barrier with Cross Bolts

Install a minimum 210 feet of temporary concrete barrier with cross bolts.

Place the temporary barrier system on a concrete or asphalt concrete surface.

Do not stake or anchor down temporary barrier system, except for 20 feet at end of the barrier system.

Intermix segments of different lengths within a temporary barrier system when necessary.

For a temporary barrier system placed on a curved layout, maintain the minimum curve radius shown in the following table:

Minimum Curve Radius	
Segment length (ft)	Curve radius (ft)
10	125
20	265
30	400

Maintain a minimum 1-foot set back distance when placed between two-way traffic.

12-3.20C(2)(d) Type K Temporary Railing

Do not install Type K temporary railing on projects advertised after December 31, 2026.

Install a minimum 160 feet of Type K temporary railing.

Excavate and backfill under section 19-3.

Do not compact earth fill placed behind Type K temporary railing in a curved layout.

Place temporary barrier system on a firm, stable surface. Grade the area to provide a uniform bearing surface throughout the entire length of the system.

Anchor or stake down the first and last segment and every other segment with four stakes as shown when placed between two-way traffic. Maintain a minimum 1-foot set back distance.

12-3.20C(2)(e)–12-3.20C(2)(g) Reserved

12-3.20C(3) Temporary Steel Barriers

12-3.20C(3)(a) General

Install temporary barrier system under manufacturer's instructions.

12-3.20C(3)(b) 50-Foot Temporary Steel Barriers

Use 50-foot temporary steel barriers with or without rubber pads.

Install a minimum 250 feet of 50-foot temporary steel barrier. The last segment must extend a minimum 25 feet past the length of the protected area.

Place the temporary barrier system on a concrete or asphalt concrete surface. Do not place the system on a dirt surface.

Anchor or stake down the first and last segment of the temporary barrier system.

Maintain a minimum radius of 800 feet for segments placed on a curved layout. For tighter curves down to a 250-foot radius, contact the manufacturer before installation and provide manufacturer's written recommendation for the installation.

Maintain a minimum 2-foot set back distance on both sides of a temporary barrier system used with traffic on both sides of the barrier.

12-3.20C(3)(c)–12-3.20C(3)(h) Reserved

12-3.20C(4)–12-3.20C(9) Reserved

12-3.20C(10) Temporary Terminal Sections

Reserved

12-3.20D Payment

The payment quantity for types of temporary barrier systems is the length measured along the top of the barrier segments.

Add to the beginning of section 12-3.32C:

Place at least one (1) portable changeable message sign for each shoulder closure, one (1) portable changeable message sign for each ramp closure. The exact locations will be designated by the Engineer.

Add between the 9th and 10th paragraphs of section 12-3.32C:

Start displaying the message on the sign 5 minutes before closing the lane or shoulder or when directed by the Engineer.

Add to section 12-4.02A(2):

special days: Martin Luther King Jr Day, Cesar Chavez Day, and Easter Sunday weekend including the Friday prior.

Add to the end of section 12-4.02C(1):

Keep the full width of the traveled way open to traffic when no active construction activities are occurring in the traveled way or within 6 feet of the traveled way.

Keep the full width of the ramp traveled way open for use by traffic on designated holidays and special days.

Add to the end of section 12-4.02C(3)(a):

If work vehicles or equipment is parked on the shoulder within 6 feet of a traffic lane of a freeway or expressway, close the shoulder area as shown.

Replace section 12-4.02C(3)(j) with:**12-4.02C(3)(j) Complete Ramp Closure Hour Charts and Ramp Lane Requirement Charts**

Comply with the requirements for the ramp lane closure shown in the following charts:

Chart No. J1 Ramp Lane Closure Requirements																										
County: FRE							Route/Direction: 168 Eastbound/Westbound							Post Mile: R1.03, R4.52, R5.64, R5.85, R6.70												
Closure limits: Westbound On-Ramp from McKinley Avenue (PM R1.03) Eastbound On-Ramp from Shaw Avenue (PM R4.52) Westbound On-Ramp from Westbound Bullard Avenue (PM R5.64) Eastbound On-Ramp from Eastbound Bullard Avenue (PM R5.64) Eastbound On-Ramp from Bullard Avenue (PM R5.85) Westbound On-Ramp from Herndon Avenue (PM R6.70)																										
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Mon– Thu							S	S	S	S	S	S	S	S	S	S	S	S								
Fri							S	S	S	S	S	S	S	S	S	S	S	S								
Sat																										
Sun																										
Legend:																										
<div><div>S</div>Shoulder closure is allowed (right/left).</div>																										
<div><div></div>Work is allowed within the highway where a shoulder or lane closure is not required.</div>																										
REMARKS:																										

Chart No. J2																											
Ramp Lane Closure Requirements																											
County: FRE										Route/Direction: 168 Eastbound/Westbound										Post Mile: R5.85, R6.70							
Closure limits: Eastbound On-Ramp from Bullard Avenue (PM R5.85) Westbound On-Ramp from Herndon Avenue (PM R6.70)																											
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Mon– Thu											1	1	1	1	1												
Fri											1	1	1	1	1												
Sat																											
Sun																											
Legend: <div style="display: flex; border: 1px solid black; padding: 2px; margin-bottom: 5px;"> Provide at least 1 ramp lane, not less than 12 feet in width, open in the direction of travel. </div> <div style="display: flex; border: 1px solid black; padding: 2px;"> Work is allowed within the highway where a shoulder or lane closure is not required. </div>																											
REMARKS:																											

Chart No. J3																											
Ramp Lane Closure Requirements																											
County: FRE										Route/Direction: 180 Eastbound/Westbound										Post Mile: R57.16, R57.46, R57.74							
Closure limits: Westbound On-Ramp from North Fulton Street (PM R57.16) Eastbound On-Ramp from Van Ness Avenue (PM R57.46) Westbound On-Ramp from North Blackstone Avenue (PM R57.74)																											
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Mon– Thu							S	S	S	S	S	S	S	S	S	S	S	S									
Fri							S	S	S	S	S	S	S	S	S	S	S	S									
Sat																											
Sun																											
Legend: <div style="display: flex; border: 1px solid black; padding: 2px; margin-bottom: 5px;"> Shoulder closure is allowed (right/left). </div> <div style="display: flex; border: 1px solid black; padding: 2px;"> Work is allowed within the highway where a shoulder or lane closure is not required. </div>																											
REMARKS:																											

Chart No. J4 Ramp Lane Closure Requirements																											
County: FRE										Route/Direction: 180 Eastbound/Westbound										Post Mile: R57.16, R57.46, R57.74							
Closure limits: Westbound On-Ramp from North Fulton Street (PM R57.16) Eastbound On-Ramp from Van Ness Avenue (PM R57.46) Westbound On-Ramp from North Blackstone Avenue (PM R57.74)																											
Hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Mon– Thu											1	1	1	1	1												
Fri											1	1	1	1	1												
Sat																											
Sun																											
Legend:																											
<div><div>1</div> Provide at least 1 ramp lane, not less than 12 feet in width, open in the direction of travel.</div>																											
<div><div></div> Work is allowed within the highway where a shoulder or lane closure is not required.</div>																											
REMARKS:																											

Add to the end of section 12-4.02C(7)(b):

Except for one-way-reversing traffic-control lane closures, the maximum length of the work area inside a closure is 0.5 miles.

Not more than 1 stationary closures are allowed in each direction of travel at one time.

AA

15 EXISTING FACILITIES

Add to the end of section 15-1.03C:

At least 2 business days before hauling the material to the salvaged material stockpile location, notify the Engineer and inform the district recycle coordinator at telephone no. (559) 488-7311.

The stockpile location is:

Caltrans Electrical Maintenance
1283 N West Ave
Fresno, CA 93728

AA

DIVISION X ELECTRICAL WORK
86 GENERAL

Add between the 7th and 8th paragraphs of section 86-1.01C(1):

The schedule of values must include material and installation methods, by plan sheet, for:

- 1. Foundations by type and quantity
- 2. Cabinets and enclosures by type and quantity
- 3. Standards and poles by type and quantity
- 4. Conduit by type, size, in linear feet
- 5. Cables and conductors by type in linear feet

AA

87 ELECTRICAL SYSTEMS

Add to the beginning of section 87-1.03B(3)(a):

Use Type 3 conduit complying with UL 651 for underground installation.

Replace the 2nd paragraph of section 87-1.03H(2) with:

Use Method B to insulate a splice.

Add to the end of section 87-21.03C:

Modifying a ramp metering system includes removing, adjusting, or adding:

- 1. Foundations
- 2. Conduit
- 3. Conductors
- 4. Standards
- 5. Signal heads
- 6. Department-furnished controller assembly
- 7. Department-furnished controller cabinet
- 8. Signs

Link to the Standard Specifications and Plans applicable to the 2023 Edition of the Standard Specifications by reference made a part of the Agreement are available at:

<https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications>

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-4	CONSTRUCTION AREA SIGNS
5-15	ELECTRICAL PLANS

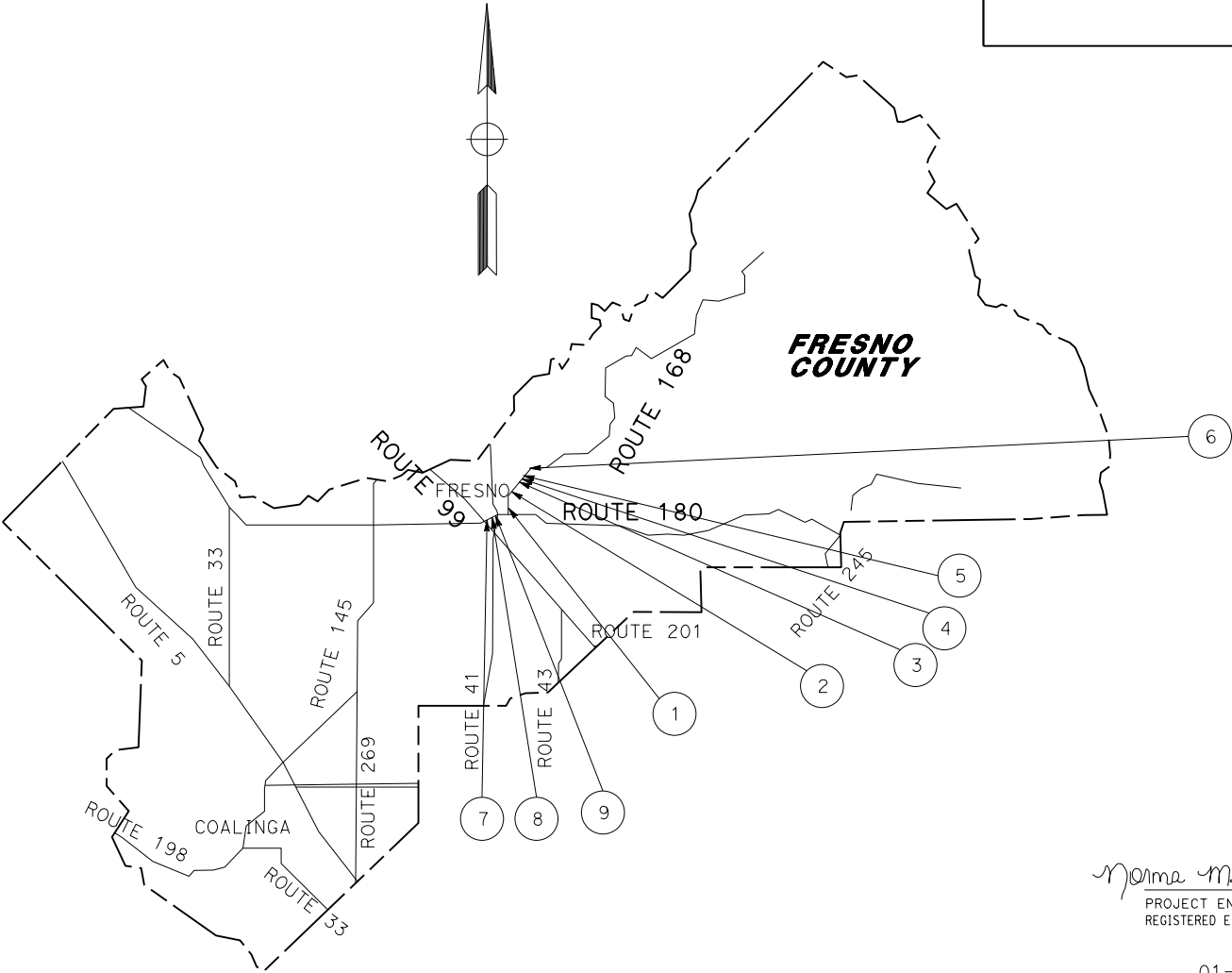
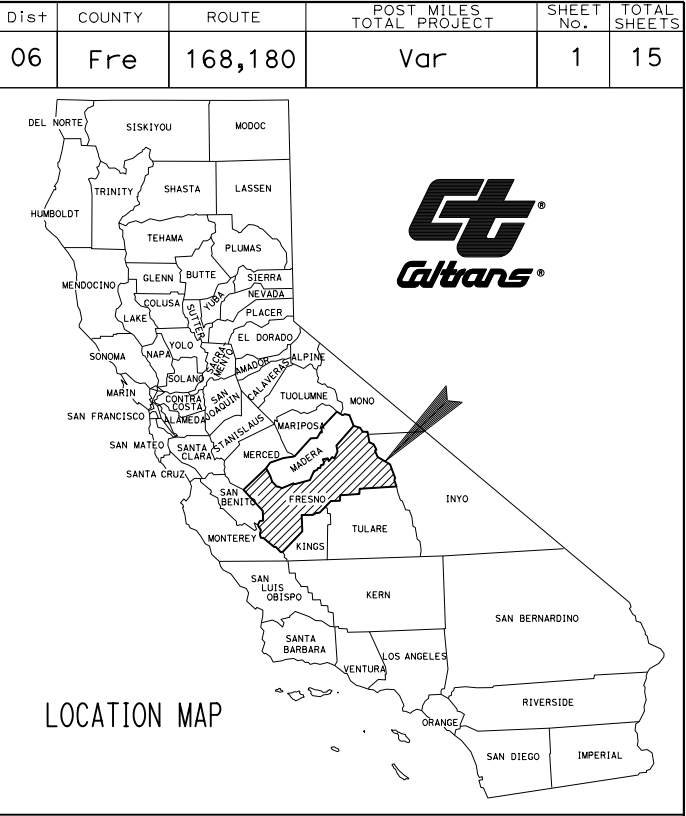
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN FRESNO COUNTY
AT VARIOUS LOCATIONS

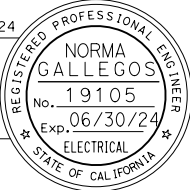
TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2023

LOCATIONS OF CONSTRUCTION

Loc No.	#	TMS ELEMENT	TMS ID	COUNTY	ROUTE	PM	DESCRIPTION
1		RM	RM-0041	Fre	168	R1.08	MCKINLEY AVENUE
2		RM	RM-0046	Fre	168	R4.51	WB SHAW AVENUE
3		RM	RM-0147	Fre	168	R5.61	EB BULLARD AVENUE
4		RM	RM-0034	Fre	168	R5.65	WB BULLARD AVENUE
5		RM	RM-0048	Fre	168	R5.83	WB BULLARD AVENUE
6		RM	RM-0033	Fre	168	R6.71	EB HERNON AVENUE
7		RM	RM-0059	Fre	180	R57.17	FULTON STREET
8		RM	RM-0062	Fre	180	R57.45	VAN NESS AVENUE
9		RM	RM-0058	Fre	180	R57.75	BLACKSTONE AVENUE



Norma M. Gallegos 01-25-24
PROJECT ENGINEER DATE
REGISTERED ELECTRICAL ENGINEER
01-28-24
PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CONTRACT No.	06A3082
PROJECT ID	0623000178

PROJECT MANAGER	ANTHONY R. LOPEZ
DESIGN MANAGER	NORMA GALLEGOS

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	2	15

Gurjot Chahal
REGISTERED ELECTRICAL ENGINEER
01-28-24
PLANS APPROVAL DATE

01-28-24
DATE

REGISTERED PROFESSIONAL ENGINEER
GURJOT CHAHAL
No. 88922
Exp. 9/30/24
CIVIL
STATE OF CALIFORNIA

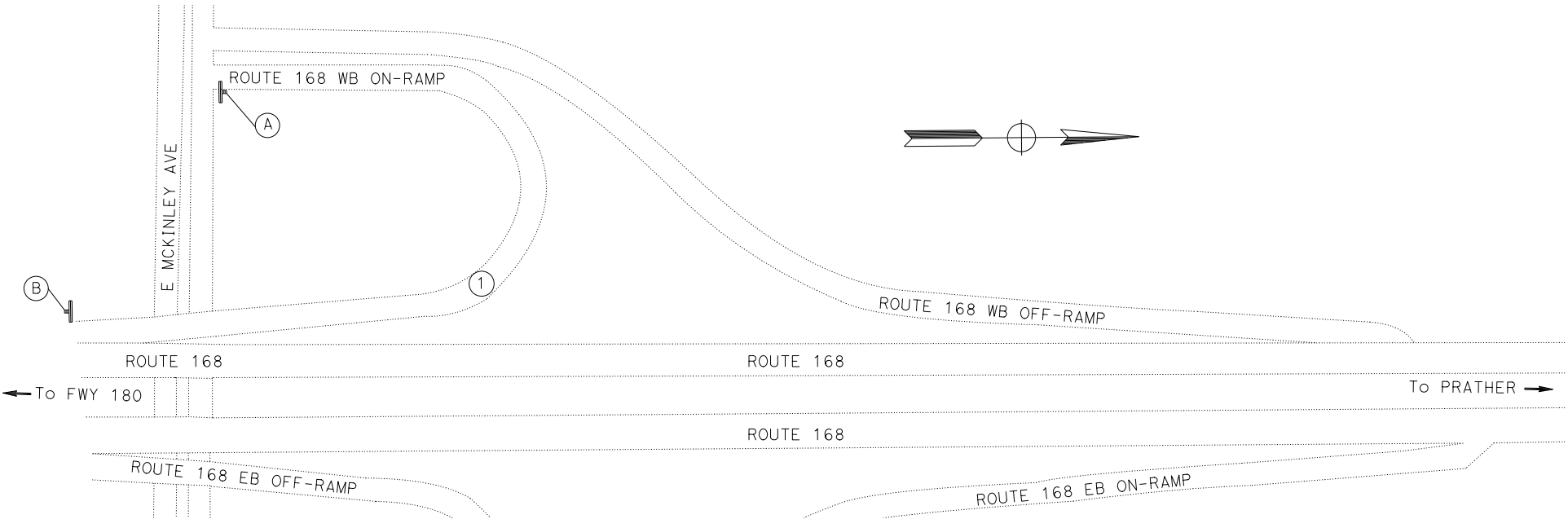
THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
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NOTE:

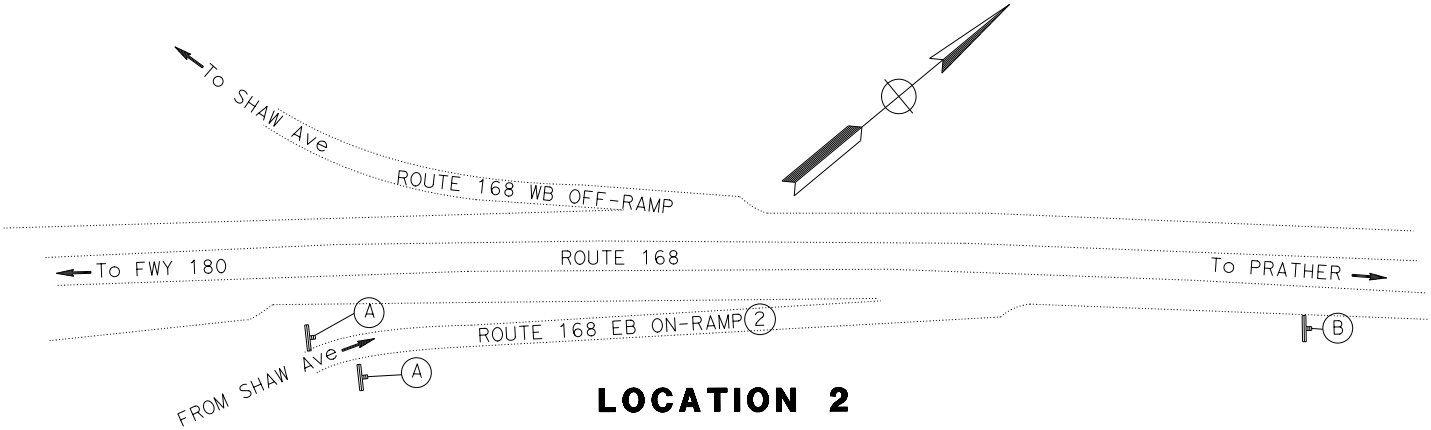
LOCATIONS OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE.
EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.

STATIONARY MOUNTED
CONSTRUCTION AREA SIGNS

SIGN No. #	SIGN DESIGNATION	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
(A)	W20-1	48" x 48"	ROAD WORK AHEAD	1-6" x 6"	3
(B)	G20-2	48" x 24"	END ROAD WORK	1-4" x 4"	2



LOCATION 1
Fre Rte 168 PM R1.08



LOCATION 2
Fre Rte 168 PM R4.51

CONSTRUCTION AREA SIGNS

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	3	15

Git Call
REGISTERED ELECTRICAL ENGINEER
01-28-24
PLANS APPROVAL DATE

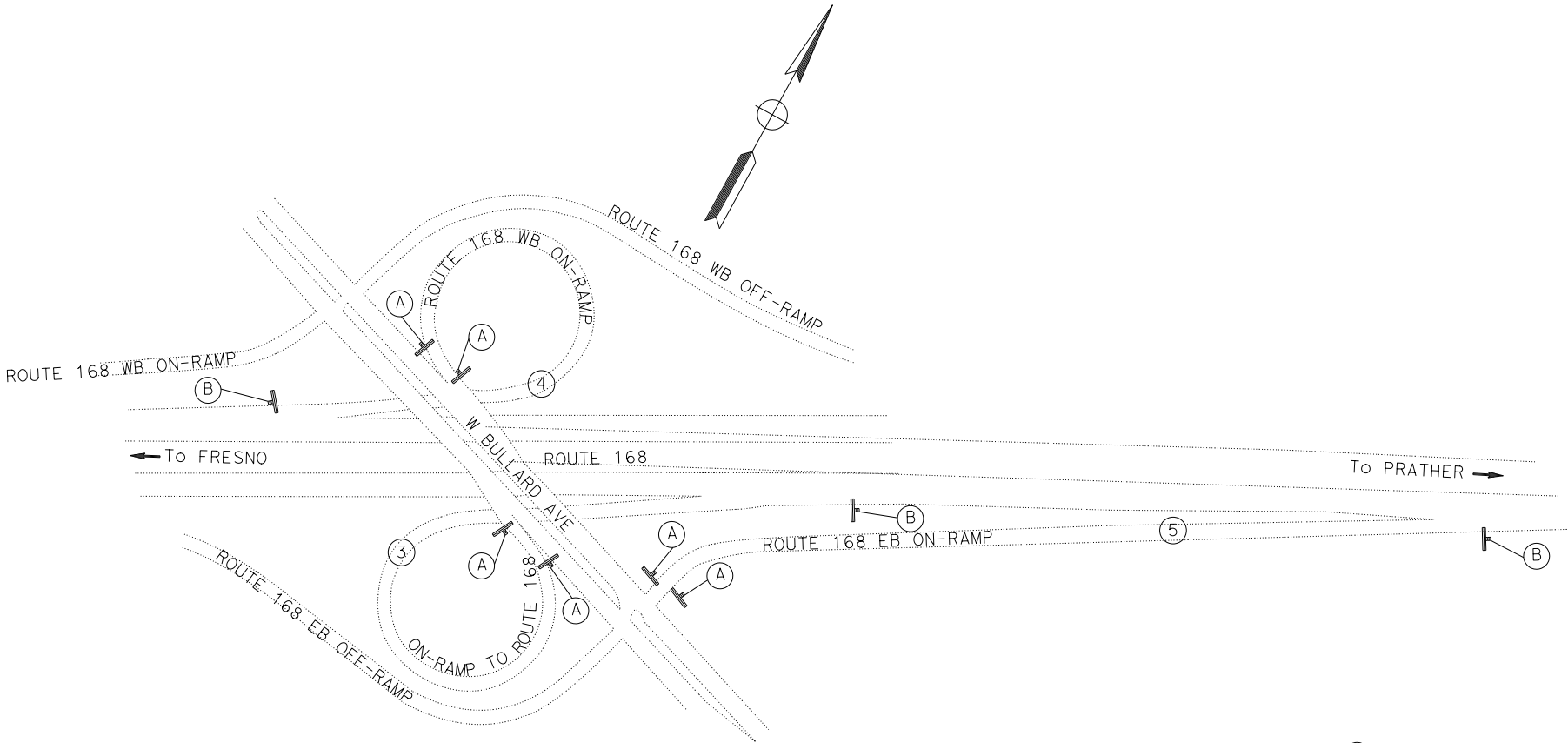
01-28-24
DATE

REGISTERED PROFESSIONAL ENGINEER
GURJOT CHAHAL
No. 88922
Exp. 9/30/24
CIVIL
STATE OF CALIFORNIA

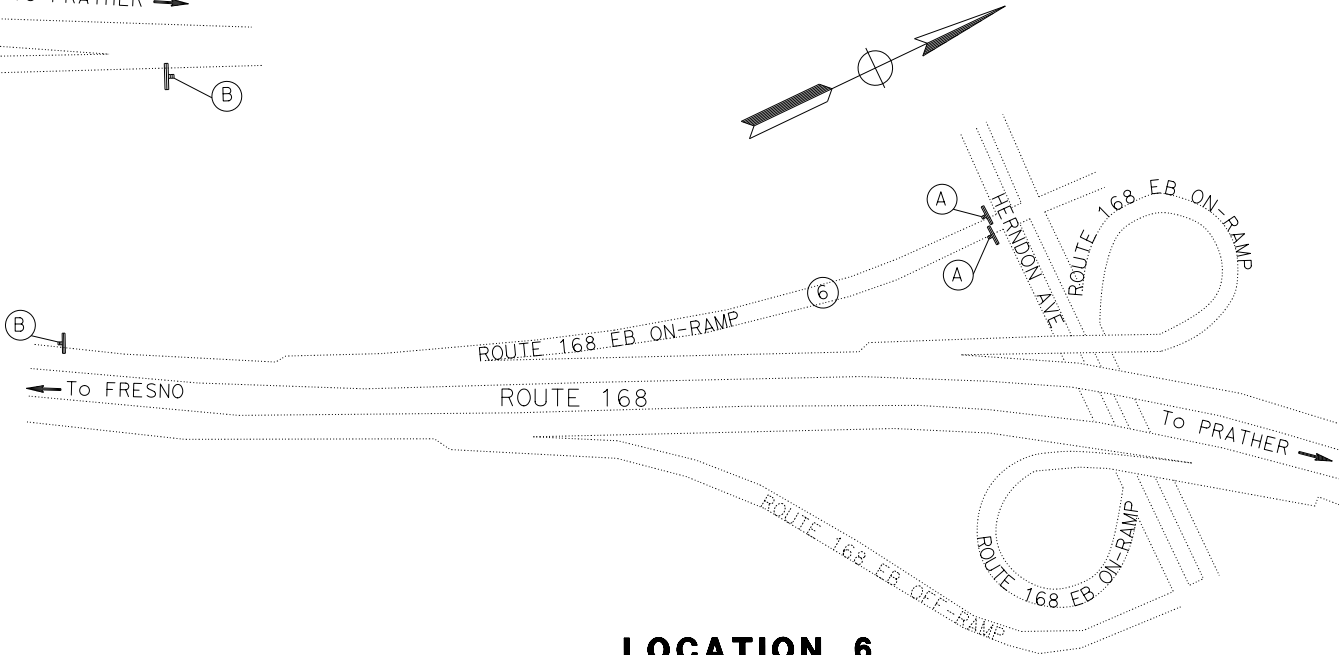
THE STATE OF CALIFORNIA OR ITS OFFICERS
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STATIONARY MOUNTED
CONSTRUCTION AREA SIGNS

SIGN No. #	SIGN DESIGNATION	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
(A)	W20-1	48" x 48"	ROAD WORK AHEAD	1-6" x 6"	8
(B)	G20-2	48" x 24"	END ROAD WORK	1-4" x 4"	4



LOCATION 3,4 AND 5
Fre Rte 168 PMs R5.61, R5.65 AND R5.83



LOCATION 6
Fre Rte 168 PM R6.71

CONSTRUCTION AREA SIGNS

CS-2

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	4	15

Git Call
REGISTERED ELECTRICAL ENGINEER
01-28-24
PLANS APPROVAL DATE

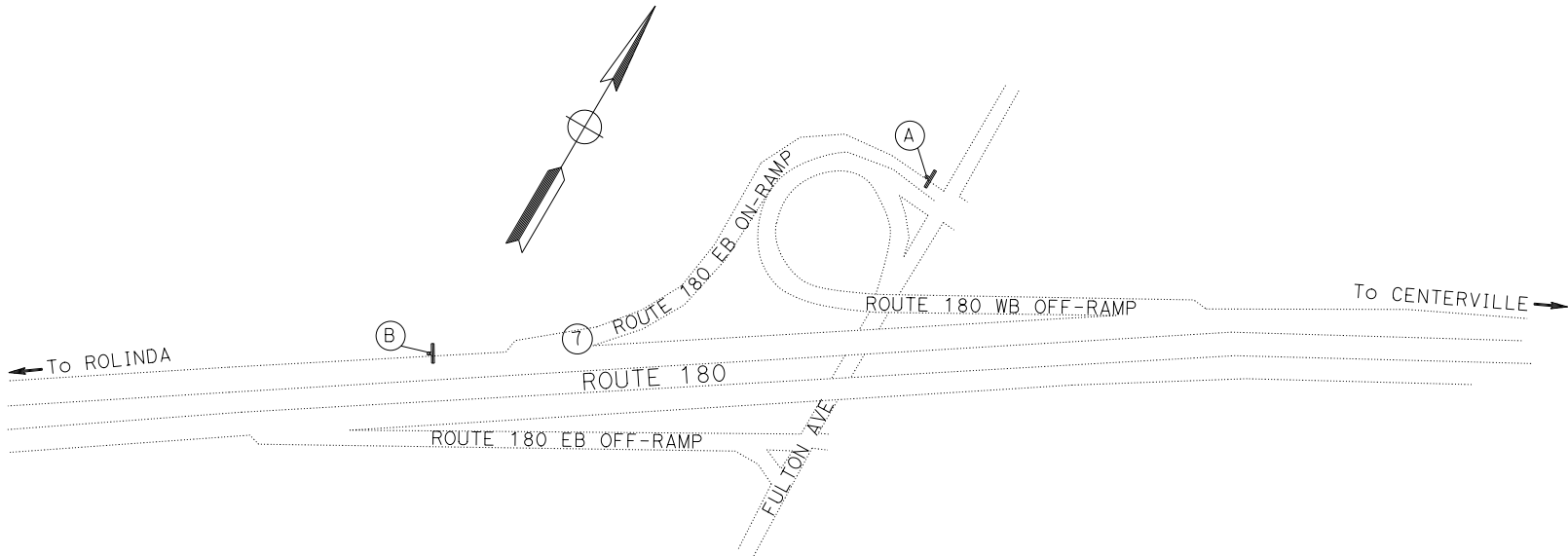
01-28-24
DATE

REGISTERED PROFESSIONAL ENGINEER
GURJOT CHAHAL
No. 88922
Exp. 9/30/24
CIVIL
STATE OF CALIFORNIA

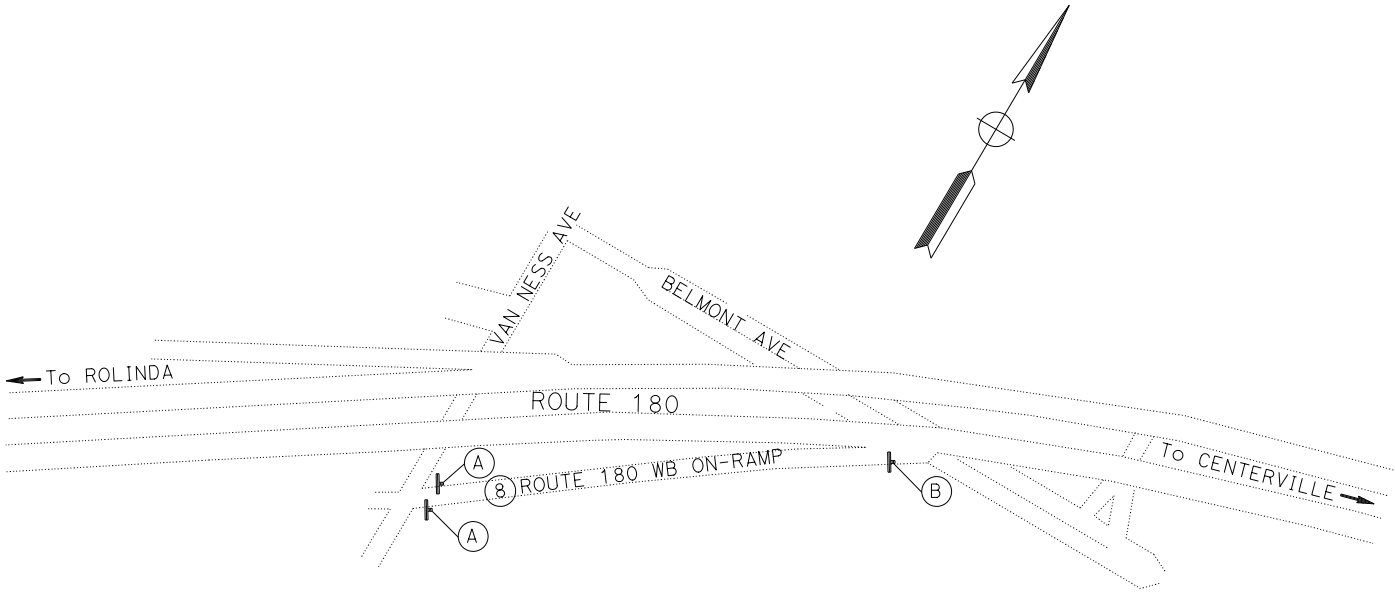
THE STATE OF CALIFORNIA OR ITS OFFICERS
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STATIONARY MOUNTED
CONSTRUCTION AREA SIGNS

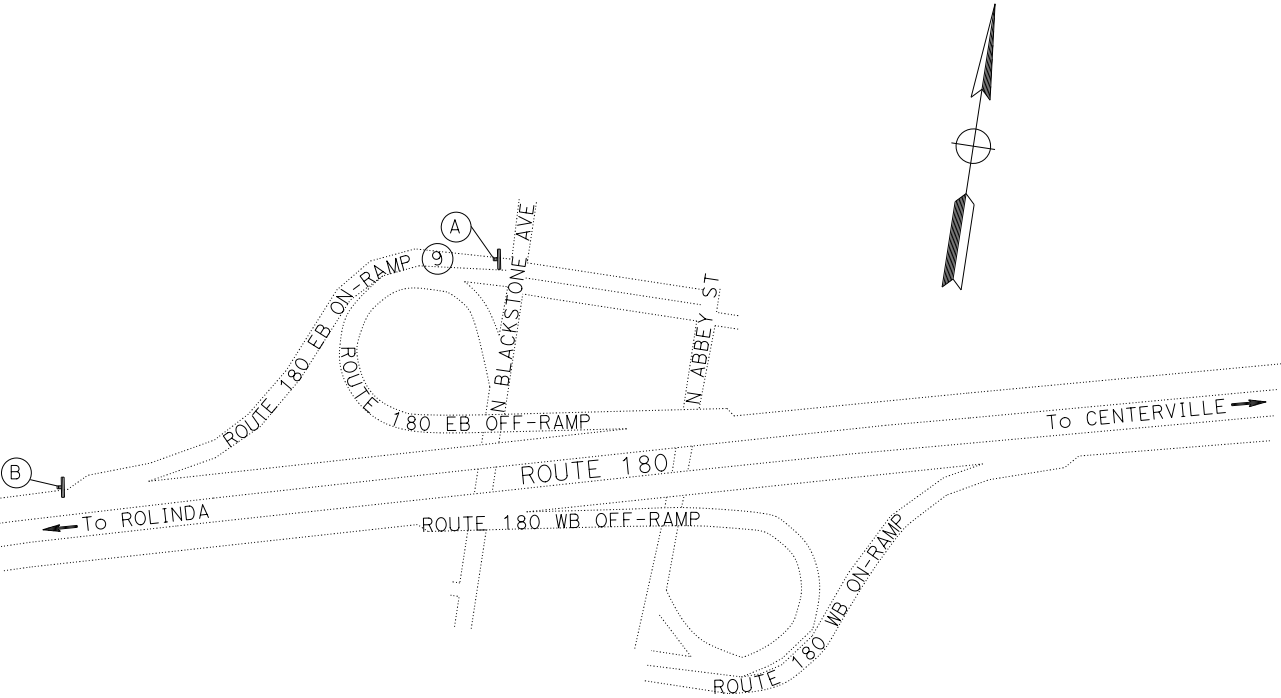
SIGN No.ⓧ	SIGN DESIGNATION	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
Ⓐ	W20-1	48" x 48"	ROAD WORK AHEAD	1-6" x 6"	4
Ⓑ	G20-2	48" x 24"	END ROAD WORK	1-4" x 4"	3



LOCATION 7
Fre Rte 180 PM R57.17



LOCATION 8
Fre Rte 180 PM R57.45



LOCATION 9
Fre Rte 180 PM R57.75

CONSTRUCTION AREA SIGNS

CS-3

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

MAINTENANCE INTELLIGENT TRANSPORTATION SYSTEMS

FUNCTIONAL SUPERVISOR
ANTHONY R. LOPEZ

CALCULATED-DESIGNED BY
CHECKED BY

CALEB DULAY
NORMA GALLEGOS

REVISED BY
DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

MAINTENANCE INTELLIGENT TRANSPORTATION SYSTEMS

FUNCTIONAL SUPERVISOR

ANTHONY R. LOPEZ

CALCULATED-DESIGNED BY

CHECKED BY

NOAH NEVAREZ

NORMA GALLEGOS

REVISED BY

DATE REVISED

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. Exist UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

LEGEND: (THIS SHEET ONLY)

- 1 Exist 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 06421680000691

AMPERES	VOLTS	POLES	NAMEPLATE	METER	SPECIAL REQUIREMENTS
100	240	3	MAIN DISCONNECT	YES	-
70	120	1	RAMP METER	YES	-
20	120	1	TDC	YES	-
40	240	2	HIGHWAY LIGHTING	NO	IV PEC

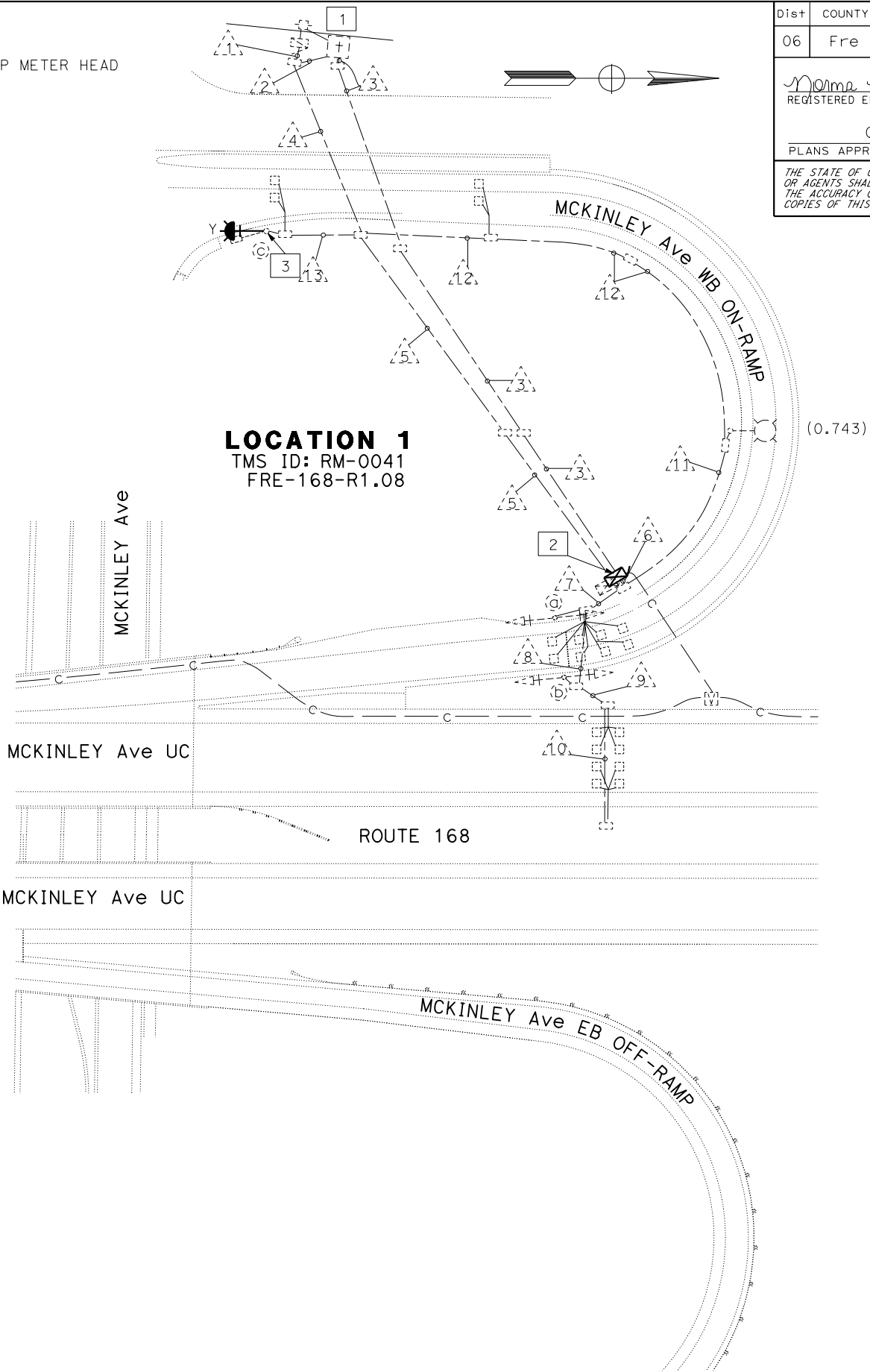
- 2 RS Exist MODEL 334 CABINET WITH MODEL 2070E CONTROLLER ASSEMBLY. RR Exist FIBER EQUIPMENT. INSTALL DEPARTMENT-FURNISHED MODEL 334LS CONTROLLER CABINET ON Exist FOUNDATION. INSTALL Exist FIBER EQUIPMENT. INSTALL DEPARTMENT FURNISHED MODEL 2070LX CONTROLLER UNIT AND LOOP DETECTOR SENSOR UNITS.
- 3 RS Exist TYPE 1-A STANDARD, RC Exist TYPE 1-A FOUNDATION. INSTALL TYPE 1-D (12') FLASHING BEACON ON TYPE 1-D (12') POLE FOUNDATION, SEE DETAIL A ON SHEET ED-1 FOR INSTALLATION.

CONDUIT AND CONDUCTOR SCHEDULE

CABLE SCHEDULE		CONDUIT RUN NUMBER AND SIZE												
CABLE TYPE	STD	1	2	3	4	5	6	7	8	9	10	11	12	13
		2"	1 1/2"	2"	2"	2"	2 3/4"	3"	3"	3"	3"	2"	2"	2"
5-C	(a)						1	1						
5-C	(b)						1	1	1					
5-C	(c)						1					1	1	1
TOTAL CIRCUIT							3	2	1					
AWG														
#4	334 CABINET	2			2	2								
#8	TDC	2	2											
#6	LIGHTING	2			2								2	
DETECTORS-TYPE B DLC														
DEMAND #1							1	1						
PASSAGE #1							1	1						
DEMAND #2							1	1						
PASSAGE #2							1	1						
QUE #1-#2							1					1	1	1
MAIN LINE							8	8	8	8	4			
TOTAL							13	12	8	8	4	1	1	1

SYMBOLS:

Exist RAMP METER HEAD



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	5	15

Norma M. Gallegos

REGISTERED ELECTRICAL ENGINEER

DATE 01-25-24

01-28-24

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER

NORMA M. GALLEGOS

No. 19105

Exp. 6-30-24

ELECTRICAL

STATE OF CALIFORNIA

MODIFYING RAMP METERING SYSTEM

E-1

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	6	15

Norma M. Gallegos
REGISTERED ELECTRICAL ENGINEER
DATE 01-28-24
PLANS APPROVAL DATE

01-25-24
No. 19105
Exp 6-30-24
ELECTRICAL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. Exist UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

LEGEND (FOR THIS SHEET ONLY):

- 1 Exist 120/240 V, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

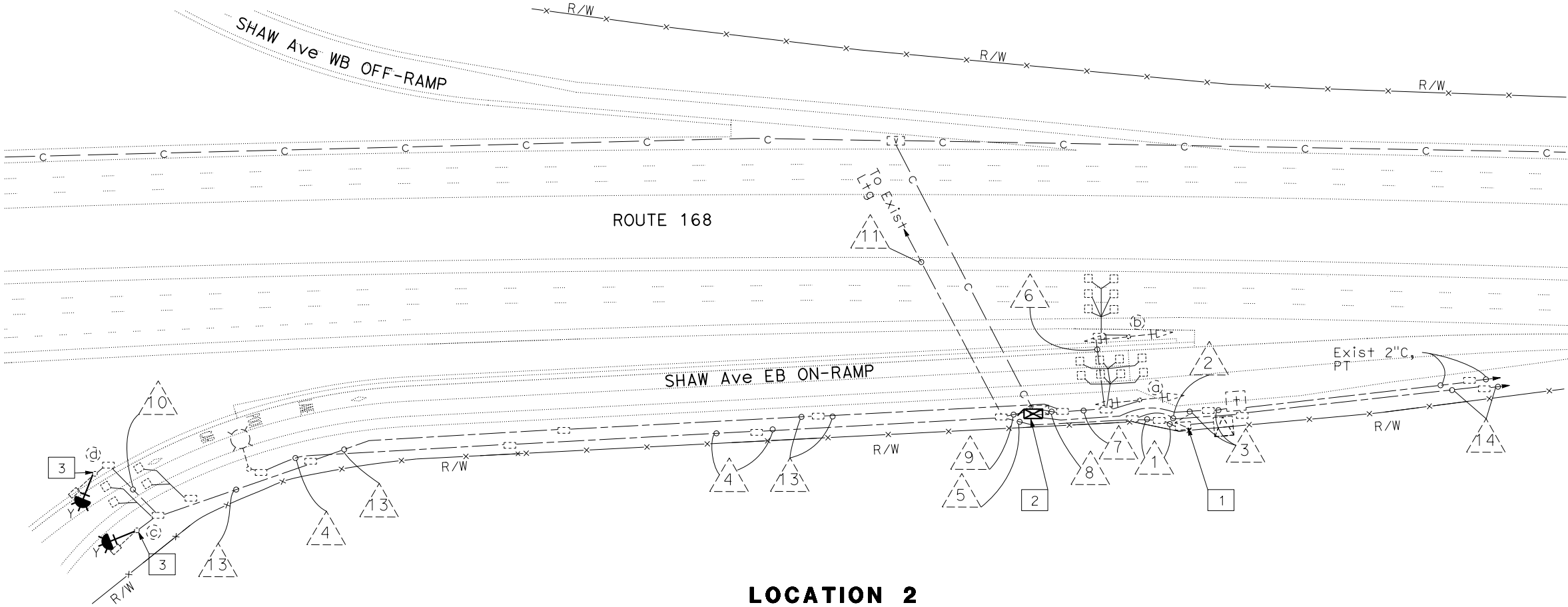
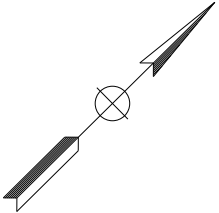
CTID No. 06421680004452

AMPERES	VOLTS	POLES	NAMEPLATE	METER
100	240	3	MAIN DISCONNECT	YES
70	120	1	RAMP METERING	YES
20	120	1	TDC	YES
40	240	2	HIGHWAY LIGHTING	NO

- 2 RS Exist MODEL 334 CABINET WITH MODEL 2070E CONTROLLER ASSEMBLY. RR Exist FIBER EQUIPMENT. INSTALL DEPARTMENT-FURNISHED MODEL 334LS CONTROLLER CABINET ON Exist FOUNDATION. INSTALL Exist FIBER EQUIPMENT. INSTALL DEPARTMENT FURNISHED MODEL 2070LX CONTROLLER UNIT AND LOOP DETECTOR SENSOR UNITS.
- 3 RS Exist TYPE 1-A STANDARD, RC Exist TYPE 1-A FOUNDATION. INSTALL TYPE 1-D (12') FLASHING BEACON ON TYPE 1-D (12') POLE FOUNDATION, SEE DETAIL A ON SHEET ED-1 FOR INSTALLATION.

CONDUIT AND CONDUCTOR SCHEDULE

CABLE SCHEDULE		CONDUIT RUN NUMBER AND SIZE													
CABLE TYPE	STD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
5-C	(a)	3"	2"	2"	2"	3"	2"	3"	2 1/2"	2"	2"	2"	2"	2"	2"
5-C	(b)						1	1	1						
5-C	(c)								1					1	
5-C	(d)								1		1			1	
TOTAL							1	2	4		1			2	
AWG	CIRCUIT														
#2	334 CABINET	2				2				2					
#6	LIGHTING	2			2	2						2			
12C-#20	TELEPHONE CABLE	2	2												2
DETECTORS-TYPE B DLC															
DEMAND #1								1	1						
PASSAGE #1								1	1						
DEMAND - HCV								1	1						
PASSAGE - HOV								1	1						
QUE #1-#2									1					1	
MAIN LINE							6	6	6						
TOTAL							6	10	11					1	



LOCATION 2
TMS ID: RM-0046
FRE-168-R4.51

MODIFYING RAMP METERING SYSTEM

E-2

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

MAINTENANCE INTELLIGENT TRANSPORTATION SYSTEMS

FUNCTIONAL SUPERVISOR
ANTHONY R. LOPEZ

CALCULATED-DESIGNED BY
CHECKED BY

NOAH NEVAREZ
NORMA GALLEGOS

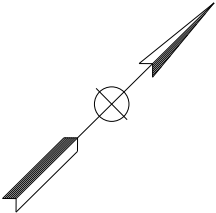
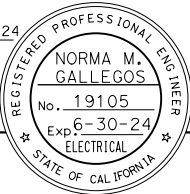
REVISED BY
DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	7	15

Norma M. Gallegos
REGISTERED ELECTRICAL ENGINEER
DATE 01-28-24
PLANS APPROVAL DATE

01-25-24
No. 19105
Exp 6-30-24
ELECTRICAL

THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.



NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. EXIST UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OTHER SYSTEM NOT SHOWN.

LEGEND: (THIS SHEET ONLY)

- 1
- EXIST 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH
THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 06421680005362

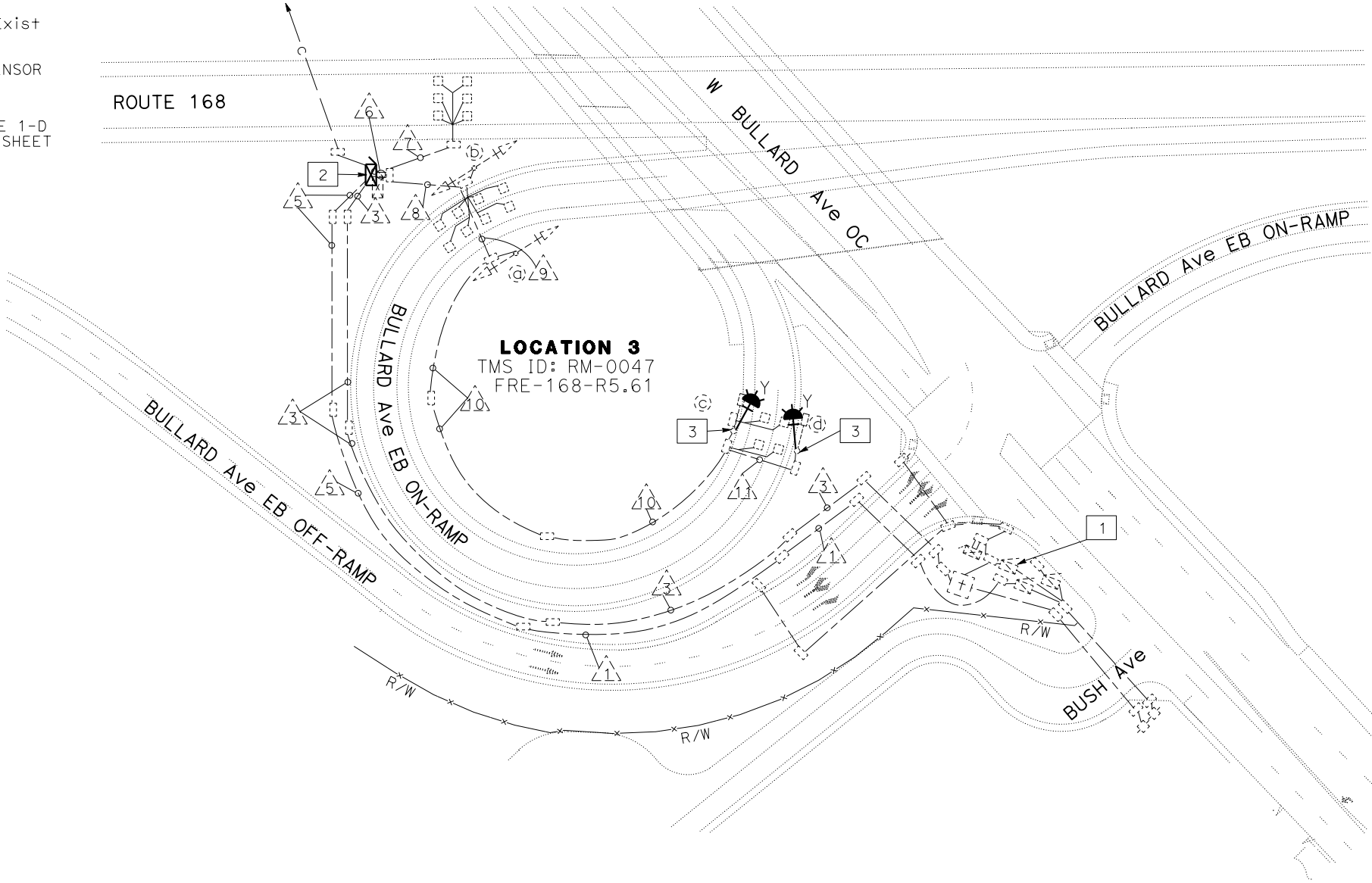
AMPERES	VOLTS	POLES	NAMEPLATE	METER	SPECIAL REQUIREMENTS
100	240	3	MAIN DISCONNECT	YES	-
60	120	1	RAMP METER	YES	-
20	120	1	SPARE	YES	-
30	240	2	HIGHWAY LIGHTING	NO	IV PEC

- 2
- RS EXIST MODEL 334 CABINET WITH MODEL 2070E CONTROLLER ASSEMBLY. RR EXIST
FIBER EQUIPMENT. INSTALL DEPARTMENT-FURNISHED MODEL 334LS CONTROLLER
CABINET ON EXIST FOUNDATION. INSTALL EXIST FIBER EQUIPMENT. INSTALL
DEPARTMENT FURNISHED MODEL 2070LX CONTROLLER UNIT AND LOOP DETECTOR SENSOR
UNITS.

- 3
- RS EXIST TYPE 1-A STANDARD, RC EXIST TYPE 1-A FOUNDATION. INSTALL TYPE 1-D
(12') FLASHING BEACON ON TYPE 1-D (12') POLE FOUNDATION, SEE DETAIL A ON SHEET
ED-1 FOR
INSTALLATION.

CONDUIT AND CONDUCTOR SCHEDULE

CABLE SCHEDULE		CONDUIT RUN NUMBER AND SIZE										
CABLE TYPE	STD	1	2	3	4	5	6	7	8	9	10	11
5-C	(d)	2"	1 1/2"	1 1/2"	2"	2"	2 3/4"	2"	3"	2"	2"	2"
5-C	(b)						1		1	1		
5-C	(c)						1		1	1	1	
5-C	(d)						1		1	1	1	1
TOTAL CIRCUIT						4		4	3	2	1	
AWG	334 CABINET	2				2						
#2	LIGHTING	2	2		2							
#6	TELEPHONE CABLE			1								
12C-#20	DETECTORS-TYPE B DLC											
DEMAND #1						1		1				
PASSAGE #1						1		1				
DEMAND - HOV						1		1				
PASSAGE - HOV						1		1				
QUE #1-#2						1		1	1	1		
MAIN LINE						6	6					
TOTAL						11	6	5	1	1		



MODIFYING RAMP METERING SYSTEM

E-3

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

Dist

COUNTY

ROUTE

POST MILES
TOTAL PROJECT

SHEET
No.

TOTAL
SHEETS

06

Fre

168,180

Var

8

15

Norma M. Gallegos

01-25-24

REGISTERED ELECTRICAL ENGINEER

DATE

01-28-24

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
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REGISTERED PROFESSIONAL ENGINEER

NORMA M. GALLEGOS

No. 19105

Exp. 6-30-24

ELECTRICAL

STATE OF CALIFORNIA

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. EXIST UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. OTHER SYSTEM NOT SHOWN.

LEGEND: (THIS SHEET ONLY)

- 1 EXIST 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH
THE FOLLOWING CIRCUIT BREAKERS:

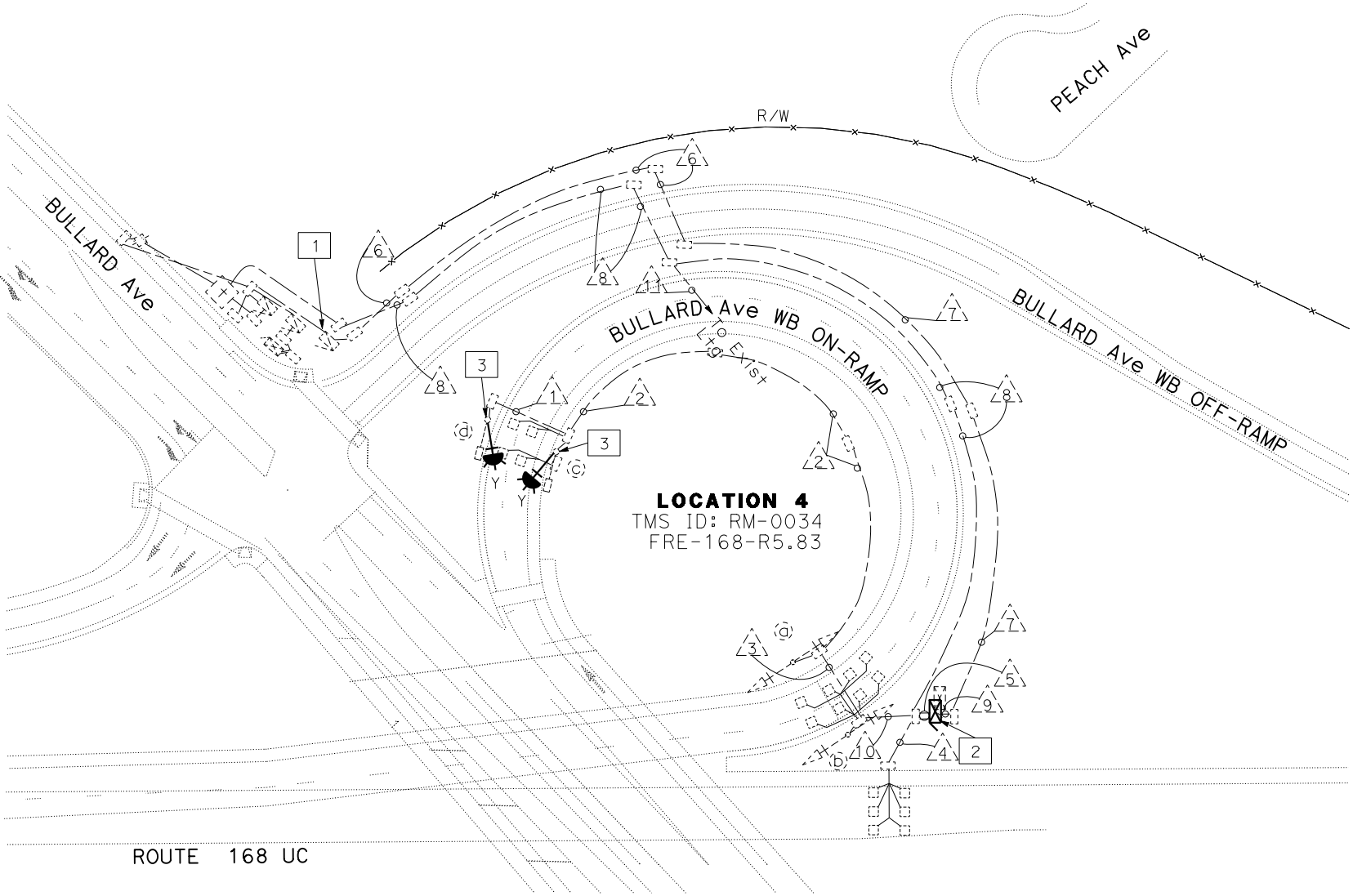
CTID No. 06421680005263

AMPERES	VOLTS	POLES	NAMEPLATE	METER	SPECIAL REQUIREMENTS
100	240	3	MAIN DISCONNECT	YES	-
70	120	1	RAMP METER	YES	-
70	120	1	CCTV	YES	-
40	240	2	HIGHWAY LIGHTING	NO	IV (4)
20	240	2	SIGN LIGHTING	NO	SC-I SIGN CONTROL

- 2 RS EXIST MODEL 334 CABINET WITH MODEL 2070E CONTROLLER ASSEMBLY. RR EXIST
FIBER EQUIPMENT. INSTALL DEPARTMENT-FURNISHED MODEL 334LS CONTROLLER
CABINET ON EXIST FOUNDATION. INSTALL EXIST FIBER EQUIPMENT. INSTALL
DEPARTMENT FURNISHED MODEL 2070LX CONTROLLER UNIT AND LOOP DETECTOR SENSOR UNITS.
- 3 RS EXIST TYPE 1-A STANDARD, RC EXIST TYPE 1-A FOUNDATION. INSTALL TYPE 1-D (12')
FLASHING BEACON ON TYPE 1-D (12') POLE FOUNDATION, SEE DETAIL A ON SHEET ED-1 FOR
INSTALLATION.

CONDUIT AND CONDUCTOR SCHEDULE

CABLE SCHEDULE		CONDUIT RUN NUMBER AND SIZE										
CABLE TYPE	STD	1 2"	2 2"	3 2"	4 3"	5 2 1/2"	6 2"	7 2"	8 1 1/2"	9 2"	10 3"	11 2"
5-C	(a)			1		1					1	
5-C	(b)					1					1	
5-C	(c)		1	1		1					1	
5-C	(d)	1	1	1		1					1	
	TOTAL	1	2	3		4					4	
AWG	CIRCUIT											
#2	334 CABINET						2	2		2		
#6	LIGHTING						2					2
12C-#20	TELEPHONE CABLE					1			1			
	DETECTORS-TYPE B DLC											
DEMAND #1						1					1	
PASSAGE #1						1					1	
DEMAND - HOV						1					1	
PASSAGE - HOV						1					1	
QUE #1-#2			1	1		1					1	
MAIN LINE					6	6						
	TOTAL		1	1	6	11					5	



MODIFYING RAMP METERING SYSTEM

E-4

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	9	15

Norma M. Gallegos
REGISTERED ELECTRICAL ENGINEER
DATE 01-28-24
PLANS APPROVAL DATE

01-25-24
No. 19105
Exp. 6-30-24
ELECTRICAL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

- NOTES:
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
 - EXIST+ UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

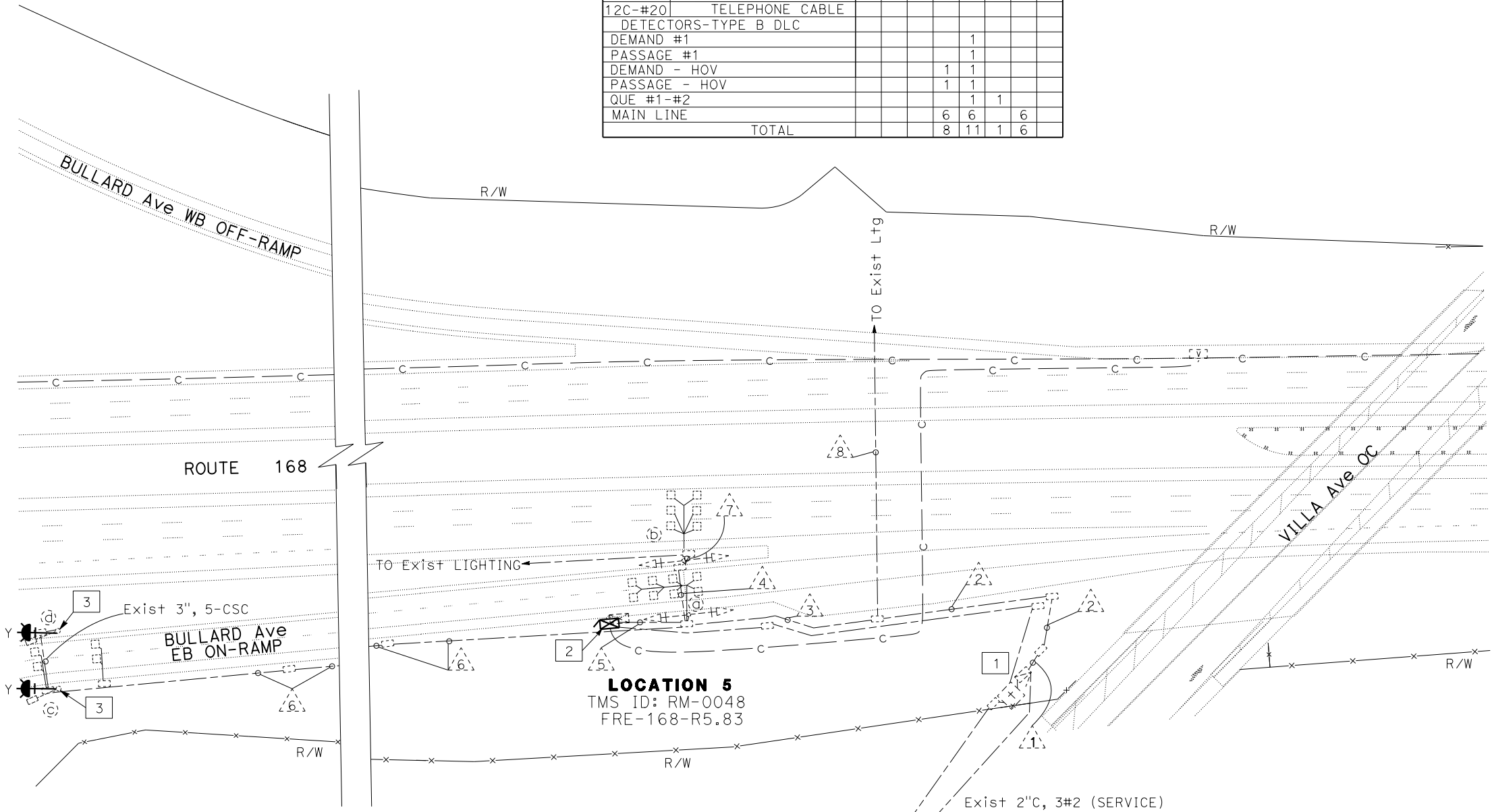
LEGEND: (FOR THIS SHEET ONLY)

- 1
- EXIST+ 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:
- CTID No. 06421680005600

AMPERES	VOLTS	POLES	NAMEPLATE	METER
100	240	3	MAIN DISCONNECT	YES
70	120	1	RAMP METER	YES
40	240	2	HIGHWAY LIGHTING	NO

CONDUIT AND CONDUCTOR SCHEDULE

CABLE SCHEDULE		CONDUIT RUN NUMBER AND SIZE							
CABLE TYPE	STD	1	2	3	4	5	6	7	8
5-CSC	(a)					1			
5-CSC	(b)				1	1			
5-CSC	(c)					1	1		
5-CSC	(d)					1	1		
TOTAL					1	4	2		
CIRCUIT									
#6	RAMP METERING	2	2	2		2			
#6	HIGHWAY LIGHTING	2	2		2		2	2	2
#8	SIGN ILLUMINATION	2							
TELEPHONE CABLE									
12C-#20	DETECTORS-TYPE B DLC								
DEMAND #1						1			
PASSAGE #1						1			
DEMAND - HOV					1	1			
PASSAGE - HOV					1	1			
QUE #1-#2						1	1		
MAIN LINE					6	6		6	
TOTAL					8	11	1	6	



- 2
- RS EXIST+ MODEL 334 CABINET WITH MODEL 2070E CONTROLLER ASSEMBLY. RR EXIST+ FIBER EQUIPMENT. INSTALL DEPARTMENT-FURNISHED MODEL 334LS CONTROLLER CABINET ON EXIST+ FOUNDATION. INSTALL EXIST+ FIBER EQUIPMENT. INSTALL DEPARTMENT FURNISHED MODEL 2070LX CONTROLLER UNIT AND LOOP DETECTOR SENSOR UNITS.
- 3
- RS EXIST+ TYPE 1-A STANDARD, RC EXIST+ TYPE 1-A FOUNDATION. INSTALL TYPE 1-D (12') FLASHING BEACON ON TYPE 1-D (12') POLE FOUNDATION, SEE DETAIL A ON SHEET ED-1 FOR INSTALLATION.

MODIFYING RAMP METERING SYSTEM

E-5

APPROVED FOR ELECTRICAL WORK ONLY

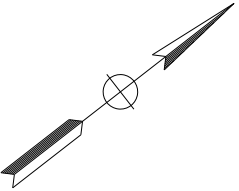
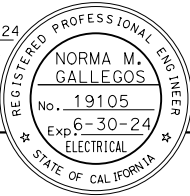
SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	11	15

Norma M. Gallegos
REGISTERED ELECTRICAL ENGINEER
DATE 01-28-24
PLANS APPROVAL DATE

01-25-24
No. 19105
Exp. 6-30-24
ELECTRICAL

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COPIES OF THIS PLAN SHEET.



NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. EXIST UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

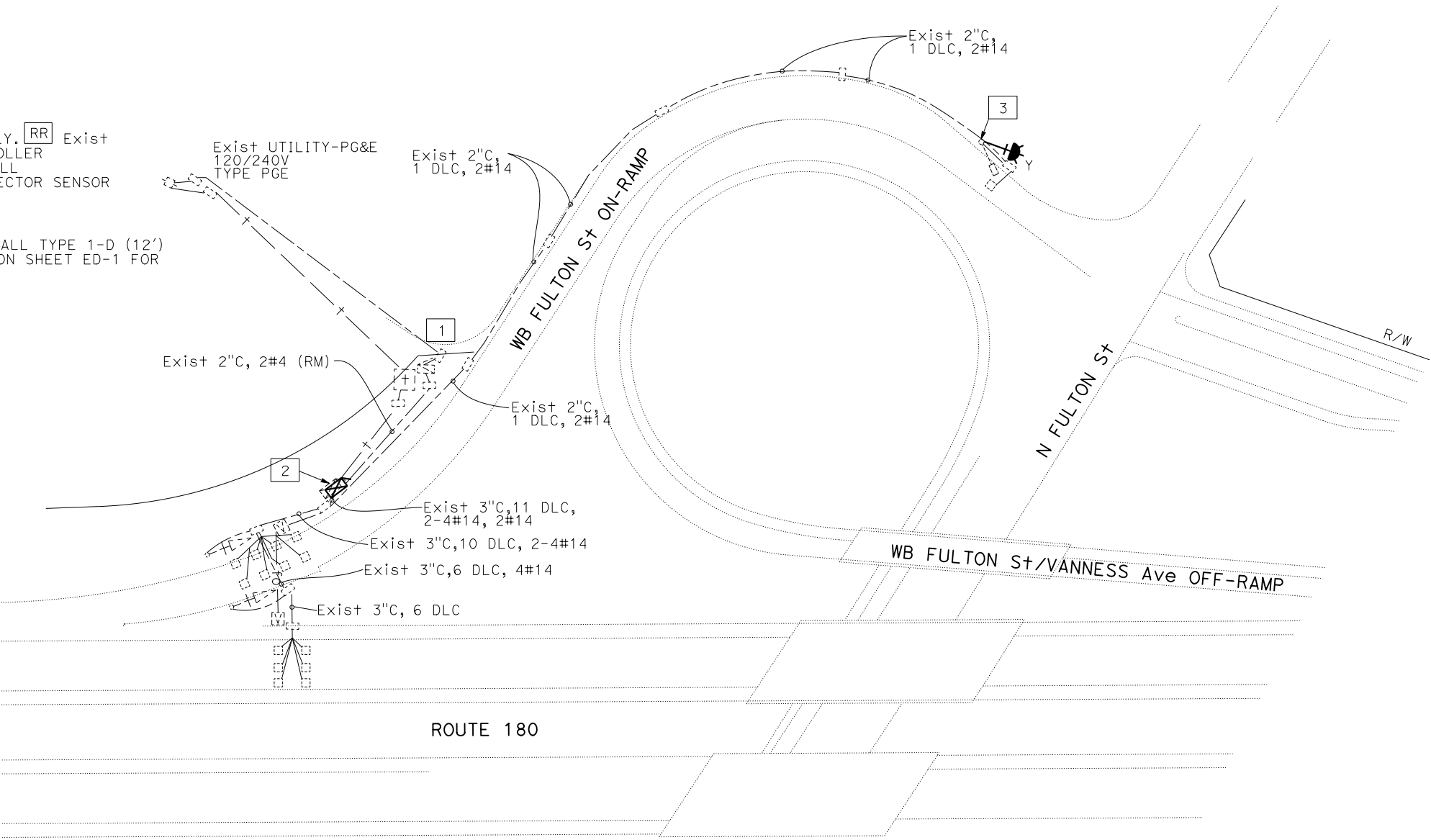
LEGEND: (THIS SHEET ONLY)

- 1 EXIST 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 06421800057190

AMPERES	VOLTS	POLES	NAMEPLATE	METER
100	240	3	MAIN DISCONNECT	YES
70	120	1	RAMP METER	YES
20	120	1	TDC	YES

- 2 RS EXIST MODEL 334 CABINET WITH MODEL 2070E CONTROLLER ASSEMBLY. RR EXIST FIBER EQUIPMENT. INSTALL DEPARTMENT-FURNISHED MODEL 334LS CONTROLLER CABINET ON EXIST FOUNDATION. INSTALL EXIST FIBER EQUIPMENT. INSTALL DEPARTMENT FURNISHED MODEL 2070LX CONTROLLER UNIT AND LOOP DETECTOR SENSOR UNITS.
- 3 RS EXIST TYPE 1-A STANDARD, RC EXIST TYPE 1-A FOUNDATION. INSTALL TYPE 1-D (12') FLASHING BEACON ON TYPE 1-D (12') POLE FOUNDATION, SEE DETAIL A ON SHEET ED-1 FOR INSTALLATION.



LOCATION 7
TMS ID: RM-0059
FRE-180-R57.17

MODIFYING RAMP METERING SYSTEM

E-7

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

MAINTENANCE INTELLIGENT TRANSPORTATION SYSTEMS

FUNCTIONAL SUPERVISOR
ANTHONY R. LOPEZ

CALCULATED-DESIGNED BY
CHECKED BY

NOAH NEVAREZ
NORMA GALLEGOS

REVISED BY
DATE REVISED

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. Exist UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

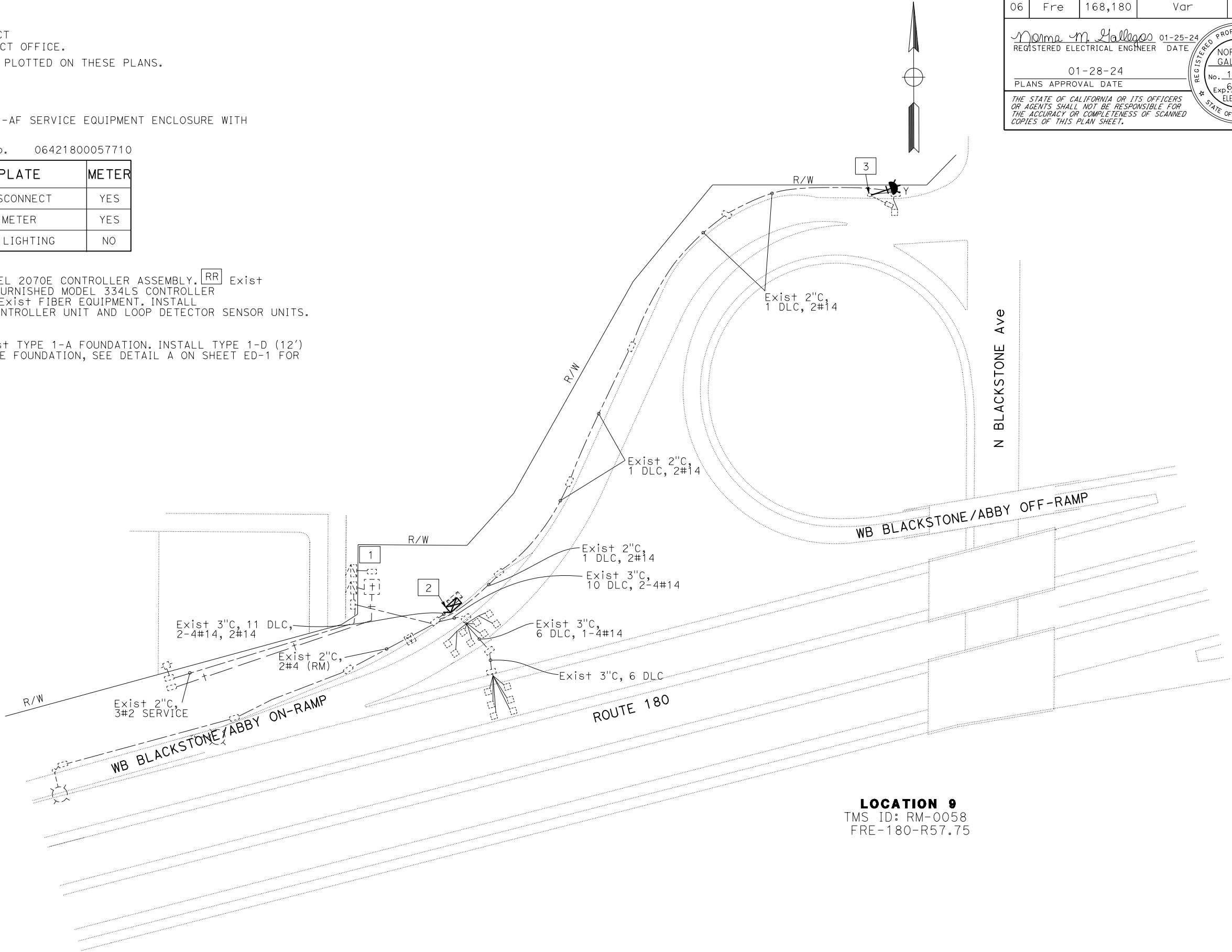
LEGEND: (THIS SHEET ONLY)

- 1 Exist 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 06421800057710

AMPERES	VOLTS	POLES	NAMEPLATE	METER
100	240	3	MAIN DISCONNECT	YES
70	120	1	RAMP METER	YES
40	240	2	HIGHWAY LIGHTING	NO

- 2 RS Exist MODEL 334 CABINET WITH MODEL 2070E CONTROLLER ASSEMBLY. RR Exist FIBER EQUIPMENT. INSTALL DEPARTMENT-FURNISHED MODEL 334LS CONTROLLER CABINET ON Exist FOUNDATION. INSTALL Exist FIBER EQUIPMENT. INSTALL DEPARTMENT FURNISHED MODEL 2070LX CONTROLLER UNIT AND LOOP DETECTOR SENSOR UNITS.
- 3 RS Exist TYPE 1-A STANDARD, RC Exist TYPE 1-A FOUNDATION. INSTALL TYPE 1-D (12') FLASHING BEACON ON TYPE 1-D (12') POLE FOUNDATION, SEE DETAIL A ON SHEET ED-1 FOR INSTALLATION.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	13	15

Norma M. Gallegos

REGISTERED ELECTRICAL ENGINEER

DATE 01-25-24

01-28-24

PLANS APPROVAL DATE

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THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER

NORMA M. GALLEGOS

No. 19105

Exp 6-30-24

ELECTRICAL

STATE OF CALIFORNIA


MODIFYING RAMP METERING SYSTEM

E-9

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

 **MAINTENANCE INTELLIGENT TRANSPORTATION SYSTEMS**

FUNCTIONAL SUPERVISOR

ANTHONY R. LOPEZ

CALCULATED-DESIGNED BY

CHECKED BY

AARON SUE

NORMA GALLEGOS

REVISED BY

DATE

REVISED BY

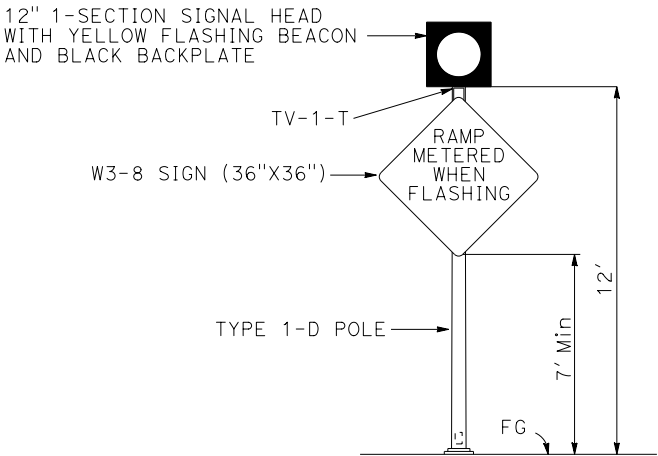
DATE

NOTES:

1. FOR DETAILS NOT SHOWN, SEE STANDARD PLANS.

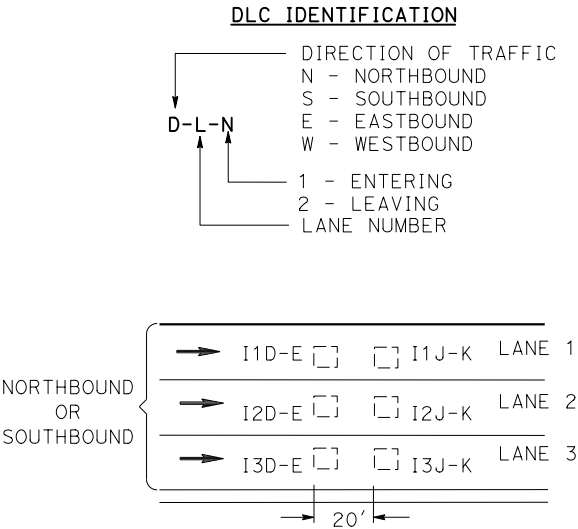
2. FOR SIGN LOCATION SEE "PROJECT PLANS".

3. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



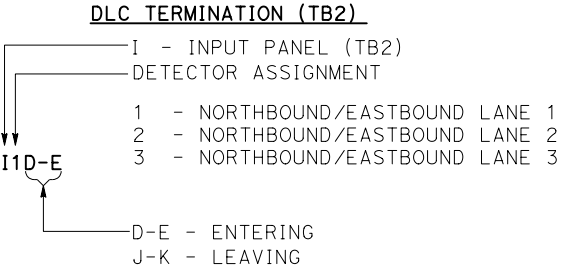
TYPE 1-D (12') FLASHING BEACON
INSTALLATION

DETAIL A



DETAIL B

TYPICAL LOOP DETECTOR
IDENTIFICATION AND TERMINATION

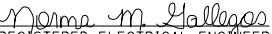


ELECTRICAL SYSTEMS DETAILS

NO SCALE

ED-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	14	15


REGISTERED ELECTRICAL ENGINEER

01-25-24
DATE

01-28-24
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
NORMA M. GALLEGOS
No. 19105
Exp. 6-30-24
ELECTRICAL
STATE OF CALIFORNIA

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NOTE:

ELECTRICAL SYSTEMS QUANTITY TABLES SUMMARIZE SIGNIFICANT COMPONENTS. SEE ELECTRICAL SYSTEMS PLANS AND SPECIFICATIONS TO DETERMINE ALL MATERIALS NEEDED FOR EACH SYSTEM.

MODIFYING RAMP METERING SYSTEM

SHEET No.	(N)			
	TYPE 1-D (12') STANDARD	TYPE 1-D (12') STANDARD FOUNDATION	12" 1-SECTION SIGNAL HEAD (TV-1-T)	W3-8 SIGN (36"X36")
	EA			
E-1	1	1	1	1
E-2	2	2	2	2
E-3	2	2	2	2
E-4	2	2	2	2
E-5	2	2	2	2
E-6	2	2	2	2
E-7	1	1	1	1
E-8	2	2	2	2
E-9	1	1	1	1

(N) - NOT A SEPARATE BID ITEM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre	168,180	Var	15	15

Norma M. Gallegos
REGISTERED ELECTRICAL ENGINEER
DATE 01-28-24
PLANS APPROVAL DATE

01-25-24
DATE
19105
Exp 6-30-24
ELECTRICAL
STATE OF CALIFORNIA

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