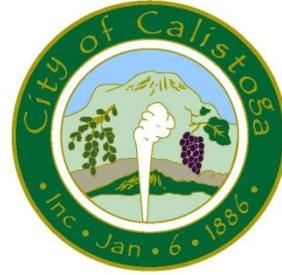


CITY OF CALISTOGA

Public Works Department
414 Washington Street - Calistoga, CA 94515
Ph: 707.942.2828
Fx: 707.942.9472
www.ci.calistoga.ca.us



March 6, 2026

Re: LINCOLN AVENUE WATER MAIN REPLACEMENT PROJECT, PROJECT NO. 24-5557

Bid Proposal ADDENDUM NO.1

Dear Sir/Madam:

Enclosed herein is Addendum Number 1 for the above referenced project. Addendum Number 1 and its attachments form a part of the contract documents, and modifies the original plans and specifications. All other conditions remain the same.

ADDENDUM NUMBER 1 (40 pages including this page)

ITEM 1: Responses to Bidder's Questions

QUESTION A. Bid #5 and 7 for the concrete restoration. Does this only cover the one location callout (R1) for the one 1.5" service does this cover all concrete replacement on the project? Do we have to account for any other concrete removal and replacement other than 12 LF of curb and 470 SF of sidewalks?

RESPONSE: Bid Items 6 and 7 represent the estimated quantities for concrete curb and sidewalk removal and replacement associated with the work shown on the plans. These quantities are provided for bid comparison purposes only and may increase or decrease based on field conditions. Contractors shall include all work necessary to complete the concrete restoration required for installation of the water improvements as shown on the plans and specified in the contract documents. No additional concrete restoration beyond what is required to complete the work shown on the plans should be assumed at bid time.

QUESTION B. Can you clarify the work hours/lane closures for the project? Will there be any night work?

RESPONSE: Construction work hours are anticipated to occur during standard daytime hours, generally **7:00 AM to 5:00 PM, Monday through Friday**, unless otherwise approved by the Engineer. Night work is not anticipated for this project.

Traffic control shall comply with the project specifications and the requirements of the Caltrans Encroachment Permit. Lane closures and activities that may impact traffic require approval through the Caltrans Lane Closure System (LCS) prior to implementation.

Permit-Std_EP-04-24-N-UT-0242

Two-way traffic shall be maintained through the project limits unless otherwise approved by Caltrans and the City.

QUESTION C. Regarding the trench repaving within 2 working days of pipe laying – see page 27 of the technical specs. Screenshot is below. Does this only apply to the temporary or the full pavement restoration?

RESPONSE: The requirement to complete trench repaving within two working days of pipe installation refers to **temporary trench paving** required to restore the roadway surface for safe traffic operations. Permanent pavement restoration will occur later in accordance with the contract documents and the project paving sequence.

QUESTION D. Do you have a copy of the Cal Trans encroachment permit?

RESPONSE: Yes. The Caltrans Encroachment Permit for this project (Permit No. **04-24-N-UT-0242**) is attached and included in the bid documents for reference. The permit authorizes the installation of a **12-inch water main and associated improvements within the State Highway right-of-way along Lincoln Avenue (SR-29)** between approximately **PM 37.06 and PM 37.14** in the City of Calistoga.

Contractors shall review and comply with all requirements of the encroachment permit, including traffic control requirements, lane closure coordination through the Caltrans Lane Closure System (LCS), and coordination with the Caltrans permit inspector prior to construction.

ITEM 2: Other Modifications and Clarifications to Bid Documents

2.1 - Water Service Sleeve Requirement

The Contract Documents are hereby modified to require sleeves for water service laterals crossing Lincoln Avenue.

All **1-1/2 inch water service laterals crossing Lincoln Avenue** shall be installed within a **continuous sleeve installed beneath the roadway**.

The sleeve shall meet the following requirements:

- Minimum **4-inch diameter** sleeve.
- Sleeve shall extend the **full width of Lincoln Avenue**, from outside the west curb line to outside the east curb line.
- Sleeve material shall be **PVC Schedule 40 or HDPE SDR 11**, or approved equal, with a smooth interior surface suitable for future service replacement.

- Ends of the sleeve shall be sealed with an approved **mechanical end seal or expandable plug** to prevent soil or water intrusion while allowing future removal.
- Installation shall provide a **straight and unobstructed alignment** to allow future removal and replacement of the water service without trenching within Lincoln Avenue.

The intent of this requirement is to allow **future replacement of the water service lateral without excavation within the State highway roadway.**

No additional payment will be made for this work. All costs associated with furnishing and installing the sleeve shall be considered **incidental to the respective water service installation bid item.**

Technical Specification for Bid Item 21. 1-1/2" Water Service w/ Meter East Side (46' +/-) with 4" sleeve shall now read:

"1-1/2" Water Service w/ Meter East Side (46' +/-) shall be paid for at the contract price each, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved in water service installation, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; saddle and valve; proper size penetration in main; water service tubing and fittings as required; meter box and lid to grade; meter shut off valves; Badger meters with Metron registers; tie-in at back of sidewalk; meter transfer; placing and compacting all required bedding and backfill; trench plates as needed; testing and chlorination; temporary trench paving; removal and replacement of median curb and island, curb, gutter, sidewalk and driveways as needed; restoration/reconstruction of landscaping/irrigation as needed; and installation of a **minimum 4-inch diameter sleeve beneath Lincoln Avenue for each water service crossing the roadway.**

The sleeve shall extend from outside the west curb line to outside the east curb line (or as directed by the Engineer) and shall be **PVC Schedule 40, HDPE SDR-11, or approved equal**, with a smooth interior surface suitable for future replacement of the service lateral without trenching within Lincoln Avenue. Sleeve ends shall be sealed with approved mechanical end seals or expandable plugs to prevent soil intrusion while allowing future service replacement.

All work required to furnish and install the sleeve shall be considered **incidental to this bid item**, and no additional allowance will be made therefor." (TS-51)

PLEASE MAKE THESE CHANGES IN THE LINCOLN AVENUE WATER MAIN REPLACEMENT PROJECT BID DOCUMENTS AND PROJECT PLANS IN YOUR POSSESSION BEFORE YOU SUBMIT YOUR BID.

It is your responsibility to furnish copies to any subcontractors you furnished with Project Plans and Specifications.

If you have any questions regarding this addendum, please call **David Fradelizio** at (707) 942-2828 or email at dfradelizio@calistogaca.gov .

Enclosures:

Addendum Number 1	(4 pages)
Bid Schedule	(2 pages)
Replacement sheets TS-51 – TS-54 for Volume II	(4 pages)
Caltrans Encroachment Permit 04-24-N-UT-0242	(30 pages)

Bidders must complete the Addendum Acknowledgement in the Contract Proposal acknowledging receipt of this addendum.

END ADDENDUM NUMBER 1

Thank you for your interest in this project. If you have any questions regarding this addendum, please contact David Fradelizio (dfradelizio@calistogaca.gov). All questions regarding this addendum must be e-mailed no later than 72 hours prior to the bid opening date. Please include project reference in your correspondence.

Sincerely,
Derek Rayner, P.E.
Public Works Director

By: 
David Fradelizio P.E.
Deputy Public Works Director

**BID SCHEDULE
CITY OF CALISTOGA**

LINCOLN AVENUE WATER MAIN REPLACEMENT PROJECT, PROJECT NO. 24-5557

ITEM	DESCRIPTION	QUANTITY	UNITS	UNIT COST	AMOUNT
1	Mobilization (not to exceed 5% of total bid price)	1	LS		
2	Water Pollution Control	1	LS		
3	Traffic Control System	1	LS		
4	Pedestrian Traffic Control	1	LS		
5	Utility Clearances	1	LS		
6	Remove and Replace Existing Concrete Curb	12	LF		
7	Remove and Replace Concrete Sidewalk (4" Concrete / 2" Sand)	470	SF		
8	Remove and Salvage Existing Fire Hydrant	2	EA		
9	Concrete Bus Pad	30	SF		
10	Asphalt Concrete Type "A"	170	TON		
11	Abandon Existing 6" Water Main	1	LS		
12	Abandon Existing 10" Water Main	1	LS		
13	Abandon Existing Water Service Laterals	22	EA		
14	Tie-in 12 " Water Main	4	EA		
15	12" Water Main PVC	525	LF		
16	12" Water Main DI (within the raised Waiver #7)	50	EA		
17	12" Water Main Raising / Overstructure (Waiver #7)	1	EA		
18	12" x 12' Cross on Water Main	1	EA		
19	12" Water Main Gate Valve	5	EA		
20	1-1/2" Water Service w/ Meter West Side (14' +/-)	14	EA		
21	1-1/2" Water Service w/Meter East Side (46' +/-) with 4" sleeve	8	EA		
22	1-1/2" Water Service at FH Sta 0+90	1	EA		
23	4" Fire Service Line and Gate Valve	1	EA		
24	6" Fire Service Line	1	EA		

25	6" Gate Valve on Fire Service Line	1	EA		
26	Fire Hydrant and Lateral Assembly Sta 0+85 +/-	1	EA		
27	Fire Hydrant Washington St	1	EA		
28	Combination Air and Vacuum/Air Release	1	EA		
29	Type D Traffic Loop Dector	3	EA		
30	SSCO Box and Plug	1	EA		
31	Thermoplastic 6" Solid Double Yellow Detail 22	480	LF		
32	Thermoplastic 8" Solid White Detail 38	75	LF		
33	Thermoplastic 12" Solid White Crosswalk Line	450	LF		
34	Thermoplastic 4" Solid White Parking Line	225	LF		
35	Thermoplastic Parking Space Tees	5	EA		
36	Thermoplastic Shared Roadway Bicycle Marking	8	EA		
37	Thermoplastic Type III Turn Arrow Marking	1	EA		
38	Thermoplastic International Symbol of Accessibility (ISA) Marking (ADA Parking Space)	1	EA		
39	Red or Blue Painted Curb	145	LF		
40	Materials Testing Allowance	1	LS	\$10,000.00	\$10,000.00
TOTAL BASE BID					
=					

ADDITIVE BID ALTERNATE A					
1A	Tie-in 12 " Recycled Water	1	EA		
2A	Recycled Water 12" Gate Valve and 3" Blowoff	1	LS		
3A	12" Recycled Water Main	84	LF		
3A	12" Recycled Water Main Half Lowering (Waiver #6)	1	EA		
TOTAL BID ALTERNATE A =					

plates *as needed*; testing and chlorination; temporary trench paving; as specified herein, and no additional allowance will be made therefor.

12" x 12' Cross on Water Main shall be paid for at the contract unit price per **each**, shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing 12" x 12" cross, complete in place, as shown on the plans, as specified in the Standard Specifications and in these special provisions, and as directed by the Engineer.

12" Water Main Gate Valve shall be paid for at the contract unit price per **each**, shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing gate valves, complete in place, as shown on the plans, as specified in the Standard Specifications and in these special provisions, and as directed by the Engineer.

1-1/2" Water Service w/ Meter West Side (14' +/-) shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved in water service installation, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; saddle and valve; proper size penetration in main; water service tubing and fittings *as required*; meter box and lid to grade; meter shut off valves; Badger meters with Metron registers, tie-in at back of sidewalk; meter transfer; placing and compacting all required bedding and backfill; trench plates *as needed*; testing and chlorination; temporary trench paving; removal and replacement of median curb and island, curb, gutter, sidewalk and driveways *as needed*; restoration/reconstruction of landscaping/irrigation *as needed*; as specified herein, and no additional allowance will be made therefor.

1-1/2" Water Service w/ Meter East Side (46' +/-) shall be paid for at the contract price each, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved in water service installation, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; saddle and valve; proper size penetration in main; water service tubing and fittings as required; meter box and lid to grade; meter shut off valves; Badger meters with Metron registers; tie-in at back of sidewalk; meter transfer; placing and compacting all required bedding and backfill; trench plates as needed; testing and chlorination; temporary trench paving; removal and replacement of median curb and island, curb, gutter, sidewalk and driveways as needed; restoration/reconstruction of landscaping/irrigation as needed; and installation of a minimum 4-inch diameter sleeve beneath Lincoln Avenue for each water service crossing the roadway.

The sleeve shall extend from outside the west curb line to outside the east curb line (or as directed by the Engineer) and shall be PVC Schedule 40, HDPE SDR-11, or approved equal, with a smooth interior surface suitable for future replacement of the service lateral without trenching within Lincoln Avenue. Sleeve ends shall be sealed with approved mechanical end seals or expandable plugs to prevent soil intrusion while allowing future service replacement.

All work required to furnish and install the sleeve shall be considered incidental to this bid item, and no additional allowance will be made therefor.

1-1/2" Water Service at FH Sta 0+90 +/- shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved in water service installation, including but not limited to: excavation and disposal of

excavated materials; dewatering and disposal of trench groundwater; contamination awareness; saddle and valve; proper size penetration in main; water service tubing and fittings *as required*; meter box and lid to grade; meter shut off valves; Badger meters with Metron registers; tie-in at back of sidewalk; meter transfer; placing and compacting all required bedding and backfill; trench plates *as needed*; testing and chlorination; temporary trench paving; removal and replacement of median curb and island, curb, gutter, sidewalk and driveways *as needed*; restoration/reconstruction of landscaping/irrigation *as needed*; as specified herein, and no additional allowance will be made therefor.

4" Fire Service Line and Gate Valve shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved in 4" Fire Service and Gate Valve, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; tee *as required*; reducers *as required*; valves; fittings; tie-in to existing 4" line; placing and compacting all required bedding and backfill; trench plates *as needed*; testing and chlorination; temporary trench paving; removal and replacement of bollards *as needed*; restoration/reconstruction of private property improvements *as needed*; as specified herein, and no additional allowance will be made therefor.

6" Fire Service Line shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved in 6" Fire Service Line, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; tee *as required*; reducers *as required*; valves; fittings; tie-in to existing gate valve line; placing and compacting all required bedding and backfill; trench plates *as needed*; testing and chlorination; temporary trench paving; removal and replacement of bollards *as needed*; restoration/reconstruction of private property improvements *as needed*; as specified herein, and no additional allowance will be made therefor.

6" Gate Valve on Fire Service Line shall be paid for at the contract unit price per **each**, shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing gate valve, complete in place, as shown on the plans, as specified in the Standard Specifications and in these special provisions, and as directed by the Engineer.

Fire Hydrant and Lateral Assembly Sta 0+85 +/- shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved to install commercial fire hydrant and lateral assemblies, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; tie-in to existing 12" pipe; valve; tee with blind flange tapped for water service line; fire hydrant and lateral assembly; fittings as required; restrained joints, thrust blocking and harnesses as required; valve box to grade; placing and compacting all required bedding and backfill including control density fill if required; trench plates as needed; testing and chlorination; temporary trench paving; restoration/reconstruction of landscaping/irrigation and fencing as needed; as specified herein, and no additional allowance will be made therefor.

See Concrete Bus Pad for related concrete work.

Fire Hydrant Washington St shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work

involved to install commercial fire hydrant and lateral assemblies, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; tapping saddle; valve; fire hydrant and lateral assembly; fittings as required; restrained joints, thrust blocking and harnesses as required; hot tap preparation if needed (City to perform actual hot tap); connection to saddle; valve box to grade; placing and compacting all required bedding and backfill including control density fill if required; trench plates as needed; testing and chlorination; temporary trench paving; restoration/reconstruction of landscaping/irrigation and fencing as needed; as specified herein, and no additional allowance will be made therefor.

Combination Air and Vacuum/Air Release shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved in air release valve installation, including but not limited to: potholing other than as specified in Section 15 to facilitate the progress of work; excavation and disposal of excavated materials; hand digging *if needed*; root pruning; dewatering and disposal of trench groundwater; contamination awareness; proper size penetration in main; saddle or tee; valves; water service tubing and fittings *as required*; valve box and lid to grade; mortar between box and extension; secure ARV to box; closure and insect screen; placing and compacting all required drain rock, bedding and backfill; trench plates *as needed*; testing and chlorination; temporary trench paving; restoration/reconstruction of landscaping/irrigation *as needed*; as specified herein, and no additional allowance will be made therefor.

Tie-in 12 " Recycled Water shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all the work involved in water main tie-in installation, including but not limited to: scheduling and notifications; excavation and disposal of excavated materials; hand digging *if needed*; root pruning; dewatering and disposal of trench groundwater; contamination awareness; supporting or removal and disposal of existing utilities in the same trench *if required*; water main and fittings *as required*; removal of temporary blow-offs; temporary restrained caps or plugs required to facilitate tie-in operations; partial water main lowerings or raising at tie-in locations; restrained joints, thrust blocking and harnesses *as required*; placing and compacting all required bedding and backfill including control density fill *if required*; trench plates *as needed*; pressure testing large scope tie ins *if required*; temporary trench paving; as specified herein, and no additional allowance will be made therefor.

Work under tie-in recycled water excludes that portion of pipe paid for as under the Water Main pay item.

Recycled Water 12" Gate Valve and 3" Blowoff installed on a new main shall be paid for at the contract price **each**, which price shall include full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all work involved in gate valve and blowoff installation, including but not limited to: excavation and disposal of excavated materials; dewatering and disposal of trench groundwater; contamination awareness; valve; valve box and riser set to grade; concrete collar; valve stem riser *if required*; pier blocks; placing and compacting all required bedding and backfill including control density fill *if required*; trench plates *as needed*; testing and chlorination; temporary trench paving; as specified herein, and no additional allowance will be made therefor.

12" Recycled Water Main shall be paid for at the contract price per **linear foot**, (as determined by measuring the total horizontal length of pipe installed and including tie-ins), which price shall include

full compensation for furnishing all labor, materials, tools, equipment, incidentals, and doing all the work involved in water main installation, including but not limited to: potholing other than as specified in Section 15 to facilitate the progress of work; excavation and disposal of excavated materials; hand digging *if needed*; root pruning; dewatering and disposal of trench groundwater; contamination awareness; supporting or removal and disposal of existing utilities in the same trench *if required*; water main and fittings *as required*; restrained joints, thrust blocking and harnesses *as required*; placing and compacting all required bedding and backfill including control density fill *if required*; trench plates *as needed*; temporary trench paving; construction water and all work involved in its obtainment, development and distribution; testing and chlorination of the new water system and appurtenances; purging lines prior to bacteria sampling; disposal of all chlorinated water by the contractor; cleaning, swabbing and flushing of water main and appurtenances; as specified herein, and no additional allowance will be made therefor.

END OF SECTION

ENCROACHMENT PERMIT

DOT TR-0120 (REV 05/2023)

Permit No. 04-24-N-UT-0242	
Dist/Co/Rte/PM 04/NAP/029/PM 37.06-37.14-Var	
Permit Approval Date March 18, 2025	
Performance Bond Amount (1) \$0	Payment Bond Amount (2) \$0
Bond Company \$ N/A	
Bond Number (1) \$ N/A	Bond Number (2) \$ N/A

In compliance with your application of March 18, 2025

Reference Documents:

- Utility Notice No. _____ of _____
- Agreement No. _____ of _____
- R/W Contract No. _____ of _____
- Project code (ID): _____ CFC #: _____
- Applicant's Reference/ Utility Work Order No. Project No. 24-5557

TO:
 City of Calistoga
 C/O: John Draper
 4739 Wild Meadow Reach
 Santa Rosa, CA 95405
 Email: 3acorns@att.net
 Phone: (707)738-1012
 , PERMITTEE

and subject to the following, PERMISSION IS HEREBY GRANTED to:
 Replace water main on State Highway 04-NAP-29, at Post Mile 37.06-37.14, in the City of Calistoga, Napa County.

A minimum of 7 days prior to the start of work under this encroachment permit, notice must be given to State Representative Soratha Sing, 2019 West Texas Street, Fairfield, CA, 94533, at soratha.sing@dot.ca.gov or (510) 520-0853, weekdays between 7:00 a.m. and 3:30 p.m., holidays excluded.

Notwithstanding General Provision 35, lane closures and other activities that may cause a traffic impact requires the permittee to apply for and obtain a closure ID prior to the start of work. Requests must be submitted electronically through the Lane Closure System (LCS). Notifications to Traffic Management Center (TMC) must be submitted timely including 1097, 1098 and 1022 codes.

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit (check applicable):

- YES NO General Provisions
- YES NO Utility Maintenance Provisions
- YES NO Storm Water Special Provisions
- YES NO Special Provisions
- YES NO A Cal-OSHA Permit, if required: Permit No. _____
- YES NO As-Built Plans Submittal Route Slip for Locally Advertised Projects
- YES NO Storm Water Pollution Protection Plan
- YES NO The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

In addition to fee, the permittee will be billed actual costs for:

- YES NO Review
- YES NO Inspection
- YES Field Work
(if any Caltrans effort expended)

As-built Plans are Required

- YES NO

This permit is void unless the work is completed before March 31, 2026

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.

No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

CC:
 #1: CHAD C KLEIN
 #2: SORATHA SING
 #3: GETNET M ALMAW
 #4: Matthew N Jones

APPROVED: _____
 Dina El-Tawansy, District Director

BY

 Jae-MYUNG LEE, District Permit Engineer

In the event of noncompliance with the Department's requirements and provisions including LCS requirements, the permittee's future lane closures may not be granted and/or authorized.

The following codes are to be used when reporting your intended closure status to TMC:
Use "1097" code at the start of a lane and shoulder or ramp closures (dropping off the first cone).
Use "1098" code after the lane and shoulder or ramp is open to traffic (picking up the last cone).
Use "1022" code if cancelling an approved closure.

If the request is rejected, you may clarify, revise, and resubmit your request by consulting the State Representative.

In addition to the 2024 Standard Specifications and Standard Plans (available at <https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications>), the attached "Encroachment Permit General Provisions" (TR-0045) (available at <https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/encroachment-permits/ep-general-provisions-all.pdf>), "Trench Detail (Trench)" (TR-0153), "Utility - Underground (UG)" (TR-0163), "Storm Water Special Provisions for Minimal or No Impact (SWSP)" (TR-0400), "Hazardous Materials and Hazardous Waste Management Special Provisions" (TR-0408), and "Pedestrian Safety (MCP)" (PedSafe) (available at <http://dot.ca.gov/programs/traffic-operations/ep/ep-manual/>), all work permitted herein must comply with the following provisions:

A pre-job meeting with the State Representative is required at least 7 days prior to the start of any work under this encroachment permit. Failure to do so may result in permit revocation with no prejudice.

The permittee must provide the stage construction plans, traffic handling plans, work schedule, and a list of all sub-contractors to the State Representative at the time of the pre-job meeting.

Certain details of work authorized herein are shown on the plans and specifications submitted by the permittee and attached to this encroachment permit.

Trench excavation must comply with the attached trench detail and the 2024 Caltrans Standard Specifications, Section 19-3, "Structure Excavation and Backfill" including Section 19.3.02E, "Slurry Cement Backfill", and 19-3.02G, "Controlled Low-Strength Material" (available at <https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications>).

Asphalt Concrete (AC) to be removed must be saw cut to the full depth along both sides of the trench. Portland Cement Concrete (PCC) to be removed must be saw cut to a minimum depth of four (4) inches along both sides of the trench.

Where the edge of trench is within two (2) feet of curb, gutter, or pavement edge, Asphalt Concrete (AC) pavement between the trench and curb, gutter, or pavement edge must be removed and replaced.

This permit has been conditionally issued without approved traffic control plans. Traffic control is not authorized under this permit until Caltrans has reviewed and approved permittee's traffic control plans.

No excavation must be left open overnight. Temporary backfilling of excavations in finished surfaces must be capped with a minimum three (3) inches Asphalt Concrete (AC).

Streets and highways in the San Francisco Bay Area contain a significant number of existing underground utilities. This includes traffic signal conduits that are installed nine (9) inches or less in depth. The Permittee is responsible for necessary site investigations for identification of the location and depth of existing underground facilities prior to excavation (e.g., test hole or hand-dig) to avoid damage or disruption in services.

All pavements must be saw cut prior to removal or removed by grinding. Obliterated pavement markings must be replaced in kind. All signs and markings must comply with the California Manual on Uniform Traffic Control Devices (MUTCD) (available at <https://dot.ca.gov/programs/safety-programs/camutcd>).

Where Asphalt Concrete (AC) has been placed, temporary painted traffic striping and pavement markings must be installed within 24 hours. Where shown on the plans, after 30 days curing time, thermoplastic materials must be applied in accordance with the 2024 Caltrans Standard Specifications, Section 84, "Markings" (available at <https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications>).

All the permittee's personnel must wear appropriate and approved personal protective equipment per Chapter 12 of Caltrans "Safety Manual", including hard hats and bright-colored safety vests, shirts or jackets with retro-reflective material, while on the State right-of-way.

Permittee must give the State Representative at least 7 days advance notice for lane closure requests.

Permittee must stop work and notify the State Representative immediately upon encountering field safety or environmental issues.

Permittee must coordinate all scheduled construction activities with other construction activities which may be in progress in the same general area.

Scope change rider requests must be made a minimum of two weeks prior to start of the construction. Time extension rider requests must be made a minimum of two weeks prior to permit expiration.

Additional inspection hours will be charged at the current State hourly rate.

Signs, lights, flags or other protective devices must not obscure the visibility of, nor conflict in intent, meaning, and function of either existing signs, lights and traffic control devices, or any construction area signs.

On conventional highways, permittee's vehicles and equipment not involved in the permitted activities must be legally located off the traveled way and not interfere with free traffic and pedestrian flow.

No vehicle or equipment must be stored overnight within the State highway right-of-way. All vehicles and equipment must be removed immediately at the completion of the day's work. Refueling of vehicle or equipment within the State highway right-of-way is strictly prohibited.

Construction activities must not inconvenience the public or abutting property owners. Maintain access to driveways, houses, and buildings.

The State Representative or California Highway Patrol may stop work not being performed in compliance with this permit. The State Representative and California Highway Patrol reserve the right to require reopening the highway at any time as necessary. All cost must be borne by the permittee.

Except for installing, maintaining, and removing traffic control devices, any work encroaching within 3 feet of the edge of a travel lane for areas with a posted speed limit below 45mph, or 6 feet of the edge of a travel lane, for areas with a speed limit posted at 45mph or higher, requires closing of that travel lane. Any work encroaching within 6 feet of the edge of the shoulder requires closing of that shoulder.

Do not reduce an open traffic lane width to less than 12 feet. If traffic cones or delineators are used for temporary edge delineation, the side of the base of the cones or delineators nearest traffic is considered the edge of traveled way.

Traffic control using flagging must comply with the California MUTCD, Part 6E, "Flagger Control" (available at <https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files>), and Cal/OSHA Construction Safety Orders, Section 1599, "Flaggers", (available at <https://www.dir.ca.gov/title8/1599.html>).

Portable changeable message signs must comply with the California MUTCD, Chapter 2L, "Changeable Message Signs", and Section 6F.60, "Portable Changeable Message Signs" (available at <https://dot.ca.gov/programs/safety->

[programs/camutcd/camutcd-files](#)).

When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped pedestrians, is safe and well defined and shown on the approved plan.

Temporary bicycle and pedestrian facilities must comply with the Caltrans Temporary Pedestrian Facilities Handbook (available at http://www.dot.ca.gov/hq/construc/safety/Temporary_Pedestrian_Facilities_Handbook.pdf), and the California MUTCD Part 6, Chapter 6D – “Pedestrian and Worker Safety” (available at <http://www.dot.ca.gov/trafficops/camutcd/>).

Notwithstanding General Provision 13, temporary bicycle and pedestrian access routes must comply with the 2024 Caltrans Standard Plans T30 through T34 (available at <http://www.dot.ca.gov/des/oe/construction-contract-standards.html>).

Temporary pedestrian walkways and canopies must comply with the requirements of the applicable local agency or the latest edition of the International Building Code, whichever contains the higher standards.

Tree removal or tree trimming is not authorized under this permit except as specified in attached documents. Changes to the provisions herein require an Encroachment Permit Rider, except for minor changes authorized by the State Representative.

Neither materials nor waste must be stockpiled within the State highway right-of-way.

All mud, dirt, and gravel tracked onto the roadway must be immediately removed.

Non-compliance with the provision(s) below may result in Caltrans taking actions including but not limited to canceling this encroachment permit without further notice, requiring bonds, and/or not providing such conditional approvals for the Permittee on future projects.

Work must not start until the documents listed below have been submitted to, reviewed by, and approved by Caltrans. This encroachment permit is conditionally issued without the documents listed below at the request of the Permittee. The Permittee acknowledges and will ensure that the following documents will be submitted to Caltrans for review and approval prior to scheduling authorized work/activities:

- Contractor(s) Authorization Form (TR-0429)
- Project-specific Traffic Control Plans

Upon completion of work authorized by this encroachment permit, the permittee must provide the State Representative with “Notice of Completion” (TR-0128) (available at [http://www.dot.ca.gov/trafficops/ep/docs/Appendix_D_\(WEB\).pdf](http://www.dot.ca.gov/trafficops/ep/docs/Appendix_D_(WEB).pdf)).

Additional Enclosure(s):

1. Notice of Completion (TR-0128)
2. Contractor(s) Authorization Form (TR-0429)
3. Project Documents

LINCOLN AVENUE WATER MAIN REPLACEMENT PROJECT CALISTOGA, NAPA COUNTY, CALIFORNIA PROJECT NO. 24-5557 DECEMBER 2024



UTILITY CONTACTS

**SANITARY MAIN, WATER
SANITARY SERVICE**
CITY OF CALISTOGA PUBLIC WORKS
DEPARTMENT
414 WASHINGTON STREET
CALISTOGA, CA 94515
PH: (707) 412-2828

LLC ITRC & GAS
CITY OF CALISTOGA PUBLIC WORKS
DEPARTMENT
414 WASHINGTON STREET
CALISTOGA, CA 94515
PH: (707) 412-2828

AT&T
CITY OF CALISTOGA PUBLIC WORKS
DEPARTMENT
414 WASHINGTON STREET
CALISTOGA, CA 94515
PH: (707) 412-2828

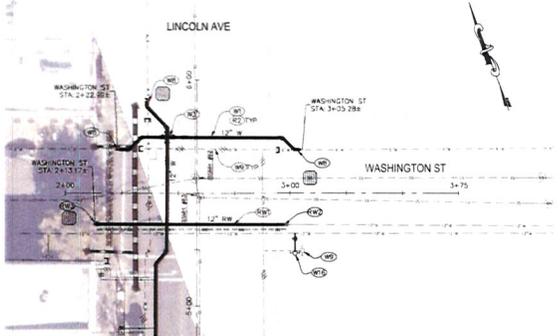
SYMBOLS & LEGEND

	EXISTING		PROPOSED
	VALVE		FIRE HYDRANT
	STREET LIGHT		UTILITY POLE
	CATCH BASIN		TREE TO BE REMOVED
	PROPERTY LINE		CENTER LINE
	CONCRETE GRADE BREAK		TREE PROTECTION FENCE
	SANITARY SEWER		STORM DRAIN
	WATER		RECLAIMED WATER
	OVERHEAD UTILITY LINE		ASPHALT GRADE AND OVERLAY
	CONCRETE		DETECTABLE WARNING
	INVERT AT CLEANOUT		KEYNOTE
	DETAIL IDENTIFICATION		SHEET WHERE DETAIL IS SHOWN

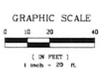
ABBREVIATIONS

A	ANGLE	LF	LINEAR FOOT
AS	ASBESTOS	LT	LEFT
AW	WIRE OR LESS	MAK	MANHOLE
AC	ASPHALT CONCRETE	MB	MANHOLE
AD	ASBESTOS CONDUIT	MIN	MINIMUM
ADP	ASSESSOR'S PARCEL NUMBER	ND	NUMBER
BS	BREAK	NTE	NOT TO SCALE
CC	CONCRETE	OD	OVERHEAD UTILITY LINE
CD	CONCRETE DRAIN	OL	OVERLAY
CM	CONCRETE MASONRY	OS	OVERLAY
CS	CONCRETE SURFACE	OSB	OVERLAY
CU	CURB	OSD	OVERLAY
CL	CURB & GUTTER	OSL	OVERLAY
CLP	CURB LINE	OSM	OVERLAY
CLD	CURB DRAIN	OSN	OVERLAY
CLF	CURB FLOW	OSP	OVERLAY
CLG	CURB GRADE	OSQ	OVERLAY
CLH	CURB HEIGHT	OSR	OVERLAY
CLJ	CURB JUNCTION	OSV	OVERLAY
CLK	CURB KNOCK	OSW	OVERLAY
CLL	CURB LANE	OSX	OVERLAY
CLM	CURB MOUNT	OSY	OVERLAY
CLN	CURB NAIL	OSZ	OVERLAY
CLP	CURB PAVEMENT	OS1	OVERLAY
CLQ	CURB QUANTITY	OS2	OVERLAY
CLR	CURB RADIUS	OS3	OVERLAY
CLS	CURB SIDEWALK	OS4	OVERLAY
CLT	CURB TYPING	OS5	OVERLAY
CLU	CURB UNDER	OS6	OVERLAY
CLV	CURB VERTICAL	OS7	OVERLAY
CLW	CURB WIDTH	OS8	OVERLAY
CLX	CURB XING	OS9	OVERLAY
CLY	CURB YIELD	OS0	OVERLAY
CLZ	CURB ZONE	OS1	OVERLAY
CL1	CURB 1	OS2	OVERLAY
CL2	CURB 2	OS3	OVERLAY
CL3	CURB 3	OS4	OVERLAY
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CL0	CURB 0	OS1	OVERLAY</

FOR REDUCED PLANS, THE 0 TO 3 INCHES GRAPHICAL SCALE IS IN INCHES



- CONSTRUCTION NOTES**
- 1. TRENCH EXCAVATION, BACKFILL AND PAVING REQUIRED FOR INSTALLATION OF WATER MAIN. SERVICES AND APPURTENANCES SHALL BE PER SHEET & DETAIL 1 - TYPICAL TRENCH SECTION
 - 2. INSTALL 12" WATER MAIN, PRESSURE CLASS AS SHOWN. RESTRAIN ALL JOINTS PER CITY STANDARD 852 (MINIMUM 3' FOOT MINIMUM SEPARATION FROM CENTER OF NEW 12" TO CENTER OF EXISTING 6" MAIN)
 - 3. INSTALL CROSS WITH FOUR 12" GATE VALVES PER CITY STD 817
 - 4. AFTER SUCCESSFUL INSTALLATION AND TESTING OF NEW WATER SYSTEM, MAKE WATER MAIN TIE-IN TO EXISTING WATER MAIN AS SHOWN UNDER CITY INSPECTION. INSTALL FITTINGS AND COVERINGS AS NECESSARY TO MAINT. GRADE, OR ALIGNMENT TRANSITION TIE-IN TO EXISTING WATER MAIN
 - 5. REMOVE OR ABANDON EXISTING WATER SYSTEM COMPONENTS IN ACCORDANCE WITH SECTION 133-117 OF THE CITY STANDARD SPECIFICATIONS
 - 6. INSTALL COMMERCIAL FIRE HYDRANT PER CITY STD 857
 - 7. INSTALL 12" RECYCLED WATER MAIN, PRESSURE CLASS AS SHOWN. RESTRAIN ALL JOINTS PER CITY STANDARD 852
 - 8. TIE-IN TO EXISTING 12" RECYCLED WATER GATE VALVE
 - 9. INSTALL 12" GATE VALVE PER CITY OF SANTA ROSA STANDARD 877 HAVING A FLUG TAPPED WITH 3" HIGH BLOW-OFF. INSTALL TWO CHRISTY 6051 TRAFFIC VALVE BOXES WITH CAST IRON LIDS
 - 10. HALF WATER MAIN LOWERING PER CITY BLANKET WAIVER 6

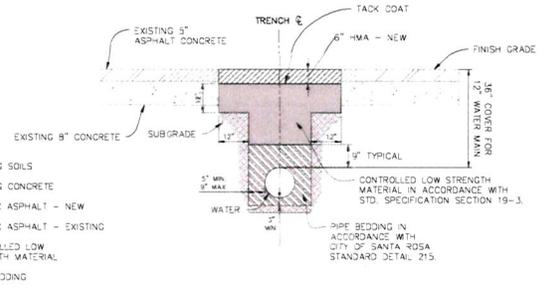
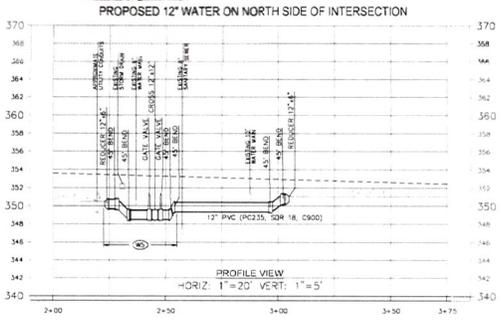


DIST	COUNTY	ROUTE	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
4	NAP	29	37.06/37.14	4	4

REGISTERED CIVIL ENGINEER
 STATE OF CALIFORNIA
 NO. 006628
 EXPIRES 03/31/2017

PLANS APPROVAL DATE: _____
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SKIPPED COPIES OF THIS PLAN SHEET.

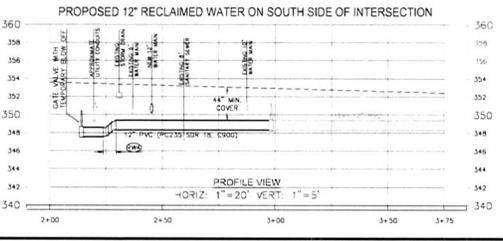
CITY OF CALISTOGA
 1332 WASHINGTON STREET
 CALISTOGA, CA 94515



- EXISTING SOILS
- EXISTING CONCRETE
- HOT MIX ASPHALT - NEW
- HOT MIX ASPHALT - EXISTING
- CONTROLLED LOW STRENGTH MATERIAL
- PIPE BEDDING

- NOTE:**
- TACK COAT (ASPHALTIC EMULSION) SHALL BE APPLIED PRIOR TO PLACING HMA (A).
 - ALL TRENCH WORK SUBJECT TO STATE REGULATIONS AND INSPECTION.
 - ALL MATERIALS, WORKMANSHIP, TESTING, AND INSPECTIONS SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS AND PROJECT-SPECIFIC SPECIAL PROVISIONS.
 - USE OF THIS DETAIL IS APPLICABLE IF HIGH GROUNDWATER CONDITIONS DO NOT EXIST WITHIN THE TRENCH.

1 TYPICAL TRENCH SECTION
 NOT TO SCALE



UNIFORM WATER MAIN IMPROVEMENTS PROJECT
 WASHINGTON STREET
 PLAN & PROFILE
 CALISTOGA

PERMIT SET

ENCROACHMENT PERMIT APPLICANT: CONTRACTOR(S) AUTHORIZATION FORM

DOT TR-0429 (NEW 12/2022)

The Permittee warrants and represents the Permittee has hired the following prime contractor(s) to perform the approved encroachment activities under Encroachment Permit # _____ on the Permittee's behalf as agents in accordance with Encroachment Permit General Provision #4 or Adopt-A-Highway Special Provision # 3, whichever is part of the Encroachment Permit. The Permittee warrants and represents the Permittee has provided a copy of the Encroachment Permit to the prime contractor(s) listed below, and further warrants and represents that the activities related to the Encroachment Permit, whether performed by the Permittee or by the prime contractor(s) below or by any person or entity acting for or on behalf of the Permittee, will be performed in compliance with all terms, conditions, specifications, standards, provisions, and other requirements of the subject Encroachment Permit. The person signing below warrants and represents such person has authority on behalf of the Permittee to make the warranties and representations contained herein, and to agree to and so bind the Permittee to this page.

List of authorized prime contractors for the encroachment permit:

Contractor Name	Scope of work (Traffic Control/civil work etc.)	Contact Person	Contact Person's Information (Phone # and E-mail)

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Name of Permittee

Name and Title of Person
Signing for Permittee (Print)

Signature

Date

ENCROACHMENT PERMIT APPLICANT: CONTRACTOR(S) AUTHORIZATION FORM

DOT TR-0429 (NEW 12/2022)

By signing below, each prime contractor acknowledges that such prime contractor has received a copy of Encroachment Permit # _____ and agrees such prime contractor, and such prime contractor's employees, managers, officers, directors, agents, subcontractors, and suppliers, will comply with, and will perform all activities in accordance with, all terms, conditions, specifications, standards, provisions, and other requirements of the Encroachment Permit, including but not limited to notifying the permit inspector as required in the Encroachment Permit and reporting the lane closure notifications per the Encroachment Permit General Provisions (TR-0045). Each person signing on behalf of each prime contractor warrants and represents such person has the authority to make the acknowledgements, warranties, and representations contained herein on behalf of the named prime contractor, and has the authority to agree to and so bind the named prime contractor to this page.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

_____ Name of Prime Contractor	_____ Name and Title of Person Signing for Contractor (Print)	_____ Signature	_____ Date
--	---	---------------------------	----------------------

_____ Name of Prime Contractor	_____ Name and Title of Person Signing for Contractor (Print)	_____ Signature	_____ Date
--	---	---------------------------	----------------------

_____ Name of Prime Contractor	_____ Name and Title of Person Signing for Contractor (Print)	_____ Signature	_____ Date
--	---	---------------------------	----------------------

_____ Name of Prime Contractor	_____ Name and Title of Person Signing for Contractor (Print)	_____ Signature	_____ Date
--	---	---------------------------	----------------------

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
NOTICE OF COMPLETION
DOT TR-0128 (REV 03/2024)

PERMIT NO. _____

To whom it may concern:

All work authorized by the above-numbered permit was completed on _____

By providing my electronic signature for this form, I agree to conduct business transactions by electronic means and that my electronic signature is the legal binding equivalent to my handwritten signature. I hereby agree that my electronic signature represents my execution or authentication of this form, and my intent to be bound by it.

SIGNATURE OF PERMITTEE

FM 92 1546 M

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
NOTICE OF COMPLETION
DOT TR-0128 (REV 03/2024)

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NOTICE OF COMPLETION
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STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
NOTICE OF COMPLETION
DOT TR-0128 (REV 03/2024)

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SIGNATURE OF PERMITTEE

FM 92 1546 M

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ENCROACHMENT PERMIT GENERAL PROVISIONS

TR-0045 (REV. 12/2022)

1. **AUTHORITY:** The California Department of Transportation (“Department”) has authority to issue encroachment permits under Division 1, Chapter 3, Article 1, Sections 660 through 734 of the Streets and Highways Code.
2. **REVOCAION:** Encroachment permits are revocable on five (5) business days’ notice unless otherwise stated on the permit or otherwise provided by law, and except as provided by law for public corporations, franchise holders, and utilities. Notwithstanding the foregoing, in an emergency situation as determined by the Department, an encroachment permit may be revoked immediately. These General Provisions and any applicable Special Provisions are subject to modification or abrogation by the Department at any time. Permittees’ joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State of California (“State”) highway right-of-way may be exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay encroachment permit fees when due may result in rejection of future applications, denial of encroachment permits, and revocation of the encroachment permit if already issued.
4. **PERMITTEE AUTHORIZATION FOR OTHERS TO PERFORM WORK:** This encroachment permit allows only the Permittee and/or Permittee’s authorized contractor or agent to work within or encroach upon the State highway right-of-way, and the Permittee may not assign or transfer this encroachment permit. Any attempt to assign or transfer this encroachment permit shall be null and void. Permittee shall provide to the Department a list of Permittee’s authorized contractors/agents, in the form and at the time specified by the Department but if no time is specified then no later than the pre-construction meeting. Permittee shall keep the list current and shall provide updates to the Department immediately upon any change to the list of authorized contractors/agents, including but not limited the addition, removal, or substitution of an authorized contractor/agent, or a new address or contact information for an existing authorized contractor/agent. Permittee is responsible for the acts and/or omissions of any person or entity acting on behalf of the Permittee, even if such person or entity is not included on Permittee’s list of authorized contractors and/or agents.
5. **ACCEPTANCE OF PROVISIONS:** Permittee, and the Permittee’s authorized contractors and/or agents, understand and agree to accept and comply with these General Provisions, the Special Provisions, any and all terms and/or conditions contained in or incorporated into the encroachment permit, and all attachments to the encroachment permit (collectively “the Permit Conditions”), for any encroachment, work, and/or activity to be performed under this encroachment permit and/or under color of authority of this encroachment permit. Permittee understands and agrees the Permit Conditions are applicable to and enforceable against Permittee as long as the encroachment remains in, under, or over any part of the State highway right-of-way. The Permittee’s authorized contractors and/or agents, are also bound by the Permit Conditions. Non-compliance with the Permit Conditions by the Permittee’s authorized contractor and/or agent will be deemed non-compliance by the Permittee.
6. **BEGINNING OF WORK:** When traffic is not impacted (see General Provision Number 35), the Permittee must notify the Department’s representative two (2) business days before starting permitted work. Permittee must notify the Department’s representative if the work is to be interrupted for a period of five (5) business days or more, unless otherwise agreed upon. All work must be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this encroachment permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within State highway right-of-way must conform to all applicable Departmental construction standards including but not limited to: Standard Specifications, Standard Plans, Project Development Procedures Manual, Highway Design Manual and Special Provisions. Other than as expressly provided by these General Provisions, the Special Provisions, the Standard Specifications, Standard Plans, and other applicable Departmental standards, nothing in these General Provisions is intended to give any third party any legal or equitable right, remedy, or claim with respect to the encroachment permit and/or to these General Provisions or any provision herein. These General Provisions are for the sole and exclusive benefit of the Permittee and the Department. Where reference is made in such standards to “Contractor” and “Engineer,” these are amended to be read as “Permittee” and “Department’s representative,” respectively, for purposes of this encroachment permit.
8. **PLAN CHANGES:** Deviations from plans, specifications, and/or the Permit Conditions as defined in General Provision Number 5 are not allowed without prior approval from the Department’s representative and the Federal Highway Administration (“FHWA”) representative if applicable.
9. **RIGHT OF ENTRY, INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. The United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, and other state, and federal agencies, and the FHWA, through their agents or representatives, must have full access to highway

ENCROACHMENT PERMIT GENERAL PROVISIONS

facilities/encroachment area, at any and all times for the purpose of inspection, maintenance, activities needed for construction/reconstruction, and operation of the State highway right-of-way.

Upon completion of work, Permittee must request a final inspection for acceptance and approval by the Department. The local public agency Permittee must not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.

- 10. PERMIT AT WORKSITE:** Permittee and Permittee's authorized contractors/agents must keep the permit package and current list of authorized contractors/agents, or copies thereof, at the work site at all times and must show such documents upon request to any Department representative or law enforcement officer. If the permit package or current list of authorized contractors/agents, or copies thereof, are not kept and made available at the work site at all times, then all work must be suspended.
- 11. CONFLICTING ENCROACHMENTS:** Permittee must yield start of work to ongoing, prior authorized work adjacent to or within the limits of the Permittee's project site. When existing encroachments conflict with Permittee's work, the Permittee must bear all cost for rearrangements (e.g., relocation, alteration, removal, etc.).
- 12. PERMITS, APPROVALS, AND CONCURRENCES FROM OTHER AGENCIES AND/OR ENTITIES:** This encroachment permit is invalidated if the Permittee has not obtained all permits, approvals, and concurrences necessary and required by law, including but not limited to those from the California Public Utilities Commission ("CPUC"), California Occupational Safety and Health Administration ("Cal-OSHA"), local and state and federal environmental agencies, the California Coastal Commission, and any other public agency and/or entity having jurisdiction. Permittee is responsible for providing notice of the encroachment to, and obtaining concurrence from, any person or entity (whether public or private) affected by the scope of work described in the encroachment permit, regardless of whether such notice or concurrence is required by law; the Department is not responsible to provide such notice or obtain such concurrence. Permittee warrants all such permits, approvals, and concurrences have been obtained before beginning work under this encroachment permit. The Department may, at the Department's discretion, require the Permittee to demonstrate that Permittee has obtained all such permits, approvals, and concurrences, and Permittee shall demonstrate this at the time and in the manner specified by the Department.
- 13. PEDESTRIAN AND BICYCLIST SAFETY:** A safe continuous passageway must be maintained through the work area at existing pedestrian or bicycle facilities. At no time must pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades must be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street. Attention is directed to Section 7-1.04 "Public Safety," and to Section 12-4.04 "Temporary Pedestrian Access Routes," and to Section 16-2.02 "Temporary Pedestrian Facility," of the Department's Standard Specifications, and to California Vehicle Code section 21760, subdivision (c).
- 14. PUBLIC TRAFFIC CONTROL:** The Permittee must provide traffic control protection, warning signs, lights, safety devices, etc., and take all other measures necessary for the traveling public's safety as required by law and/or the Department. While providing traffic control, the needs of all road users, including but not limited to motorists, bicyclists and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act, must be an essential part of the work activity.
- Lane, Bike Lane, Sidewalk, Crosswalk, and/or shoulder closures must comply with the Department's Standard Specifications and Standard Plans for Temporary Traffic Control Systems & Temporary Pedestrian Access Routes, and with the applicable Special Provisions. Where issues are not addressed in the Standard Specifications, Standard Plans, and/or Special Provisions, the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control) must be followed.
- 15. MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee must plan and conduct work so as to create the least possible inconvenience to the traveling public (motorized vehicles, unmotorized vehicles such as bicycles, pedestrians, person(s) with disabilities, etc.), such that traffic is not unreasonably delayed.
- 16. STORAGE OF EQUIPMENT AND MATERIALS:** The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this encroachment permit. If encroachment permit Special Provisions allow for the storage of equipment or materials within the State highway right-of-way, the equipment and material storage must also comply with Section 7-1.04, Public Safety, of the Department's Standard Specifications.
- 17. CARE OF DRAINAGE:** Permittee must provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Department's Standard Specifications, Standard Plans, and/or as directed by the Department's representative.
- 18. RESTORATION AND REPAIRS IN STATE HIGHWAY RIGHT-OF-WAY:** Permittee is responsible for restoration and repair of State highway right-of-way resulting from permitted work (Streets and Highways Code, section 670 et seq.).
- 19. STATE HIGHWAY RIGHT-OF-WAY CLEAN UP:** Upon completion of work, Permittee must remove and dispose of all scraps, refuse, brush, timber, materials, etc. off the State highway right-of-way. The aesthetics of the highway must be as it was before work started or better.
- 20. COST OF WORK:** Unless stated otherwise in the encroachment permit or a separate written agreement with the Department, the Permittee must bear all costs

ENCROACHMENT PERMIT GENERAL PROVISIONS

- incurred for work within the State highway right-of-way and waives all claims for indemnification or contribution from the United States, the State, the Department, and from the Directors, officers, and employees of the State and/or the Department. Removal of Permittee's personal property and improvements shall be at no cost to the United States, the State, and the Department.
21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the Permittee actual costs at the currently set Standard Hourly Rate for encroachment permits.
22. **AS-BUILT PLANS:** When required, Permittee must submit one (1) set of folded as-built plans within thirty (30) calendar days after completion and acceptance of work in compliance with requirements listed as follows:
- Upon completion of the work provided herein, the Permittee must submit a paper set of As-Built plans to the Department's representative.
 - All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
 - The plans are to be prominently stamped or otherwise noted "AS-BUILT" by the Permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a Department stamp, or by signature of the Department's representative, must be used for producing the As-Built plans.
 - If construction plans include signing or striping, the dates of signing or striping removal, relocation, or installation must be shown on the As-Built plans when required as a condition of the encroachment permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage must show the removal, relocation, and installation dates of the appropriate staged striping and signing.
 - As-Built plans must contain the Encroachment Permit Number, County, Route, and Post Mile on each sheet.
 - The As-Built Plans must not include a disclaimer statement of any kind that differs from the obligations and protections provided by sections 6735 through 6735.6 of the California Business and Professions Code. Such statements constitute non-compliance with Encroachment Permit requirements and may result in the Department retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future encroachment permits or a provision requiring a public agency to supply additional bonding.
23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the State highway right-of-way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt encroachment permit is issued to the Permittee for the purpose of providing a notice and record of work. The Permittee's prior rights must be preserved without the intention of creating new or different rights or obligations.
- "Notice and Record Purposes Only" must be stamped across the face of the encroachment permit.
24. **BONDING:** The Permittee must file bond(s), in advance, in the amount(s) set by the Department and using forms acceptable to the Department. The bonds must name the Department as obligee. Failure to maintain bond(s) in full force and effect will result in the Department stopping all work under this encroachment permit and possibly revoking other encroachment permit(s). Bonds are not required of public corporations or privately-owned utilities unless Permittee failed to comply with the provisions and/or conditions of a prior encroachment permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedure section 337.15. A local public agency Permittee also must comply with the following requirements:
- In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local public agency Permittee agrees to require the construction contractor to furnish both a payment and performance bond in the local public agency's name with both bonds complying with the requirements set forth in Section 3-1.05 Contract Bonds of the Department's Standard Specifications before performing any project construction work.
 - The local public agency Permittee must defend, indemnify, and hold harmless the United States, the State and the Department, and the Directors, officers, and employees of the State and/or Department, from all project construction related claims by contractors, subcontractors, and suppliers, and from all stop notice and/or mechanic's lien claimants. The local public agency also agrees to remedy, in a timely manner and to the Department's satisfaction, any latent defects occurring as a result of the project construction work.
25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to relocate a permitted installation upon notice by the Department. Unless under prior property right or agreement, the Permittee must comply with said notice at the Permittee's sole expense.
26. **ENVIRONMENTAL:**
- ARCHAEOLOGICAL/HISTORICAL:** If any archaeological or historical resources are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified archaeologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.
 - HAZARDOUS MATERIALS:** If any hazardous waste or materials (such as underground storage tanks, asbestos pipes, contaminated soil, etc.) are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified hazardous

ENCROACHMENT PERMIT GENERAL PROVISIONS

waste/material specialist who must evaluate the site at the Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.

Attention is directed to potential aerially deposited lead (ADL) presence in unpaved areas along highways. It is the Permittee's responsibility to take all appropriate measures to protect workers in conformance with California Code of Regulations Title 8, Section 1532.1, "Lead," and with Cal-OSHA Construction Safety Orders, and to ensure roadway soil management is in compliance with Department of Toxic Substances Control (DTSC) requirements.

- c) **BIOLOGICAL:** If any regional, state, or federally listed biological resource is identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified biologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.

27. **PREVAILING WAGES:** Work performed by or under an encroachment permit may require Permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the California Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements must be directed to the California Department of Industrial Relations.

28. **LIABILITY, DEFENSE, AND INDEMNITY:** The Permittee agrees to indemnify and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind, and description, including but not limited to those brought for or on account of property damage, invasion of privacy, violation or deprivation of a right under a state or federal law, environmental damage or penalty, or injury to or death of any person including but not limited to members of the public, the Permittee, persons employed by the Permittee, and/or persons acting on behalf of the Permittee, arising out of or in connection with: (a) the issuance and/or use of this encroachment permit; and/or (b) the encroachment, work, and/or activity conducted pursuant to this encroachment permit, or under color of authority of this encroachment permit but not in full compliance with the Permit Conditions as defined in General Provision Number 5 ("Unauthorized Work or Activity"); and/or (c) the installation, placement, design, existence, operation, and/or maintenance of the encroachment, work, and/or activity; and/or (d) the failure by the Permittee, or by anyone acting for or on behalf of the Permittee, to perform the Permittee's obligations under any part of the Permit Conditions as defined in General Provision Number 5, in respect to maintenance or any other obligation; and/or (e) any change to the Department's property or adjacent

property, including but not limited to the features or conditions of either of them, made by the Permittee or anyone acting on behalf of the Permittee; and/or (f) a defect or obstruction related to or caused by the encroachment, work, and/or activity whether conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constituting Unauthorized Work or Activity, or from any cause whatsoever. The duty of the Permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

It is the intent of the Department and the Permittee that except as prohibited by law, the Permittee will defend, indemnify, and hold harmless as set forth in this General Provision Number 28 regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of: the United States, the State; the Department; the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors; the Permittee; persons employed by the Permittee; and/or persons acting on behalf of the Permittee.

The Permittee waives any and all rights to any type of expressed or implied indemnity from or against the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors.

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the encroachment, work, and/or activity whether conducted pursuant to this encroachment permit or constituting Unauthorized Work or Activity, and further agrees to defend, indemnify, and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, penalties, liability, suits, or actions of every name, kind, and description arising out of or by virtue of the Americans with Disabilities Act.

The Permittee understands and agrees the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, are not personally responsible for any liability arising from or by virtue of this encroachment permit.

For the purpose of this General Provision Number 28 and all paragraphs herein, "contractors of the State and/or of the Department" includes contractors, and their subcontractors, under contract to the State and/or the Department.

This General Provision Number 28 and all paragraphs herein take effect immediately upon issuance of this encroachment permit, and apply before, during, and after the encroachment, work, and/or activity

ENCROACHMENT PERMIT GENERAL PROVISIONS

contemplated under this encroachment permit, whether such work is in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, except as otherwise provided by California law. The Permittee's obligations to defend, indemnify, and save harmless under this General Provision Number 28 take effect immediately upon issuance of this encroachment permit and have no expiration date, including but not limited to situations in which this encroachment permit expires or is revoked, the work or activity performed under this encroachment permit is accepted or not accepted by the Department, the encroachment, work, and/or activity is conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, and/or no work or activity is undertaken by the Permittee or by others on the Permittee's behalf.

If the United States or an agency, department, or board of the United States is the Permittee, the first two paragraphs of this General Provision Number 28 (beginning "The Permittee agrees to indemnify..." and "It is the intent of the parties...") are replaced by the following paragraph:

Claims for personal injury, death, or property damage allegedly caused by the negligent or wrongful act or omission of any employee of the United States acting within the scope of their official duties are subject to the Federal Tort Claims Act, as amended, 28 U.S.C. § 1346 and § 2671 et seq. (Chapter 171).

29. **NO PRECEDENT ESTABLISHED:** This encroachment permit is issued with the understanding that it does not establish a precedent.

30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**

a) As part of the consideration for being issued this encroachment permit, the Permittee, on behalf of Permittee and on behalf of Permittee's personal representatives, successors in interest, and assigns, does hereby covenant and agree that:

- i) No person on the grounds of race, color, or national origin may be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- ii) That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination must be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
- iii) That such discrimination must not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the State highway right-of-way.
- iv) That the Permittee must use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal

Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.

b) That in the event of breach of any of the above nondiscrimination covenants, the State and the Department have the right to terminate this encroachment permit and to re-enter and repossess said land and the facilities thereon and hold the same as if said permit had never been made or issued.

31. **MAINTENANCE:** The Permittee is responsible at Permittee's sole expense for the encroachment, and the inspection, maintenance, repair, and condition thereof, and is responsible to ensure the encroachment does not negatively impact State highway safety, maintenance, operations, construction, State facilities, activities related to construction/reconstruction, or other encroachments. The Permittee's obligations in the preceding sentence take effect immediately upon issuance of this encroachment permit and continue until the encroachment is entirely and permanently removed. Additional encroachment permits or approval documents may be required authorizing work related to inspection, repair, and/or maintenance activities. Contact the Department for information.

32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code section 682.5 and 682.7, the Department is not responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of any activity for which this encroachment permit is issued.

The Permittee is required, as a condition of this encroachment permit, for any event that awards prize compensation to competitors in gendered categories, for any participant level that receives prize compensation, to ensure the prize compensation for each gendered category is identical at each participant level. (Streets and Highways Code, section 682.7.)

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the event, and further agrees to defend, indemnify, and save harmless the United State, the State and the Department, and the Directors, officers, and employees of the State and/or Department, including but not limited to the Director of the Department and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of or by virtue of the Americans with Disabilities Act.

33. **PRIVATE USE OF STATE HIGHWAY RIGHT-OF-WAY:** State highway right-of-way must not be used for private purposes without compensation to the State. The gifting

ENCROACHMENT PERMIT GENERAL PROVISIONS

of public property uses and therefore public funds is prohibited under the California Constitution, Article XVI, Section 6.

34. **FIELD WORK REIMBURSEMENT:** Permittee must reimburse the Department for field work performed by or on behalf of the Department to correct or remedy issues created by the Permittee or by others acting on behalf of the Permittee, including but not limited to hazards or damaged facilities, or to clear refuse, debris, etc. not attended to by the Permittee or by others acting on behalf of the Permittee.
35. **LANE CLOSURE REQUEST SUBMITTALS AND NOTIFICATION OF CLOSURES TO THE DEPARTMENT:** Lane closure request submittals and notifications must be in accordance with Section 12-4.02, and Section 12.4-04, of the Department's Standard Specifications or as directed by the Department's representative. The Permittee must notify the Department's representative and the Traffic Management Center ("TMC") before initiating a lane closure or conducting an activity that may cause a traffic impact. In emergency situations when the corrective work or the emergency itself may affect traffic, the Department's representative and the TMC must be notified as soon as possible.
36. **SUSPENSION OF TRAFFIC CONTROL OPERATION:** The Permittee, upon notification by the Department's representative, must immediately suspend all traffic lane, bike lane, sidewalk, crosswalk, and/or shoulder closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension must be borne by the Permittee.
37. **UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code section 4216 et seq., including but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The Permittee must provide notification to the Department representative at least five (5) business days before, and the regional notification center at least forty-eight (48) hours before, performing any excavation work within the State highway right-of-way.
38. **COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA):** All work within the State highway right-of-way to construct and/or maintain any public facility must be designed, maintained, and constructed strictly in accordance with all applicable Federal Access laws and regulations (including but not limited to Section 504 of the Rehabilitation Act of 1973, codified at 29 U.S.C. § 794), California Access laws and regulations relating to ADA, along with its implementing regulations, Title 28 of the Code of Federal Regulations Parts 35 and 36 (28 C.F.R., Ch. I, Part 35, § 35.101 et seq., and Part 36, § 36.101 et seq.), Title 36 of the Code of Federal Regulations Part 1191 (36 C.F.R., Ch. XI, Part 1191, § 1191.1 et seq.), Title 49 of the Code of Federal Regulations Part 37 (49 C.F.R., Ch. A, Part 37, § 37.1 et seq.), the United States Department of Justice Title II and Title III for the ADA, and California Government Code section 4450 et seq., which require public facilities be made accessible to persons with disabilities.
- Notwithstanding the requirements of the previous paragraph, all construction, design, and maintenance of public facilities must also comply with the Department's Design Information Bulletin 82, "Pedestrian Accessibility Guidelines for Highway Projects" and Standard Plans & Specifications on "Temporary Pedestrian Access Routes."
39. **STORMWATER:** The Permittee is responsible for full compliance with the following:
- For all projects, the Department's Storm Water Program and the Department's National Pollutant Discharge Elimination System (NPDES) Permit requirements under Order No. 2012-0011-DWQ, NPDES No CAS000003; and
 - In addition, for projects disturbing one acre or more of soil, with the California Construction General Permit Order No. 2009-0009-DWQ, NPDES No CAS000002; and
 - In addition, for projects disturbing one acre or more of soil in the Lahontan Region with Order No. R6T-2016-0010, NPDES No CAG616002.
 - For all projects, it is the Permittee's responsibility to install, inspect, repair, and maintain all facilities and devices used for water pollution control practices (Best Management Practices/BMPs) before performing daily work activities.

ENCROACHMENT PERMIT SPECIAL PROVISIONS

except in curbed urban areas or as specified in the encroachment permit. Where no curb exists and excavations within ten (10) feet of the traveled way are to remain open, a temporary Type K railing must be placed at a 10:1 taper or as otherwise directed by the Department's representative.

UG 6. TUNNELING: In addition to the requirements of "UG 1" and Section 603.6 of the Encroachment Permits Manual, the following requirements are also applicable:

- A. For this provision, a tunnel is defined as any installation that is thirty (30) inches or greater in diameter.
- B. When tunneling is authorized, the permittee must provide full-time inspection of tunneling operations. The Department's representative must monitor projects.
- C. Sand shields may be required as ground conditions change.
- D. Pressure grouting for liner plate, rib and spiling, or rib and lagging tunnels must be at every eight (8) feet section or the end of work shift before the next section is excavated. All grouting must be completed by the end of each workday.
- E. The headway must be secured at the end of each workday. Breast boards or plates must be installed during working hours for running sand or super-saturated soil.

UG 7. FACILITIES EXEMPT FROM UTILITY POLICIES: The following utilities are exempt from the requirements for location and depiction on the project plans unless the depiction of the utility is needed for interconnectivity with the proposed work (see Chapter 17 of the Project Development Procedures Manual):

- Natural gas service lines less than two (2) inches in pipe diameter that have normal operating pressures of sixty (60) psig or less
- Service connections (laterals) for water, sewer, electric, and telecommunication including fiber optic and cable service

All State-owned utilities must be plotted on the plans.

UG 8. DETECTOR STRIP: A continuous metallic detectable strip must be provided for non-metallic main utility installations. Service connections must be installed at right angles to the centerline of the State highway.

UG 9. BACKFILLING: All backfilling operations must be in accordance with Section 19-3 of Caltrans Standard Specifications.

Any required compaction tests must be performed by a certified laboratory at no cost to the Department and the

laboratory report must be furnished to the Department's representative.

UG 10. ROADWAY SURFACING AND BASE MATERIALS: Temporary repairs to pavements must be made and maintained upon completion of backfill until permanent repairs are made. Permanent repairs to pavements must be made within thirty (30) calendar days of completion of backfill unless otherwise authorized by the Department's representative. Temporary pavement patches must be placed and maintained in a smooth riding plane free of humps and depressions.

UG 11. DAMAGE TO TREE ROOTS: Tree roots three (3) inches or larger in diameter must not be cut within the tree drip line when trenching or other underground work is necessary adjacent to roadside trees. If such roots are encountered, they must be tunneled under, wrapped in burlap, and kept moist until the trench is backfilled. Trenching machines must not be used under trees if the trunk or limbs can be damaged by their use. Manholes must not be installed within twenty (20) feet of any trunk.

If the trees involved are close together and of such sizes that it is impractical to protect all roots three (3) inches or larger in diameter, or when roots are less than four (4) inches in diameter, outside tree drip line, special arrangements may be made whereby pruning of the tree tops to balance the root loss can be done by the permittee only when approved by and under the close supervision of the District Landscape Specialist or District Tree Maintenance Supervisor.

UG 12. PIPES ALONG ROADWAY: Pipes and conduits paralleling the pavement must be located as shown on the plans or as close as possible to the right-of-way line.

UG 13. BORROW AND WASTE: Borrow and waste must not be allowed within the work limits unless otherwise specified in the encroachment permit.

UG 14. MARKERS: All markers must not create a safety hazard for the traveling public or highway workers.

UG 15. CATHODIC PROTECTION: The permittee must perform stray current interference tests on underground utilities under cathodic protection and notify the Department's representative prior to the tests. The permittee must perform any corrective measures as necessary and authorized by the Department's representative.

UG 16. PAVEMENT REMOVAL: ASPHALT CONCRETE (AC) pavement must be saw cut to the full depth to provide a neat and straight pavement break along sides of the trench. Portland Cement Concrete (PCC)

ENCROACHMENT PERMIT SPECIAL PROVISIONS

pavement must be saw cut at the slab joints and to the full slab depth.

Where the edge of the trench is within two (2) feet of the existing curb and gutter or pavement edge, the AC pavement between the trench and the curb or pavement edge must be removed.

UG 17. EXCAVATION UNDER FACILITIES:

Where it is necessary to excavate under the existing curb and gutter or underground facilities, the void must be backfilled with two (2) sack cement-sand slurry.

UG 18. PERMANENT REPAIRS TO PCC

PAVEMENT: Repairs must be of PCC containing at least six hundred fifty-eight (658) pounds or seven (7) sacks of cement per cubic yard. The new pavement must have the same thickness as the adjacent pavement. The PCC must be satisfactorily cured and protected from

disturbance until it can be open to traffic with a compressive strength of at least 3,000 psig or for not less than forty-eight (48) hours. The new pavement may be open to traffic after six (6) hours of curing when no more than two (2) percent by weight of calcium chloride is added to the PCC mix as an accelerating chemical admixture.

UG 19. REMOVAL OF PCC SIDEWALKS OR

CURBS: PCC sidewalks or curbs must be saw cut to the nearest score marks and reconstructed to match the existing sidewalk or curb.

UG 20. SPOILS: No earth or construction materials must be tracked onto the highway pavement and public or private approach. The permittee must remove these materials immediately if tracked from the highway pavement and public or private approach.

PEDESTRIAN SAFETY (MCP)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

1. When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped, is safe and well defined and shown on the approved permit plan.
2. Pedestrian walkways and canopies within State Right of Way shall comply with the requirements of the applicable local agency or of the latest edition of the Uniform Building Code whichever contains the higher standards.

ENCROACHMENT PERMIT SPECIAL PROVISIONS**STORMWATER SPECIAL PROVISIONS FOR MINIMAL OR NO IMPACT (SWSP)**

TR-0400 (Rev. 09/2024)

1. **GENERAL:** The purpose of these Special Provisions is to provide the Permittee with specifications for water pollution control to minimize, prevent, or control the discharge of material into the air, surface waters, groundwater, and storm sewers owned by the State or local agencies. These provisions are not intended to take the place of the Caltrans Water Pollution Control Program (WPCP) for projects where soil disturbance from work activities ranging from more than a quarter of an acre to less than one acre, or work activities of one acre or more subject to the preparation of the Caltrans Storm Water Pollution Prevention Plan (SWPPP). These provisions must be included with the permit for projects that require an Erosion and Sediment Control Plan (ESCP). The Permittee must comply with the following Special Provisions and the direction of the State Representative. All Stormwater Best Management Practices (BMPs) must conform to Section 13 Water Pollution Control of the Caltrans' Standard Specifications.
2. **NPDES REQUIREMENTS:** The Permittee must be responsible for full compliance with the Caltrans Storm Water Program and the Caltrans National Pollutant Discharge Elimination System (NPDES) Permit requirements (Order 2022-0033-DWQ, NPDES No. CAS000003, and any amendments and/or subsequent orders). Projects in construction with active waste discharge identification number (WDID number) may continue their coverage with the California Construction General Permit CGP (Order 2009-0009-DWQ, NPDES No. CAS000002, and any amendments and/or subsequent orders) until 9/1/2025. Privately funded projects may not extend their 2009 CGP regulatory coverage and are responsible for compliance with the CGP (Order WQ 2022-0057-DWQ NPDES No. CAS000002) after 9/1/2023. It is the Permittee's responsibility to install, inspect, and repair or maintain facilities and devices used for water pollution control practices (BMPs) before performing daily work activities. Installation, inspection and maintenance responsibilities on the job site include: 1) soil stabilization materials in work areas that are inactive or prior to storm events, 2) water pollution control devices to control sediment and erosion, 3) implementation of spill and leak prevention procedures for chemical and hazardous substances stored on the job site, 4) material storage, 5) stockpile management, 6) waste management, 7) non-stormwater management, 8) water conservation, 9) tracking controls, and 10) illicit connection, illegal discharge detection and reporting. The Permittee must report to the State Representative when discharges enter receiving waters, adjacent property, and drainage systems. The Permittee must also address any illicit discharges or illegal dumping prior to start of daily work schedule by cleaning them up. Copies of written notices or orders from the Regional Water Quality Control Board or other regulatory agency must be provided to the State Representative within forty-eight (48) hours of reported activity. For additional information on stormwater compliance, visit the [State Water Resources Control Board's Storm Water Program](#).
3. **RESPONSIBILITY FOR DEBRIS REMOVAL:** The Permittee must be responsible for preventing project related sediment, trash, debris, and other construction waste from entering the street, storm drains, drainage swales, stormwater conveyance infrastructure, local creeks, or any other bodies of water. All existing treatment BMP's (TBMPs) must be protected in place. If an existing TBMP is damaged by the Permittee, the Permittee is responsible for complete repair to a satisfactory condition determined by the State Representative.
4. **SPOILS AND RESIDUE:** The Permittee must vacuum any saw-cut concrete waste material, debris, residue, etc. No spoils, debris, residue, etc. must be washed into a drainage system. The Permittee must ensure that Portland cement concrete and asphalt concrete grindings are not stockpiled or used in a manner that may result in an unauthorized stormwater discharge to waters of the state.
5. **SWEEPING:** Sweep paved roads at construction entrance and exit locations and surrounding paved areas daily within the job site during: 1) clearing and grubbing, 2) earthwork, 3) trenching, 4) soil disturbance, 5) pavement grinding and/or cutting, and 6) after observing tracking of material onto or off the State property. Minimize the amount of dust particles during sweeping activities, ensuring that the levels do not exceed the standards set by local air quality control districts or the EPA's National Ambient Air Quality standards. Use wet-vacuum whenever dust generation is excessive, or sediment pickup is ineffective. Roadways or work areas must not be washed down with water. Street sweeping operations must conform to Section 13 Water Pollution Control of the Caltrans' Standard Specifications.
6. **VEHICLES AND EQUIPMENT:** The Permittee must prevent all vehicles, equipment, etc. from leakage or mud tracking onto roadways. If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site. If vehicle or equipment cannot be immediately removed from job site, install secondary containment to contain spill and prevent illicit non-stormwater discharge.
7. **MAINTENANCE AND FUELING OF VEHICLES AND EQUIPMENT:** Maintenance and fueling of equipment must not result in any pollution at the job site. The Permittee must immediately clean up spills/leaks, and properly dispose of contaminated soil and materials. All maintenance and fueling should be conducted at an appropriate facility that is feasible. All maintenance and fueling which must occur onsite

ENCROACHMENT PERMIT SPECIAL PROVISIONS

- shall be conducted as far away as practical from drain inlets, water bodies, and other stormwater conveyance systems.
8. **CLEANING VEHICLES AND EQUIPMENT:** Limit vehicle and equipment cleaning or washing at the job site except what is necessary to control vehicle tracking or hazardous waste. All equipment must be sanitized prior to mobilization to limit the spread of invasive plant species. The Permittee must clean all equipment within a bermed area or over a drip pan large enough to prevent run-off. Notify the Engineer before cleaning vehicles and equipment at the job site with soap, solvents, or steam. Any water from this operation must be collected and disposed of at an appropriate site. Containment berms or dikes must be used for fueling, washing, maintaining and washing vehicles or equipment in outside areas. Containment must be performed at least one hundred (100) feet from concentrated flows of storm water, drainage courses, and storm drain inlets if within a flood plain, otherwise at least fifty (50) feet if outside the floodplain. Keep adequate quantities of absorbent spill cleanup material and spill kits in the fueling or maintenance area and on fueling trucks.
 9. **DIESEL FUELS:** The use of diesel fuel from petroleum or other fossil fuel as a form-oil or solvent is not allowed.
 10. **WEATHER CONDITIONS AT WORKSITE:** Any activity that generates fine particles or dust (e.g., Saw cutting, earthwork, sanding, etc.), which could be carried off-site by stormwater, must be conducted during dry weather conditions to avoid immediate mobilization into the drainage system.
 11. **WIND EROSION PROTECTION:** The use of Wind Erosion BMPs must be deployed year-round in instances where dust or fine particles could be transported off site. Potential wind erosion BMPs may include wind fence, water application, gravel, and/or hydro-mulch.
 12. **HOT MIX ASPHALT:** Runoff from washing hot mix asphalt must not enter any drainage conveyances or receiving waters.
 13. **PROTECTION OF DRAINAGE FACILITIES:** The Permittee must protect/cover gutters, ditches, drainage courses, and inlets with gravel bags, fiber rolls, State approved fabric filters, etc., to the satisfaction of the State Representative during grading, paving, sealing, saw-cutting, grooving and grinding, or any other activity which may result in an illicit discharge. All materials must conform to Section 13-6.02 Materials for Water Pollution Control of the Caltrans' Standard Specifications. No such protection measures must cause an obstruction to the traveling public. The Permittee must implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site (including secondary containment requirements) in accordance with Section 13-4.03B Spill Prevention and Control and for leaks and spills from vehicles and equipment each day of use in accordance with Section 13-1.03C Inspections for Water Pollution Control and Section 14-11 Hazardous Waste and Contamination for Environmental Stewardship of the Caltrans' Standard Specifications.
 14. **PAINT:** Clean water-based and oil-based paint from brushes or equipment within a contained area to prevent contamination of soil, receiving waters, or storm drain systems. Handle and dispose of paints, thinners, solvents, residues, and sludges that cannot be recycled or reused as hazardous waste under section 14-11. When thoroughly dry, dispose of dry latex paint, paint cans, used brushes, rags, absorbent materials, and drop cloths as solid waste under section 14-10.
 15. **CONSTRUCTION MATERIALS AND MATERIAL MANAGEMENT:** Materials necessary for erosion and sediment control must be stockpiled on site at convenient locations to facilitate prompt installation. Such materials must be implemented at all inactive disturbed areas, and prior to all qualifying rain events. A "Qualifying Precipitation Event" (QPE) is defined as a forecast with a 50% or greater probability of precipitation that results in 0.5 inches or more of rain within a 24-hour period. Do not allow soil, sediment, or other debris from stockpiles to enter storm drains, open drainages, or watercourses. Minimize stockpiles of all construction materials, including, but not limited to; pressure treated wood, asphalt concrete, cold mix asphalt concrete, concrete, grout, cement containing premixes, and mortar. All stockpiling of such materials must conform to Section 13-4.03C(2) Material Storage and Section 13-4.03C(3) Stockpile Management for Water Pollution Control of the Caltrans' Standard Specifications.
 16. **CONCRETE EQUIPMENT:** Concrete equipment must be washed in a designated washing area in a way that does not contaminate soil, receiving waters, or storm drain systems. Any concrete washout activities which result in compromised containment must be cleaned and disposed of immediately. All Designated concrete facilities, including equipment, washout areas must be contained during Qualifying Precipitation Events (QPEs) marked by clearly visible signage throughout the project area.
 17. **EXISTING VEGETATION:** Established existing vegetation is the best form of erosion control. Minimize disturbance to existing vegetation. Fenced barriers may serve as an adequate buffer to prevent traffic across existing vegetation. Damaged or removed vegetation must be replaced as directed by the State Representative.
 18. **SOIL DISTURBANCE:** Soil disturbing activities must be avoided during the wet weather season. If construction activities during wet weather are allowed in the permit, all necessary erosion control and soil stabilization measures must be implemented in advance of soil disturbing activity. All temporary relocation of BMPs must be completed at the end of each working day and prior to each Qualifying Precipitation Event with a 50% or greater probability of precipitation that results in 0.5 inches or more of rain within a 24-hour period. Silt and debris shall be removed from linear barriers as part of the regular inspection schedule and as deemed necessary by the State Representative.

ENCROACHMENT PERMIT SPECIAL PROVISIONS

- 19. SLOPE STABILIZATION AND TRACKING CONTROL:** Consider a certified expert in Erosion and Sediment Control in cases where slopes are disturbed or during implementation of temporary road construction for equipment and material access to the project. The Permittee is directed to comply with Section 13.5 Temporary Soil Stabilization, Section 13.6 Temporary Sediment Control, Section 13.7 Temporary Tracking Control and Section 21 Erosion Control of the Caltrans' Standard Specifications for construction during application of temporary soil stabilization and sediment/tracking control measures to minimize impacts to the soil surface. Temporary construction entrances/exits are required to be stabilized and may include gravel, rumble plates, and/or FODS. Erosion control blankets, temporary mulch, soil binders, tackifier, fiber, seed, straw, temporary covers, rigid plastic, gravel bag barriers, sediment filter bags, temporary check dams, drainage inlet protection, fiber rolls and/or silt fences may be required down slope and on temporary construction roads and entrances until permanent soil stabilization is established. Consult with manufacturer specifications regarding maintenance frequency of sediment controls. All controls must be maintained to ensure proper functionality. The Permittee must limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist or when environmental regulations prohibit their use within the project.
- 20. STOCKPILES:** All stockpiled materials must be stored at least one hundred (100) feet from concentrated flows of storm water, drainage courses, and storm drain inlets if within a flood plain, otherwise at least fifty (50) feet if outside the floodplain. All stockpiles must be covered and protected with a temporary perimeter sediment barrier if inactive or prior to each Qualifying Precipitation Event with a 50% or greater probability of precipitation that results in 0.5 inches or more of rain within a 24-hour period. A stockpile is considered inactive after fourteen (14) days without addition or subtraction. Additionally, cold mix stockpiles must be stored on an impermeable surface and covered with nine (9) mil plastic to prevent contact with water. Minimize stockpiling of materials on the job site. Manage stockpiles by implementing the water pollution control practices in Section 13--4.03C(3) Stockpile Management for Water Pollution Control of the Caltrans' Standard Specifications for construction. Demolished material must not be allowed to enter storm drain systems and receiving waters. Use authorized covers and platforms to collect debris. Use attachments on equipment to catch debris during all demolition activities. Empty debris-catching devices daily and handle debris in accordance with Section 13-4.03D Waste Management for Water Pollution Control of the Caltrans' Standard Specifications for construction.
- 21. DISCOVERY OF CONTAMINATION:** The State Representative must be notified in case any unusual discoloration, odor, or texture of ground water, is found in excavated material. Additionally, the State Representative must be notified if abandoned, underground tanks, pipes, or buried debris are encountered.
- 22. SANITARY AND SEPTIC WASTE:** Do not bury or discharge wastewater from a sanitary or septic system within the highway. A sanitary facility discharging into a sanitary sewer system must be properly connected and free from leaks. Place a portable sanitary facility at least 50 feet away from storm drains, receiving waters, and flow lines. The Permittee must comply with local health agency regulations if using an on-site disposal system.
- 23. LIQUID WASTE:** Prevent job site liquid waste from entering storm drain systems and receiving waters. Drilling slurries, grease or oil-free wastewater or rinse water, dredging, and wash water or rinse water running off a surface or other non-storm water liquids not covered under separate wastewater permits must be held in structurally sound, leak-proof containers, such as portable bins or portable tanks. Store containers at least fifty (50) feet away from moving vehicles, equipment, concentrated flows of storm water, drainage courses, and storm drain inlets. Liquid waste may require testing to determine hazardous material content prior to disposal. All measures must conform to section 13--4.03D(5) Liquid Waste for Water Pollution Control of the Caltrans' Standard Specifications for construction.
- 24. WATER CONTROL AND CONSERVATION:** Manage water use in a way that will prevent erosion and discharge of pollutants into storm drain systems and receiving waters. Direct all runoff into areas where it can infiltrate.
- 25. PILE DRIVING:** Keep spill kits and cleanup materials at pile driving locations. Park pile driving equipment over drip pans, absorbent pads, or plastic sheeting with absorbent material, and away from stormwater run-on when not in use. In the event of oil/grease leaks and spills from pile driving activities, immediately contain and dispose of all contaminated materials.
- 26. DEWATERING:** Dewatering consists of discharging accumulated storm water, groundwater, or surface water from excavations or temporary containment facilities. All dewatering operations must comply with the latest Caltrans guidelines including the Field Guide for Construction Site Dewatering. Contact the State Representative for approval of dewatering discharge by infiltration or evaporation, otherwise, any effluent discharged into a permitted storm water system requires approval from the Regional Water Quality Control Board. Prior to the start of dewatering, the Permittee must provide the State Representative with a dewatering and discharge work plan that complies with Section 13-4.03G Dewatering for Water Pollution Control of the Caltrans' Standard Specifications for construction. Work plan also references guidelines and BMPs in the CGP and the Field Manual for Construction Site Dewatering. A 24-hour email notification of dewatering discharge to the Regional Water Board, including the implemented SWPPP and BMPs, is required by Attachment J of the CGP.

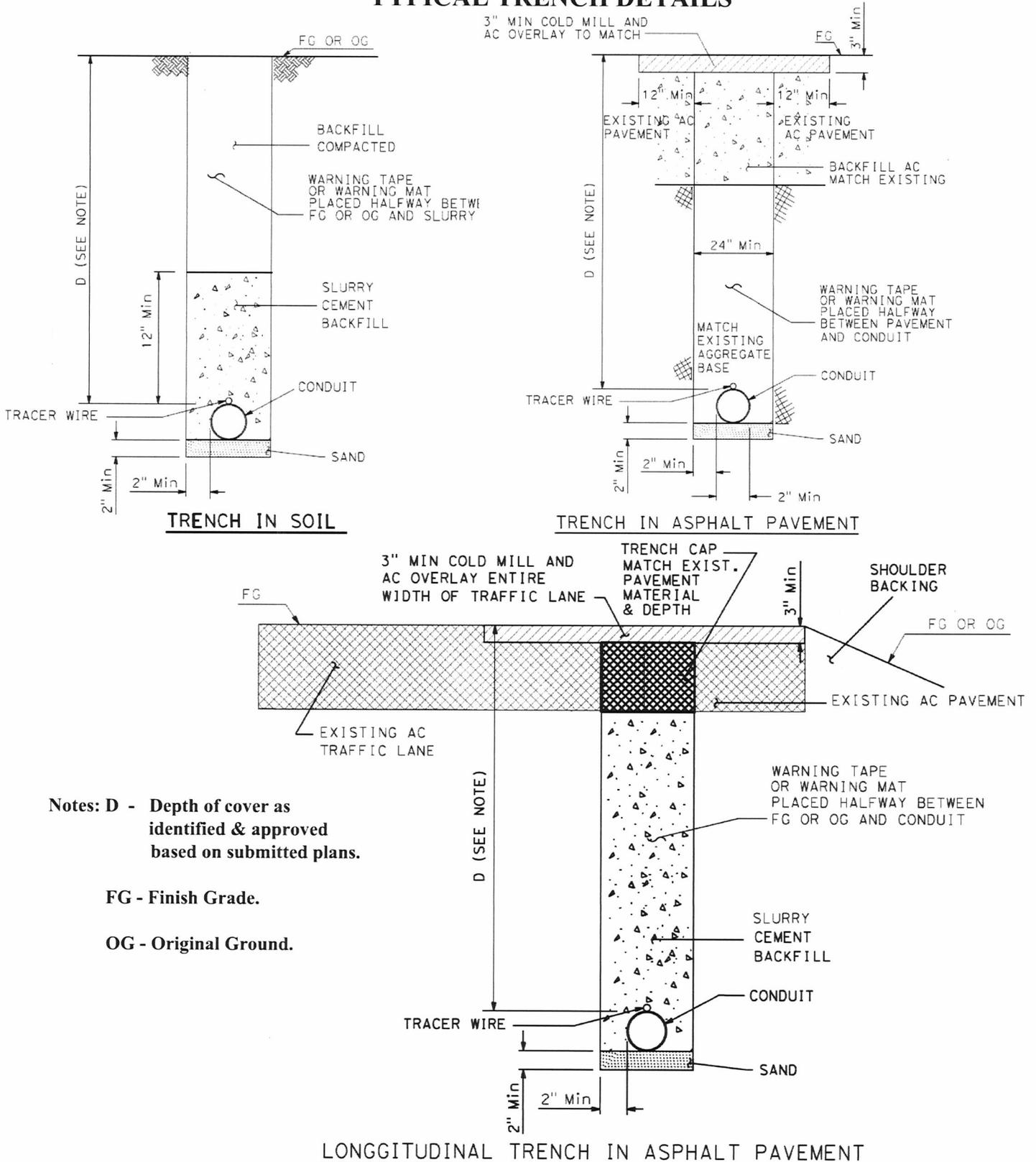
HAZARDOUS MATERIALS AND HAZARDOUS WASTE MANAGEMENT SPECIAL PROVISIONS

TR-0408 (New 09/2017)

By acceptance of this encroachment permit, Permittee hereby agrees that:

1. All construction debris/materials/water/excess soil must become the property of the Permittee, and must be transported and disposed of, outside of Caltrans' right-of-way, in accordance with all applicable environmental laws and regulations. The Permittee must be identified as the generator for all construction debris/materials/water/excess soil and must be responsible for proper identification (including sampling and analysis) and management of all construction and contaminated debris/materials/water/excess soil that are removed, and/or excavated, from the work site. If hazardous waste is generated, the Permittee must obtain an Environmental Protection Agency (EPA) Identification Number issued in their name. State Permit Inspector does not sign any manifests or shipping papers. The Permittee must be named as the generator on all Uniform Hazardous Waste Manifests and shipping papers. Caltrans must not be identified or written anywhere on the manifests or shipping papers. Prior to waste disposal, the Permittee should submit the waste generator form(s) to State Permit Inspector for verification. The Permittee must submit to the State Permit Inspector, a copy of all manifests and/or shipping papers generated for materials removed, transported and/or excavated from the state right-of-way.
2. If contaminated material is encountered, Permittee is to stop work and contact the State Permit Inspector immediately. The Permittee must submit a Sampling and Analysis Plan (SAP), and a Health and Safety Plan (HaSP) prepared by a Certified Industrial Hygienist (CIH) and in conformance with California Code of Regulations title 8, section 5192, "Hazardous Waste Operations and Emergency Response" for sampling activity through a separate permit application. Upon the permit review, additional environmental documents may be required prior to resumption of construction activity.
3. Permittee is responsible for any violation, penalty, enforcement action, corrective action, remedial action, and any other type of consequences resulting from cross contamination of groundwater (including perched groundwater), improper handling/managing of hazardous materials and/or placement of contaminated materials inside Caltrans right-of-way.
4. It is the Permittee's responsibility to comply with the Department of Toxic Substances Control (DTSC) ADL requirements for roadway soil management. Reuse of soils containing greater than 80 mg/kg total lead is not allowed without written approval of the DTSC and Caltrans. The Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils between Caltrans and the DTSC does not constitute written approval for the Permittee to reuse soils containing greater than 80 mg/kg total lead.
5. The Permittee must implement the emergency notification requirements established in the California Office of Emergency Management Hazardous Materials, Spill / Release Notification Guidance (<http://www.caloes.ca.gov/>).
6. Any imported material used for backfill must be free of contamination, and a certificate of the material as "clean" with the source area of the material must be provided to Permit Inspector upon request. Importing soils containing greater than 80 mg/kg total lead for use in state right-of-way is not allowed.
7. Stockpiles of material containing aerially deposited lead shall not be placed where affected by surface run-on or run-off. Stockpiles shall be covered with plastic sheeting 13 mils minimum thickness or with one foot of nonhazardous material. Stockpiles shall not be placed in environmentally sensitive areas. Stockpiled material shall not enter storm drains, inlets, or waters of the State.

TYPICAL TRENCH DETAILS



Notes: D - Depth of cover as identified & approved based on submitted plans.

FG - Finish Grade.

OG - Original Ground.

- All work must be authorized by the encroachment permit, and/or as directed by the State's representative. (Notes continue on page 2)

- Must include tracer wire or other continuous measure to provide positive subsurface detection for the life of the facility (Project Development Procedures Manual (PDPM) Chapter 17).
- Open trench installation of underground utility facilities must include warning tape or warning mats complying with the American Public Works Association (APWA) Uniform Color Code for identifying the type of underground utility. Where mechanical protection is installed, warning tape must be placed above the mechanical protection and below the roadbed subgrade as shown on the details. (PDPM Chapter 17).
- Clearance between the trench wall and conduit of less than 6 inches in width shall be a minimum of 2 inches. Clearance between the trench wall and conduit of greater than 6 inches in width shall be a minimum of 6 inches.
- When the trench width is less than 24 inches the backfill for subgrade must consist of slurry cement. Controlled Low-Strength Material (CLSM) can be substituted at the discretion of the State's representative.
- When trench width is greater than 24 inches compacted aggregate base may be used for backfilling.
- Structure backfill and compaction must conform to Section 19-3.02C and 3.03 of the Standard Specifications.
- For trench located under unimproved surface, structure backfill can use the original soil. Soil must be compacted by mechanical means. Ponding, jetting or flooding are not allowed. Slurry cement backfill is not optional unless approved by the Caltrans District.
- Slurry cement backfill must conform to Section 19-3.02E of the Standard Specifications.
- Aggregate base and its compaction shall conform to Section 26 of the Standard Specifications.
- CLSM if used must conform to Section 19-3.02G of the Standard Specifications. When CLSM is utilized the mix design and test results must be submitted to the State's representative. See Appendix H of the Encroachment Permits Manual for additional information.
- Cold planed surface and overlay shall be to the nearest lane line for the entire length of the trench/disturbed areas, and/or as directed by the State's representative.
- When Hot mix asphalt (HMA) is used to backfill Asphalt Concrete (AC) Section of the road, HMA must conform to Section 39 of the Standard Specifications.
- A paving notch ("T" Cut) shall be cold planed in exist asphalt concrete to a minimum width of 12 inches beyond each side of the trench and to a depth of 3 inches for the final layer of HMA.
- AC used to replace pavement section shall match existing pavement depth, unless directed otherwise by the State's representative.
- A tack coat of asphaltic emulsion conforming to Section 39-2.01C (3) (f) shall be applied.
- When the trench is within 4 feet of curb and gutter, additional cold planning may be required at the discretion of the State's representative. Potholes or trenches separated / adjoined by 10 feet or less to be overlaid together at the discretion of the State's representative.
- Pavement markings and/or striping removed or damaged during construction must be replaced in kind as directed by the State's representative.
- Other trench related details are shown in Chapter 6 of the Encroachment Permits Manual as well as the Trenching and Shoring Manual. Both publications can be found on the State of California, Department of Transportation's website.
- If trench is located in the roadway where Portland Cement Concrete (PCC) exist, remove the concrete to a depth of at least 3 feet below finished grade as per standard Specification 15-1.03B. Replace entire concrete slab from joint to joint as directed by State's representative.
- Electrical systems installations that are part of State Highway System must be installed in compliance with Caltrans Standard Specifications, Section 87.

UTILITY UNDERGROUND PROVISIONS (UG)

TR-0163 (Rev. 07/2023)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

High priority utilities, pressurized facilities, pipes or ducts six (6) inches or larger in diameter, or placement of multiple pipes or ducts regardless of diameters are required to be encased on both conventional and access-controlled State highway right-of-way. An exception to this encasement policy may be allowed on a case-by-case basis with the “Uncased High-Pressure Natural Gas Pipeline” Special Provisions (TR-0158).

A “High Priority Utility” is defined as: 1) natural gas pipelines greater than six (6) inches in diameter, or with normal operating pressures greater than sixty (60) psig; 2) petroleum pipelines; 3) pressurized sanitary sewer pipelines; 4) high-voltage electric supply lines, conductors, or cables that have a potential to ground of greater than or equal to sixty (60) kV; or 5) hazardous materials pipelines that are potentially harmful to workers or the public if damaged.

The pavement or roadway must not be open cut unless specifically allowed. Utility installations are not allowed inside culverts or drainage structures.

All installations must comply with Chapter 17 of the Caltrans Project Development Procedures Manual for utility clearance and offset requirements.

For additional details regarding longitudinal utility encroachments on both conventional and access-controlled State highway right-of-way, see Section 602 of the Encroachment Permits Manual.

UG 1. ENCASEMENT: Casings must have an inside diameter sufficiently larger than the outside diameter of the pipe or duct to accommodate placement and removal.

When Horizontal Directional Drilling (HDD) is authorized, High-Density Polyethylene (HDPE) is acceptable as the casing.

When Reinforced Concrete pipe in accordance with Section 65-2 of Caltrans Standard Specifications is installed by Bore & Jack, it must have rubber gaskets at the joints and see “D” below for grouting of voids left by jacking operations.

- A. Spiral welded casings may be allowed provided the casing is new and the weld is smooth.
- B. The ends of the casing must be plugged with ungrouted bricks or other suitable material approved by the Department’s representative.
- C. Minimum wall thicknesses of steel encasements for different lengths and diameters of pipes are as follows:

Minimum Wall Thickness

Casing Diameter	Up to 150 feet in length	Over 150 feet in length
6 to 28 inches	1/4 inch	1/4 inch
30 to 38 inches	3/8 inch	1/2 inch
40 to 60 inches	1/2 inch	3/4 inch
62 to 72 inches	3/4 inch	3/4 inch

- D. When required by the Department’s representative, the permittee must pressure grout to fill any voids

caused by the permitted work at the permittee’s expense. The grout holes when placed the inside of the casing must be on eight (8) feet centers, longitudinally and offset twenty-two (22) degrees from the vertical axis of the casing and staggered to the left and right of the top longitudinal axis of the casing. Grout pressure must not exceed five (5) psig for a duration sufficient to fill all voids.

- E. When the placement of multiple encasements is requested, the distance between multiple encasements must be the greater of twenty-four (24) inches or twice the diameter of the larger pipe being installed.
- F. Casings within access-controlled highways must extend to the right-of-way lines.
- G. Wing cutters, if used, must be a maximum of one (1) inch larger in diameter than the outside diameter of the casing. Voids caused by the use of wing cutters must be grouted in accordance with “D” above.
- H. A band welded to the leading edge of the casing must be placed square to the alignment and not on the bottom edge. A flared lead section on bores over one hundred (100) feet is not allowed.
- I. The length of the auger strand must be equal to that of the section of encasement pipe.
- J. The casings within conventional highways must extend at least five (5) feet beyond the back of curb or edge of pavement, or to the right-of-way line if less. Where Portland Cement Concrete (PCC) cross-gutter exists, the casings must extend at least five (5)

ENCROACHMENT PERMIT SPECIAL PROVISIONS

feet beyond the back of the cross-gutter, or to the right-of-way line if less.

UG 2. OPEN-CUT METHOD: When the encroachment permit authorizes installation by the open-cut method, surfacing and base materials and thickness thereof must be as specified in the encroachment permit.

No more than one (1) lane of the highway pavement must be open cut at any time unless otherwise approved in writing by the Department's representative. After the pipe is placed in the open-cut section, the trench must be backfilled in accordance with Section 19-3 of Caltrans Standard Specifications. The backfilled section must be open to traffic safely with temporary repairs to the surfacing before the next section of pavement is cut.

If backfilling operations have not been properly completed at the end of a working day, steel plate bridging is required to make the entire highway facility open to traffic in accordance with the "Steel Plate Bridging Utility" Special Provisions (TR-0157).

Sides of open-cut trenches in paved areas must be kept as nearly vertical as possible. Trenches must not be two (2) feet wider than the sum of the outside diameter of the pipe to be laid therein plus the necessary width to accommodate shoring.

UG 3. TRENCHLESS CONSTRUCTION: The following provisions are applicable for installing conduit with the bore diameter less than thirty (30) inches using trenchless methods (e.g., Bore & Jack, HDD, Microtunneling, Pipe Bursting, Pipe Ramming, etc.). For installations with the bore diameter equal to or greater than thirty (30) inches, permittees must comply with Non-Standard Special Provision (NSSP) 19-15, Trenchless Construction. A copy of the NSSP 19-15 can be obtained from the Department's representative or District Encroachment Permits Office.

3.1. Definitions

Bore: Borehole excavated using trenchless construction for the installation of conduit.

Overcut: Radial annular gap between bore and outer pipe wall.

3.2. Construction: The superintendent must be at the site at all times when work is being conducted, if the borehole diameter is greater than ten (10) inches and the depth of installation is less than eight (8) times the diameter of the borehole.

Trenchless excavation and conduit installation must be performed to the line and grade shown. When excavation or installation is out of line or grade, make immediate alignment correction.

Existing structures, pavement, and utilities must be protected during installation. Restore and repair immediately any damage resulting from construction.

Repair or replace any damaged pipe sections.

Overcut must be less than:

- A. One (1) inch or five (5) percent of the conduit outside radius, whichever is less, and
- B. Two (2) inches for trenchless construction using HDD method

Notify the Department's representative immediately if you encounter obstruction or condition that impedes construction.

3.3. Quality Assurance

3.3-1. Pre-construction Meeting: Contact the Department's representative to schedule and have a pre-construction meeting at least seven (7) business days before the start of trenchless construction or as identified in the permit.

Attendees should include:

1. The Department's representative
2. Your project manager
3. Your project superintendent
4. The contractor for trenchless construction

Provide and present:

1. Trenchless construction shop drawings, work plans, and calculations
2. Mitigation plans for both during and after construction
3. Construction timeline and critical path activities

3.3-2. Contractor Qualifications: The contractor must employ a superintendent, who has successfully completed at least five (5) of such projects, if the borehole diameter is greater than ten (10) inches and the depth of installation is less than eight (8) times the diameter of the borehole. Before pre-construction meeting, the following must be submitted to Department's representative if requested:

1. Summary of the contractor's experience demonstrating that the contractor has successfully completed at least five (5) projects in the past five (5) years using similar trenchless construction in similar ground and groundwater conditions with similar drive lengths and diameter range.
2. Summary of the superintendent's experience demonstrating that the superintendent has successfully completed at least five (5) projects using similar construction methods for trenchless construction in similar ground and groundwater

ENCROACHMENT PERMIT SPECIAL PROVISIONS

conditions with similar drive lengths and diameter range.

3.3-3. Conduit Line, Grade, and Shape: When monitoring is required:

1. Survey and record control lines at least seven (7) business days before trenchless construction.
2. Observe and adjust measurements of survey control lines weekly. Report discrepancies to the Department's representative.

Survey and record the centerline of the constructed conduit after each section is advanced or every five (5) feet of advancement, whichever is shorter.

3.3-4. Ground Surface Movement Monitoring: Ground surface movement monitoring is required if the installation meets the following criteria or if required by the Department's representative:

1. Bore diameter is greater than ten (10) inches, and
2. Minimum vertical distance between the pavement or sidewalk surface and the top of bore is less than eight (8) times the diameter of the borehole.

Mark monitoring points on critical structures and utilities at locations shown. Include these points in monitoring surveys. Perform monitoring surveys before noon and at ambient temperature below eighty-five (85) degrees Fahrenheit. Perform ground surface survey under the Caltrans Surveys Manual and supplemental guidance.

Establish a minimum of four (4) control points for ground surface movement monitoring. Perform baseline ground surface survey at least fifteen (15) business days before trenchless construction. Notify the Department's representative at least ten (10) business days before the survey.

Develop baseline surface model. Use the baseline surface model to determine the movement of ground surface and embankment slope. See Encroachment Permit Survey Grid (TR-0151) in Appendix E of the Encroachment Permits Manual for survey grid spacing and other requirements.

Perform ground surface movement monitoring survey:

1. Weekly during construction or as required by the Department's representative
2. Biweekly for one (1) month after completion of each installation or as required by the Department's representative

Produce the surface model based on the monitoring survey data and calculate the movement of monitoring points using baseline surface model. Each monitoring survey may have different grid points.

Each ground surface horizontal and vertical measurement must be accurate to ± 0.03 feet on pavement and ± 0.1 feet

on unpaved surfaces at the ninety-five (95) percent confidence level. Vertical movement produced by comparing current surface model with pre-construction surface model must be accurate to ± 0.01 feet on pavement and ± 0.1 feet on unpaved surfaces at the ninety-five (95) percent confidence level.

If ground surface movement in the pavement above the advancing pipe meets the requirements for two (2) consecutive weeks, the frequency of monitoring survey may be reduced to biweekly.

Notify the Department's representative at completion of each installation. Ground surface vertical movement requirements are:

Ground Surface Vertical Movement

Quality Characteristic	Requirement
Critical Structure Monitoring Points - Horizontal or Vertical (max, feet)	0.02
Highway surface (max, feet)	0.04
Embankment slope (max, feet)	0.2

If ground surface vertical movement requirements are not met:

1. Stop work immediately.
2. Notify the Department's representative.
3. Submit an alternative construction method.
4. Submit a mitigation plan that includes methods to fill the voids created under the ground surface and restore the density of subsurface materials.
5. Monitor ground surface movement in the area above the advancing pipe:
 - 5.1. Daily until no additional vertical movement is detected in the areas that exceed the movement requirements
 - 5.2. Every two (2) working days until the vertical movement meets the requirements for two (2) consecutive weeks

3.4. Submittals

3.4-1. Monitoring Plans: Submit monitoring plans for:

1. Conduit grade and alignment control, including monitoring instruments, layout of instrumentation points, construction details, and monitoring frequency
2. Logging of excavated materials, including anticipated volume of excavation and measured volume of removed spoil
3. Critical operations of applicable trenchless construction, including excavation, boring, spoil removal, lubrication, jacking, installation, and grouting
4. Ground surface movement, including digital surface survey method, survey data processing and analysis

ENCROACHMENT PERMIT SPECIAL PROVISIONS

method, and digital surface file for the bore diameter greater than ten (10) inches and the vertical distance between the pavement or sidewalk surface and the top of bore less than eight (8) times the diameter of the borehole

3.4-2. Daily Construction Record: Maintain Daily Construction Record and submit to the Department's representative upon request.

Daily Construction Record must include:

1. Date and time of operation
2. Names of key personnel
3. Length of constructed conduit, including coordinates and elevation of the beginning and ending (latitude, longitude and northing, easting, elevation) of the conduit advanced during each work shift. Record must reference the project coordinate system.
4. Rate of advance
5. Jacking force
6. Problems encountered, possible causes, and mitigation performed
7. Geological log of excavated face and materials, with the logging performed by a geologist who is registered as an engineering geologist in the State
8. Records and field note of:
 - 8.1. Any visible cracks
 - 8.2. Conduit line and grade control
 - 8.3. Anticipated and actual volumes of spoil removed and causes of the volume discrepancy
 - 8.4. Groundwater table elevation if dewatering is required

3.4-3. Ground Surface Movement Monitoring

Records: Submit:

1. Before construction: survey data and surface model to demonstrate compliance with the Caltrans Surveys Manual and supplemental guidance
2. During and after construction: survey data, surface model, and vertical movement based on the comparison between current and pre-construction surface model

3.4-4. Contact Grouting Record: Maintain Contact Grouting Record and submit to the Department's representative upon request.

Contact Grouting Record must include:

1. Injection locations
2. Grout quantity]
3. Grout pressure
4. Measurements and observations, including heave, casing or carrier pipe movement, grout loss quantity,

communication between grout ports, ground surface, and nearby utilities and storm drains

5. Problems encountered, possible causes, and mitigation performed

3.4-5. Post-Construction Record: Maintain Post-Construction Record and submit to the Department's representative upon request.

Post-Construction Record must include:

1. Completed conduit construction inspection records, including video recording and photographs
2. As-built plans showing details and alignment of the constructed conduit, horizontal and elevation survey based on project coordinate system, any problems encountered, and mitigation actions performed
3. As-built plans showing details of pavement restoration work performed

3.5. Restore Highway Pavement: After completion of trenchless construction of conduit, restore highway pavement to conditions as it was prior to beginning of construction activities or better. Restore Asphalt Concrete (AC) pavement with mill and fill. Repair or replace AC pavement with dowels for any cracks and spalling caused by construction.

UG 4. Bore and receiving pits must:

1. be located at least ten (10) feet from the edge of pavement on rural conventional highways.
2. be located at least five (5) feet beyond the concrete curb and gutter or AC dike on urban conventional highways.
3. be located at least five (5) feet beyond the toe of slope of embankments.
4. be located outside access-controlled highway right-of-way.
5. be protected by placement of six (6)-foot chain link fence or Type K railing around them.
6. be adequately shored in accordance with Cal/OSHA requirements. Shoring for jacking and receiving pits located within fifteen (15) feet of traffic lanes on a State highway must not extend more than thirty-six (36) inches above the pavement grade unless otherwise authorized by Department's representative. Reflectors must be affixed to the shoring on the sides facing traffic. A six (6)-foot chain link fence must be installed around the perimeter of the pits during non-working hours.
7. have crushed rock and sump areas to clear groundwater and water used to clean the casing. Where groundwater is found and pumping is required, the pits must be lined with filter fabric.

UG 5. LIMIT OF EXCAVATION: No excavation is allowed within ten (10) feet from the edge of pavement