STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

FM 91 1436

ENCROACHMENT PERMIT

DOT TR-0120 (REV 05/2023)

Permit No.
01-26-N-UJ-0234

In compliance with your application of May 12, 2026

Dist/Co/Rte/PM
01/HUM/101/PM R90.8-R92.3-Var

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. 12669030

Permit Approval Date
June 03, 2026

Performance Bond Amount (1)	Payment Bond Amount (2)
$0	$0

Bond Company
$ N/A

Bond Number (1)	Bond Number (2)
$ N/A	$ N/A

TO:

Mckinleyville Community Services District
C/O: GHD
718 Third Street, Eureka, CA 95501
Eureka, CA 95501
Email: luke.halonen@ghd.com
Phone: (707)267-2228

, PERMITTEE

and subject to the following, PERMISSION IS HEREBY GRANTED to:
Enter the State highway right-of-way from post mile 90.8 to 92.8 on Route 101 in Humboldt County to install two gravity sewer main crossings and associated traffic control.

The Permittee must arrange a pre-construction meeting with the Department's Representative a minimum of two (2) weeks prior to the start of work to discuss traffic control, scheduling, and the attached permit provisions. Work must not begin until the Department's Representative has been contacted. Failure to comply with this requirement will result in suspension of this permit.

Department's Representative: Barrett Penton, (707) 572-7308, barrett.penton@dot.ca.gov

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

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

☐ YES ☒ NO The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before June 1, 2027
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: Barrett A. Penton
#2:
#3:
#4:

APPROVED:

Matthew Brady, District Director

BY

Heidi Quintrell (Jun 3, 2026 15:11:42 PDT)

Heidi L. Quintrell, District Permit Engineer

DISTRICT 01 SPECIAL PROVISIONS

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

NOTIFICATIONS

1. **The Permittee must arrange a pre-construction/pre-event conference with the Department's Representative upon receipt of this encroachment permit. The Department's Representative, Barrett Penton, can be reached at (707) 572-7308 or barrett.penton@dot.ca.gov.**
2. Prior to beginning permitted work on any given day, the Permittee must contact the Department's Representative.
3. The Permittee must notify Caltrans Electrical, Michael Jensen at telephone (707) 272-5481, at least 3 working days in advance of beginning work, to locate buried facilities prior to any excavations or demolition.
4. Immediately, all damage loop detectors must be replaced, and notification made to Caltrans District 1 TMS Electrical Technician, William Bartley, at (707) 498-7927.
5. The Permittee must notify Caltrans Electrical Maintenance 5 days in advance if any signal loop detectors will be altered by construction activities, if signals will be put on all red flash operations, shut down, or if any temporary signal turning adjustments are needed.
6. The Permittee must notify the Caltrans Senior Transportation Surveyor, James Harcharik at (707) 441-5732, a minimum of 7 days before work is started to identify Caltrans survey monuments to be located.

GENERAL

7. The Department's Representative has the authority to stop all work immediately at any time.
8. Regular work hours are defined as 6:30 a.m. Monday to 6:30 p.m. Friday, excluding holidays and the Friday before a holiday weekend.
9. **If a contractor is to be used that is not named as the Permittee (Mckinleyville Community Services District) or Authorized Agent, Form TR-0429 must be submitted to and approved by the Department's Representative prior to beginning work in the State right of way.**
10. The Permittee's work is subordinate to any operations which the Department may conduct and must not delay or interfere with the Department's Forces or the Department's contractors/subcontractors.
11. Permitted work must be diligently prosecuted to completion. Should suspension of work be necessary for any reason, maintain and protect work, including but not limited to trenches and excavation being closed (backfilled and compacted), and the area graded, obstructions removed, and erosion control measures installed to the satisfaction of the Department's Representative.

CLOSURE SCHEDULE AND CONDITIONS

12. The Permittee's attention is directed to Section 12-4.02A(3)(b) "Closure Schedules" of the latest Standard Specifications and Revised Standard Specifications that can be found here Construction Contract Standards | Division of Design (ca.gov).
13. Delete General Provision 35, "Notification of Closures to Department and Traffic Management Center (TMC)," in its entirety and replace with: "The Permittee must notify the Department's Representative and the Department Lane Closure System (LCS) Representative, telephone (707) 834-2134, at least 10 days before conducting an activity that may cause a traffic impact, including initiating a lane closure. A confirmation notification should occur 3 days before closure or other potential traffic impacts. In emergency situations when the corrective work or the emergency itself may affect traffic, the TMC, LCS Representative and the Department's Representative must be notified immediately."

TRAFFIC MANAGEMENT CENTER

14. The Permittee must immediately communicate with the Caltrans District 1 Transportation Management Center by telephone at the time a planned lane, shoulder, or ramp closure's first cone is placed, last cone is picked up, or closure cancelled. The Permittee must provide the following information: Permittee's name, encroachment permit number,

location (county, route and post mile limits), direction of closure (e.g. southbound, eastbound, full road), and the time when installing or removing the closure.

Call the Transportation Management Center 24/7 at (707) 441-5727.

TRAFFIC CONTROL

15. Traffic control must be approved by the Department's Representative prior to scheduling work.
16. Traffic control authorized by this permit is limited to the implementation of a lane and/or shoulder closure. Lane closure hours will be provided/approved on a case by case basis.
17. For a stationary one-way-reversing traffic-control lane closure, you may stop traffic in 1 direction for periods not to exceed 5 minutes. After each stoppage, all accumulated traffic for that direction must pass through the work zone before another stoppage is made.
18. Traffic control must accommodate bicyclists with at least 5 feet of paved shoulder width.

PORTABLE CHANGEABLE MESSAGE SIGNS

19. Portable Changeable Message Signs (PCMS) must comply with Section 12-3.32, "Portable Changeable Message Signs," of the latest Standard Specifications and Revised Standard Specifications that can be found here Construction Contract Standards | Division of Design (ca.gov).
20. Place one (1) PCMS in each direction of travel at locations shown on the plans or as directed by the Department's Representative.

AERIALLY DEPOSITED LEAD MANAGEMENT

21. All work must be completed in compliance with "Hazardous Materials and Hazardous Waste Management," attached.

DRILLING PLAN

22. The Permittee's attention is directed to UG2, "Direction Drilling: Bore and Receiving Pits," and Encroachment Permit Manual section 603.6A-5A, "General Submittal" for drilling plan requirements. A minimum of ten working days prior to the intended start of work, the Permittee and/or Permittee's contractor/subcontractor must submit a detailed Drilling Plan addressing all of these requirements to the Department's Representative and District Permit Engineer. The Permittee must submit a rider request with all required documents prior to contractor scheduling work. Rider Request MUST be approved prior to work being performed.
23. The Permittee's attention is directed to the Caltrans Geotechnical Manual, Earthwork – Trenchless Construction section at the following website:

    https://dot.ca.gov/programs/engineering-services/manuals/geotechnical-manual

HORIZONTAL DIRECTIONAL DRILLING

24. In order to work anywhere in the State of California and perform Horizontal Directional Drilling (HDD) operations for the purpose of installing an "encasement" or "Product pipe/conduit underground" for the proposed use of gas, water, electrical, telecommunications, sewer, etc., YOU ARE REQUIRED TO HAVE AN "A" OR "C-34" CONTRACTORS LICENSE.
25. IN ORDER TO PERFORM HDD WORK IN STATE HIGHWAY RIGHTS-OF-WAY, YOU MUST PROVIDE PROOF OF YOUR LICENSING CLASSIFICATION before beginning work.
26. Protective safety gear must be worn by all members of the contractor's crew. (Di-Electric boots are recommended.)

UTILITY

27. New installation under an existing roadbed must be made by boring and jacking, directional drilling or other methods approved by the Department's Representative. This encroachment permit authorizes placement by directional drilling.
28. Bore pits and/or exploratory potholes within the State highway right-of-way are prohibited from being placed within the drip line of adjacent trees unless shown on the plans or otherwise approved by the Department's Representative.

DISTRICT 01 SPECIAL PROVISIONS

29. Utilities must be placed as close as possible to the outer edge of the State highway right-of-way unless otherwise shown on the approved plans.
30. Transverse crossing must be normal (90 degrees) to the highway alignment where practical.
31. Encroachment Permit Underground Utility Provisions UG16, "Installation by Open Cut Method," is modified to include driveways and/or road connections.
32. Trenches and/or excavations must be excavated and backfilled in accordance with the specifications, the attached Encroachment Permit Trench Detail, and at the direction of the Department's Representative.
33. The location of the proposed facility must be staked, and the location of the final alignment and grade of the facility approved by the Department's Representative prior to the start of any excavation. The Department's Representative can direct an alternate placement location of the facility as long as there are no other problems with moving the facility from the planned placement, for such issues as environmental concerns, constructability, or conflicting facilities. Such changes must be shown on the as-built plans.
34. Unless otherwise shown on the approved plans, the Permittee must submit to the Department's Representative a written plan showing proposed installation methods and pavement/sidewalk repair and obtain approved by the Department's Representative before beginning work.
35. Any painted markings must be made with water-soluble paint.
36. Markers must be installed to indicate the alignment of the utility lines to the line and grade approved by the Department's Representative along the alignment. In addition, a minimum of 2 markers must be placed at each underground run where the utilities enters and exits the State highway right-of-way. The markers must conform to the following standards:
    a. Markers must be placed as close to the right-of-way as possible.
    b. Markers must not be a risk to traffic or pedestrians.
    c. Markers must face the highway.
    d. Markers must have a weather proof label with the following information: (1) Type of Utility: (2) Distance to the Utility: (3) Depth of Utility from a benchmark.
    e. Comply with Caltrans "breakaway" standard if located within the Clear Recovery Zone.
37. Markers must be placed so they do not interfere with vehicle recovery areas.
38. The Permittee must obtain a separate encroachment permit for any Open Cut method within the traveled way unless otherwise shown on submitted plans.

EXCAVATIONS

39. All Caltrans electrical facilities must be located prior to any excavations or demolitions.
40. Your attention is directed to Section 5-1.36, “Property and Facility Preservation,” of the latest Standard Specifications and Revised Standard Specifications that can be found here Construction Contract Standards | Division of Design (ca.gov) and Business and Professions Code, Section 8771. Permittee shall physically inspect the work site and locate ALL survey monuments before work commencement. Monuments that might be disturbed shall be referenced or reset in accordance with Business and Professions Code.
41. If feasible, monuments should not be set within the traveled way. All monuments that must be set or perpetuated in paved surfaces, must be constructed in accordance with Section 78-2, "Survey Monuments," of the Caltrans Standard Specifications and Standard Plan A74, Type D, or equal with prior approval of the District Surveys Engineer.
42. Copies of Corner Records filed, or Record of Surveys recorded in compliance with the Business and Professions Code must be forwarded to the District Surveys Engineer.

EQUIPMENT ON ROADWAY

43. All equipment used on the paved surface of the State highway must be rubber tired or rubber tracked, unless authorized by Department's Representative, and must comply with the legal weight requirements for operation on a State highway.

DISTRICT 01 SPECIAL PROVISIONS

ENVIRONMENTAL

44. Existing creek and stormwater culverts near bore pits at the South and Middle Crossings must be protected.
45. The Caltrans Representative for the District 1 Environmental Branch is Cassie Nichols and can be reached at (707) 798-7557.
46. The Permittee shall be responsible for ensuring that all mitigation and monitoring requirements, as proposed in the lead agency's environmental document, are fulfilled and that all regulatory agency coordination and permit requirements are completed prior to beginning construction.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

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

CALIFORNIA DEPARTMENT OF TRANSPORTATION

DISTRICT 1 ENCROACHMENT PERMITS LANE CLOSURE REQUEST FORM

- Every Monday by noon, submit a schedule of planned closures for the next week period. The next week period is defined as Sunday noon through the following Sunday noon.
- Fax this form to **(707) 463-4736** or email: D1Permits@dot.ca.gov

Requestor Name:_____ **Field Contact (if different):**_____

Company:_____ **Company:**_____

Contact #:_____ **Contact #:**_____

Encroachment Permit #_____

Start Date of Planned Work:_____ **End Date of Planned Work:**_____

Days(s): ☐ **Sun PM** ☐ **Mon** ☐ **Tues** ☐ **Weds** ☐ **Thurs** ☐ **Fri** ☐ **Sat** ☐ **Sun AM**

County	Route	Post Mile or Cross road		Time	
		Start	End	Start	End

Direction (check all that apply): ☐ **NB** ☐ **SB** ☐ **EB** ☐ **WB**

Types of Closure (check all that apply):

☐ **Lane Closure** ☐ **One Way Controlled** ☐ **Full Closure** ☐ **Moving Closure**

☐ **CHP Break** ☐ **Ramp Closure** ☐ **Shoulder Closure**

Estimated Delay:_____ **Minutes** **Describe Planned Work:** _____

Additional details:_____

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

September 20, 2024
PLANS APPROVAL DATE

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

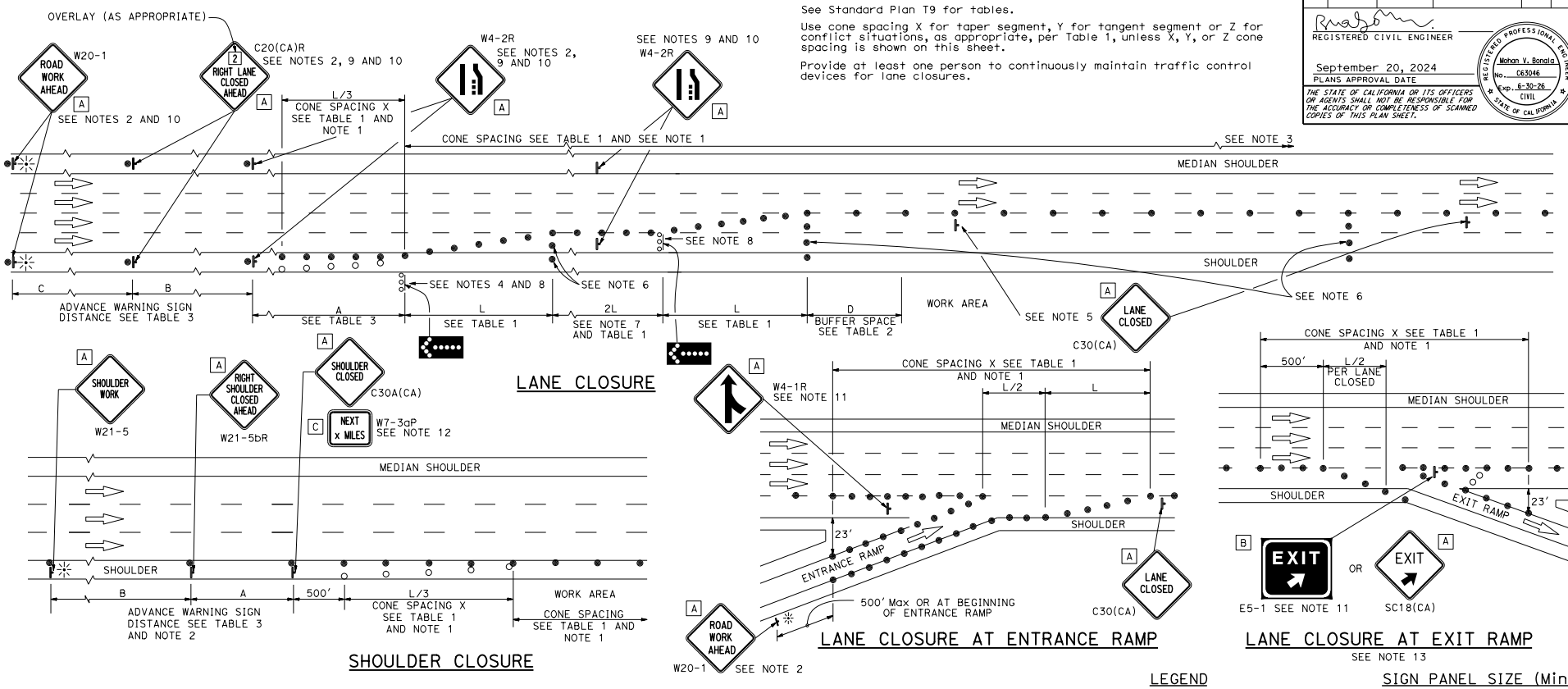
REGISTERED PROFESSIONAL ENGINEER
Mohan V. Bonala
No. C63046
Exp. 6-30-26
CIVIL
STATE OF CALIFORNIA

NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest verticle curve or on a horizontal curve.
5. Place a C30(CA) sign every 1000' throughout length of lane closure.
6. A minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 1000' as shown on the "Lane Closure" detail. Two type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
7. The 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
8. Use one flashing arrow sign for each lane closed. The flashing arrow sign shall be Type I.
9. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
10. Duplicate sign installations are not required:
    a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
    b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
11. The E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
12. A W7-3aP "NEXT _____ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.
13. For the warning sign requirements at the Exit Ramp, when work is proposed on the local street, see CA MUTCD Figure 6H-22 to 6H-27.

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 72" x 60"
- C 36" x 30"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

T10

7-1-24

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12-3.31 PORTABLE FLASHING BEACONS

12-3.31A General

Section 12-3.31 includes specifications for placing, maintaining, and removing portable flashing beacons.

12-3.31B Materials

Each portable flashing beacon must have:

1. Standard and base
2. Signal section
3. Flasher unit
4. Battery power source

The components must be assembled to form a complete, self-contained, portable flashing beacon that can be delivered to the job site and placed into immediate operation.

The portable flashing beacon must be weatherproof and operate a minimum of 150 hours between battery recharging and routine maintenance.

The signal section must be yellow and comply with section 86-1.02R(4)(b), except it must be rated for 25 W at 12 V.

The flash rate for the flashing unit must comply with chapter 4L, "Flashing Beacons," of the *California MUTCD*.

The standard must be adjustable to allow variable mounting of the signal section from 6 to 10 feet, from the bottom of the base to the center of the lens, and be capable of being secured at the desired height. The standard must be securely attached to the base and have a length of multiconductor, neoprene-jacketed cable long enough for the full vertical height.

The base must be (1) large enough to accommodate at least two 12 V automotive-type storage batteries and (2) a shape and weight such that the beacon will not roll if struck by a vehicle or pushed over.

12-3.31C Construction

Remove portable flashing beacons from the traveled way at the end of each night's work. You may store the flashing beacon at selected central locations within the highway where designated by the Engineer.

Moving portable flashing beacons from location to location if ordered after initial placement is change order work.

12-3.31D Payment

The payment quantity for portable flashing beacons (ea) is the number of portable flashing beacon locations with each location counting as 1 measurement unit.

12-3.32 PORTABLE CHANGEABLE MESSAGE SIGNS

12-3.32A General

12-3.32A(1) Summary

Section 12-3.32A includes specifications for placing, maintaining, and removing portable changeable message signs.

12-3.32A(2) Definitions

Reserved

12-3.32A(3) Submittals

If requested, submit a certificate of compliance for each PCMS.

Submit your cell phone number before starting the first activity that requires a PCMS.

12-3.32A(4) Quality Assurance

Reserved

12-3.32B Materials

Each PCMS consists of a sign panel, a controller unit, a power supply, and a structural support system.

The PCMS must:

1. Be assembled to form a complete self-contained unit that can be delivered to the job site and placed into immediate operation.
2. Operate at an ambient air temperature from -4 to 158 degrees F.
3. Not be affected by mobile radio transmissions other than those required to control the PCMS.
4. Be capable of displaying a 3-line message with at least 7 characters per line.
5. Provide a complete alphanumeric selection.
6. Be internally or externally illuminated during the hours of darkness, when non-illuminated pixels are used.
7. Have a dimming control that automatically adjusts the character light intensity to provide optimum character visibility and legibility under all ambient lighting conditions. The dimming control must have a minimum 3 manual dimming modes of different intensities.

A message with 18-inch high characters or 12-inch high characters must be visible from a distance of 1,500 feet and legible from a distance of at least 750 feet at noon on a cloudless day and during the night by persons with 20/20 vision or vision corrected to 20/20.

A message with 10-inch high characters must be legible from a distance of at least 650 feet at noon on a cloudless day and during the night by persons with 20/20 vision or vision corrected to 20/20.

The controller must:

1. Be an all solid-state unit.
2. Include at least 5 preprogrammed messages.
3. Have a user adjustable display rate.
4. Have a user adjustable flashing-off time.
5. Include a screen to review the messages before being displayed on the sign.
6. Include a keyboard message entry system. The keyboard must be equipped with a security lockout feature.
7. Have nonvolatile memory to store an infinite number of user created messages.
8. Be installed at a location that allows the user to perform all the functions from a single position.

12-3.32C Construction

Use a PCMS with characters:

1. At least 18 inches in height where the useable shoulder area is 15 feet wide or more
2. At least 12 inches in height where the useable shoulder area is less than 15 feet wide
3. At least 10 inches in height if the PCMS is:
    3.1. Mounted on a service patrol truck or incident response vehicle
    3.2. Used for traffic control where the posted speed limit is less than 40 mph

Place a PCMS as far from the traveled way as practicable where it is legible to approaching traffic without encroaching on the traveled way. Where the vertical roadway curvature restricts the sight distance of approaching traffic, place the sign on or before the crest of the curvature where it is most visible to the approaching traffic. Where the horizontal roadway curvature restricts the sight distance of approaching traffic, place the sign at or before the curve where it is most visible to approaching traffic. Where practicable, place the sign behind guardrail or temporary barrier system.

If multiple signs are needed, place each sign on the same side of the road at least 1,000 feet apart on freeways and expressways and at least 500 feet apart on other types of highways.

Operate the PCMS under the manufacturer's instructions. Activate the security lockout feature at all times.

When in operation, place the bottom of a PCMS at least 7 feet above the roadway in areas where pedestrians are anticipated and 5 feet above the roadway elsewhere. Place the top of the PCMS no more than 14.5 feet above the roadway.

If more than one PCMS is simultaneously visible to traffic, only one sign may display a sequential message at any time. Do not use dynamic message displays, such as animation, rapid flashing, dissolving, exploding, scrolling, horizontal movement, or vertical movement of messages. The message must be centered within each line of the display.

You may use an additional PCMS if more than 2 phases are needed to display a message.

Display only messages shown or ordered.

Repeat the entire message continuously in not more than 2 phases of at least 3 seconds per phase. The sum of the display times for both of the phases must be a maximum of 8 seconds. If more than 2 phases are needed to display a message, use an additional PCMS.

You must be available by cell phone during activities that require a sign. Be prepared to immediately change the displayed message if ordered. You may operate the sign with a 24-hour timer control or remote control if authorized.

Keep the PCMS clean to provide maximum visibility.

After the initial placement, move a sign from location to location as ordered.

12-3.32D Payment

Not Used

12-3.33 PORTABLE SIGNAL SYSTEMS

12-3.33A General

12-3.33A(1) Summary

Section 12-3.33 includes specifications for installing, maintaining, and removing portable signal systems.

A portable signal system includes:

1. Portable signals
2. Portable lighting
3. Portable flashing beacons

The components of a portable signal system are shown.

12-3.33A(2) Definitions

Reserved

12-3.33A(3) Submittals

Submit a certificate of compliance for each portable signal system.

Submit a 24-hour contact phone number before starting the activity that requires the portable signal system.

12-3.33A(4) Quality Assurance

Assign an on-site portable signal system coordinator. The coordinator must be available to service, maintain, adjust timing parameters, and relocate system components as necessary. The coordinator must be accessible 24 hours a day while the system is in operation.

Replace or repair damaged or malfunctioning portable signal system units within 12 hours of notification of a system failure.

12-3.33B Materials

The portable signal system must:

1. Comply with Part 4 of the *California MUTCD*
2. Be a complete system that can be delivered to the job site and placed into immediate operation
3. Withstand a minimum 90-mph wind speed under AASHTO (2001) Standard Specification for Highway Signs, Luminaires and Traffic Signals
4. Have a minimum one-mile communication range between portable signals, not line of sight

Memorandum

April 09, 2026

To	Caltrans District 1 Permits	**Contact No.**	(707) 267-2228
Copy to	Pat Kaspari, McKinleyville CSD James Henry, McKinleyville CSD Patrick Sullivan, GHD	**Email**	Luke.Halonen@ghd.com
From	Luke Halonen, GHD	**Project No.**	12669030
Project Name	MCSD Sewer Highway Crossings Retrofit		
Subject	Encroachment Permit Application for McKinleyville Community Services District		

1. Introduction

The encroachment permit application package for the McKinleyville Community Services District (MCSD) Highway Sewer Crossing Retrofit Project (Project) has been completed and submitted through the online Caltrans Encroachment Permit System (CEPS). This memorandum provides a summary of the Project and supporting documentation requested in the application package, as well as identifying items that will be submitted by the Contractor after award.

Please review the attached information regarding the proposed work within the highway right-of-way (ROW) to accommodate the proposed sewer crossing improvements. MCSD appreciates your review and coordination on this Project and looks forward to obtaining the required encroachment permit. Refer to Attachment 1 for the signed Agent Authorization Form.

2. Project Description

McKinleyville is a small, unincorporated community in Humboldt County, California, located along U.S Highway 101 on the Northern California coast, approximately 14 miles north of the City of Eureka.

The primary purpose of the project is to retrofit the two existing gravity sewer crossings beneath U.S Highway 101 in McKinleyville. The crossings, originally constructed in 1976, convey wastewater from the east side of the highway to MCSD's wastewater treatment facilities on the west side of the highway. Due to the age of the facilities, original construction materials, and seismic vulnerability, retrofitting the crossings is necessary to ensure long-term system reliability, seismic resiliency, and environmental protection.

Project improvements consist of installing two new highway crossings constructed of continuously joined High-Density Polyethylene (HDPE) or Fusible Polyvinyl Chloride (FPVC) carrier pipes using horizontal auger boring (HAB) trenchless construction methods, and installing associated new sewer mains and manholes.

Work within the Highway ROW consists of installing sewer crossings at the following approximate post mile locations along U.S. Highway 101:

- Middle Crossing, PM 101-HUM-92.3
- South Crossing, PM 101-HUM-90.8

The project received CEQA clearance through an Initial Study/Mitigated Negative Declaration (ISMND). A Notice of Determination (NOD) was signed by the MCSD's General Manager on December 4, 2025, and submitted to the Humboldt County Clerk on the same date. The approved ISMND and NOD are included in Attachment 2.

Refer to Attachment 3 for the Project Plans and Technical Specifications. Note that all HAB excavation pits for all crossings will occur outside of the highway ROW.

2.1 Encroachment Policy Exception

An encroachment policy exception (EPE) request was previously submitted for the North Crossing as part of this permit application. Note that the North Crossing scope of work has been removed from the project and associated design plans and specification attachments. There is no longer a need for the EPE request, and therefore the EPE request is canceled.

2.2 Owner Submittals

Environmental documentation is included as Attachment 2 as noted above.

The Project Plans and Technical Specifications are included as Attachment 3.

The application checklists for this permit, Form TR-0413 (Encroachment Permit Application Utility Checklist) is included as Attachments 4. Note that items left blank in the TR-0413 checklist will be provided as contractor submittals during construction, as discussed in the next section.

The Geotechnical Report supporting the proposed trenchless crossings is included as Attachment 5.

The remaining items required for this permit application will be provided as Contractor submittals during construction, as described in the following section. Bid dates identified in the Contract Documents will be revised, as necessary, pending approval of this encroachment permit application.

2.3 Contractor Submittals

The following items will be the responsibility of the contractor to complete and will be submitted during construction, which are summarized in the following paragraphs:

- Traffic Control Plan
- Trenchless Construction Work Plan and Calculations
- Health and Safety Plan
- Shoring and Excavation Safety Plan
- Dewatering Plan
- Settlement Monitoring and Geotechnical Instrumentation Plan
- Stormwater Pollution Prevention Plan (SWPPP)

Traffic Control Plan

The Contractor will provide a Traffic Control Plan (TCP) submittal for Caltrans review and approval prior to the start of construction. The TCP will identify the types of closures anticipated, if any, and will describe pedestrian and bicycle facilities that may be affected by the work.

The Contractor will not access work areas from the highway traveled way, shoulders, ramps, or structures for any of the crossings. Construction access will be limited to local access roads, and no impacts on highway operations are anticipated.

Trenchless Construction Work Plan

The Contractor will provide a trenchless construction work plan submittal that will include the following items as required: Qualifications and Experience, Equipment and Materials, Method of Construction, Working Schedule, and Contingency Plans.

Health and Safety Plan

The Contractor will provide a health and safety plan submittal addressing worker safety, public safety, and hazard controls associated with construction activities within the work area. The plan shall comply with applicable federal, state, and local safety requirements.

Shoring and Excavation Safety Plans

The Contractor will provide shoring plans and excavation safety submittal for all excavations, including HAB pit and trench excavations.

Dewatering

The Contractor will provide a dewatering plan submittal. Dewatering is anticipated to be required for HAB pits and associated excavations. Dewatering activities will be conducted in compliance with applicable permits and regulations. Discharged water will be managed to prevent erosion, sediment transport, and impacts to stormwater systems or receiving waters.

Settlement Monitoring and Geotechnical Instrumentation

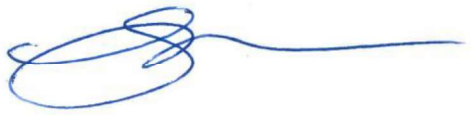
The Contractor will provide a submittal on, and be responsible for, installing, monitoring, and maintaining all settlement monitoring, geotechnical instrumentation, and associated survey control required for this work.

Stormwater Pollution Prevention Plan (SWPPP)

The Contractor will provide a SWPPP submittal identifying best management practices (BMPs) to prevent pollution of stormwater runoff during construction. The SWPPP shall be implemented and maintained by the contractor for the duration of construction in accordance with applicable permits and regulatory requirements.

If you have any questions, please feel free to contact me at 707-267-2228 or by e-mail: **Luke.Halonen@ghd.com**.

Regards,



Luke Halonen
Senior Civil Engineer

List of Attachments

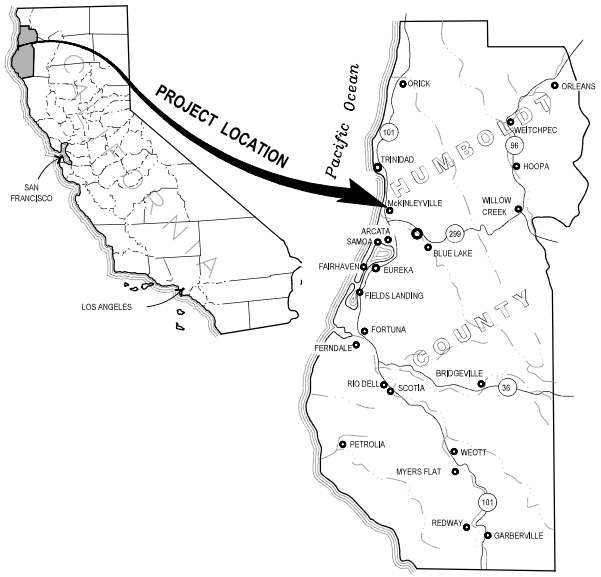
1. Authorization of Agent Form
2. Project Initial Study/Proposed Mitigated Negative Declaration (ISMND)

3. Project Plans and Technical Specifications, Revised 4/9/2026.
4. Encroachment Permit Application Utility Checklist (TR-0413)
5. Geotechnical Report
6. ~~Encroachment Policy Exception Request Letter (EPE Attachments 1 & 2 omitted as they are superseded by the permit application Attachment 3 enclosed).~~ Canceled 4/9/2026

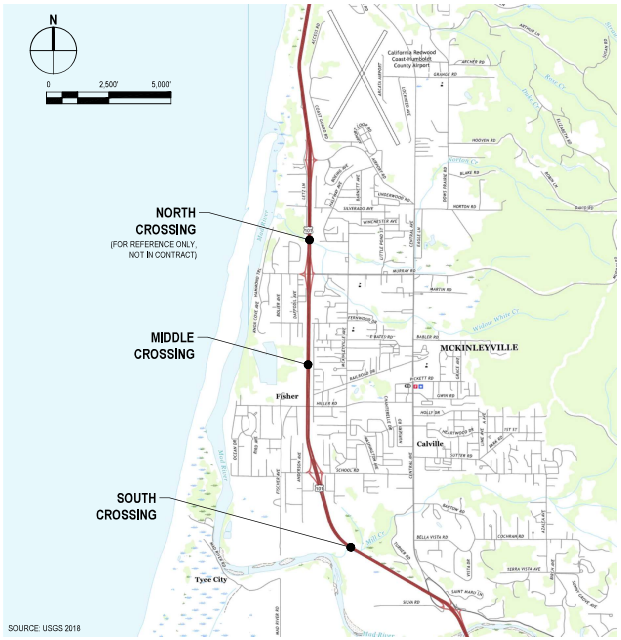
McKINLEYVILLE COMMUNITY SERVICES DISTRICT
HIGHWAY SEWER CROSSING RETROFIT

APRIL 2026

AREA MAP



LOCATION MAP



PROJECT DIRECTORY

OWNER: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT

PAT KASPARI, PE
GENERAL MANAGER
1656 SUTTER RD, MCKINLEYVILLE CA 95519
707-839-3251

CIVIL ENGINEER: GHD INC.

LUKE HALONEN, PE
718 THIRD ST, EUREKA CA 95501
707-267-2228

SHEET INDEX

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	LH	PS	4/9/2026

Author E. STOCKWELL | Drafting Check L. HALONEN | Project Manager P. SULLIVAN
Designer R. RIOS | Design Check P. SULLIVAN | Project Director S. ALLEN

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Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
Project: HIGHWAY SEWER CROSSING RETROFIT
Title: COVER SHEET
Size: ANSI D

Project No. 12669030 | Date 4/9/2026 | Scale AS SHOWN
Sheet No. G-001 | Sheet 1 of 16

Plot Date: 10 April 2026 - 2:39 PM | Plotted By: Thomas Rodriguez | Filename: \\ghdnet\ghd\US\Eureka\Projects\061\12669030\Digital_Design\ACAD\Sheets\12669030_G-001.dwg

ABBREVIATIONS

A B	ANCHOR BOLT
AB	AGGREGATE BASE
ABND	ABANDONED
AC	ASPHALT CONCRETE
AGG	AGGREGATE
APN	ASSESSOR PARCEL NUMBER
ARV	AIR VACUUM RELEASE VALVE
AVE	AVENUE
AWWA	AMERICAN WATER WORKS ASSOCIATION
B-	BORING
BC	BEGIN CURVE
BF	BLIND FLANGE
BFP	BACK FLOW PREVENTER
BH	BORE HOLE
BM	BENCH MARK
BLDG	BUILDING
BLVD	BOULEVARD
BO	BLOW OFF
BOT	BOTTOM
C	CONDUIT
CB	CATCH BASIN
CBC	CALIFORNIA BUILDING CODE
CI	CAST IRON
CL	CENTERLINE
CLR	CLEAR, CLEARANCE
CO	CLEAN OUT
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CONT	CONTINUOUS
CONTD	CONTINUED
COR	CORNER
CU	CUBIC
CV	CHECK VALVE
d	PENNY (NAIL SIZE)
DIA, Ø	DIAMETER
DTL	DETAIL
DI	DROP (DRAINAGE) INLET, OR DUCTILE IRON
DIPS	DUCTILE IRON PIPE SIZE
DR	DRIVE, DIMENSION RATIO
DWG	DRAWING
DYLT	DAYLIGHT
(E)	EXISTING
E	EAST, OR EASTING
EA	EACH
EC	END CURVE
EF	EACH FACE
EP	EDGE OF PAVEMENT
EQ	EQUAL
ER	EDGE ROAD
EL/ELEV	ELEVATION
ELEC	ELECTRIC, OR ELECTRICAL
ENGR	ENGINEER
ETW	EDGE OF TRAVEL WAY
EW	EACH WAY
(F)	FUTURE
FIN	FINISH
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FLG	FLANGE
FLR	FLOOR
FM	FORCE MAIN
FO	FIBER OPTIC
FP	FIRE PROTECTION
FPVC	FUSIBLE PVC
FS	FINISHED SURFACE
FT	FOOT, OR FEET
FTG	FOOTING
G	GAS LINE
GAL	GALLON
GALV	GALVANIZED
GR	GRADE
GRD	GROUND
GV	GATE VALVE
HAB	HORIZONTAL AUGER BORING
HDPE	HIGH-DENSITY POLYETHYLENE
HORZ	HORIZONTAL
HPG	HIGH PRESSURE GAS
HPNG	HIGH PRESSURE NATURAL GAS
HRS	HOURS
HWY	HIGHWAY
IE	INVERT ELEVATION
IN	INCH
INC	INCLINOMETER
INV	INVERT
IP	IRON PIPE
IRR	IRRIGATION
JCT	JUNCTION
JP	JUNCTION POLE (UTILITY)
JT	JOINT TRENCH
L	LENGTH
LAT	LATERAL
LF	LINEAR FEET
LS	LIFT STATION
LT	LEFT
M	METER
MAX	MAXIMUM
MFR	MANUFACTURER
MCSD	MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
MG	MILLION GALLON
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MPBX	MULTI-POINT BOREHOLE EXTENSOMETER
(N)	NEW
N	NORTH
NB	NORTHBOUND
NIC	NOT IN CONTRACT
NO	NUMBER
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
OC	ON CENTERS
OD	OUTSIDE DIAMETER
OPNG	OPENING
OVF	OVERFLOW
PC	POINT OF CURVATURE
PCC	PORTLAND CONCRETE CEMENT
PE	POLYETHYLENE
PI	POINT OF INTERSECTION
PL	PLATE, OR PROPERTY LINE
PLCS	PLACES
POC	POINT OF CONNECTION
PP	POWER POLE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PT	POINT, POINT OF TANGENCY, OR PRESSURE TREATED
PVC	POLYVINYL CHLORIDE PLASTIC PIPE
R	RADIUS
RC	RELATIVE COMPACTION
RCP	REINFORCED CONCRETE PIPE
RCBC	REINFORCED CONCRETE BOX CULVERT
RD	ROAD
REQD	REQUIRED
REQT	REQUIREMENT
RPP	REDUCED PRESSURE PRINCIPAL
RT	RIGHT
R/W, ROW	RIGHT OF WAY
S	SLOPE
SAT	SATURATED
SB	SOUTHBOUND
SCH, SCHED	SCHEDULE
SD	STORM DRAIN
SDCB	STORM DRAIN CATCH BASIN
SDMH	STORM DRAIN MANHOLE
SDR	STANDARD DIMENSION RATIO
SHT	SHEET
SIM	SIMILAR
SMP	SETTLEMENT MONITORING POINT
SO	SOUTH
SOE	SUPPORT OF EXCAVATION
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEAN OUT
SSFM	SANITARY SEWER FORCE MAIN
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
STL	STEEL
TC	TOP OF CURB
T, TEL	TELEPHONE
THK	THICK
TG	TOP OF GRATE
TS	TOP OF SLAB
TW	TOP OF WALL
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UNO	UNLESS NOTED OTHERWISE
UP	UTILITY POLE
V	VOLT(S)
VERT	VERTICAL
VWPZ	VIBRATING WIRE PIEZOMETER
W	WITH
W	WATER
WD	WIDE
WWTP	WASTEWATER TREATMENT PLANT
XING	CROSSING
YD	YARD
&	AND
@	AT
°	DEGREE
Ø	DIAMETER
'	FEET
"	INCHES
#	NUMBER
±	PLUS OR MINUS

NOTE:
CONTACT ENGINEER FOR ABBREVIATIONS NOT LISTED.

PLAN SYMBOLS

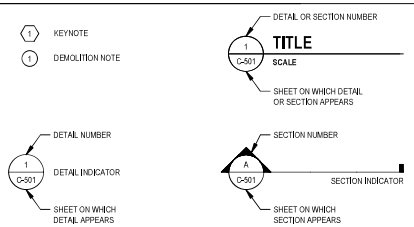
SITE/TOPOGRAPHIC

NEW	EXISTING	DESCRIPTION
		AREA OF POTENTIAL EFFECT
		RIGHT OF WAY CENTERLINE
		RIGHT OF WAY LINES AND PROPERTY LINES
		APPROX PROPERTY LINES
		EASEMENT LINES
		FENCE
		EDGES OF ASPHALT PAVEMENT
	40	CONTOUR LINE
		TOP OF BANK
		FLOW LINE
		BRUSH/VEGETATION LINE
		TREE
		SIGN
		SURVEY CONTROL POINT
		FOUND RECORD SURVEY MONUMENT

UTILITY

NEW/REHABILITATED	EXISTING	DESCRIPTION
SS	SS	SANITARY SEWER LINE (SIZE & TYPE AS NOTED)
		SANITARY SEWER CASING
	SSFM	SANITARY SEWER FORCE MAIN (SIZE & TYPE AS NOTED)
	W	WATER LINE (SIZE & TYPE AS NOTED)
	JT	UNDERGROUND JOINT UTILITY TRENCH
	SD	STORM DRAIN CULVERT (SIZE & TYPE AS NOTED)
		STORM DRAINAGE INLET/ CATCH BASIN
	S	SANITARY SEWER MANHOLE
		FIRE HYDRANT

GENERAL SHEET SYMBOLS



BIOLOGICAL PLAN SYMBOLS

WETLAND

COASTAL WILLOW

RED ALDER

SITKA SPRUCE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	LH	PS	4/9/2026

Author E. STOCKWELL | Drafting Check L. HALONEN | Project Manager P. SULLIVAN
Designer R. RIOS | Design Check P. SULLIVAN | Project Director S. ALLEN

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Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
Project: HIGHWAY SEWER CROSSING RETROFIT
Title: ABBREVIATIONS, SYMBOLS, AND SHEET INDEX
Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12669030	4/9/2026	AS SHOWN	G-002	2 of 16

Plot Date: 9 April 2026 - 1:38 PM | Plotted By: Thomas Rodriguez | Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12669030\Digital_Design\ACAD\Sheets\12669030_G-002.dwg

GENERAL NOTES

1. PROJECT REQUIRES A CLASS A GENERAL ENGINEERING CONTRACTOR'S LICENSE IN THE STATE OF CALIFORNIA.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE ENGINEER. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE SITE CONDITIONS PRIOR TO BIDDING.
3. IT IS EXPECTED THAT THE ACTUAL LOCATION OF EXISTING UTILITIES MAY VARY FROM THAT SHOWN ON THE PLANS. CONTRACTOR SHALL POTHOLE AND LOCATE ALL EXISTING UTILITIES. VARIATIONS IN LOCATION AND DEPTH SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER IMMEDIATELY SO THAT THE LOCATION OF UTILITIES MAY BE CHECKED WITH THE PROPOSED DESIGN. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT PRIOR TO WORK COMMENCING FOR ANY EXCAVATION OR POTHOLING.
4. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THAT NEW FEATURES TIE INTO EXISTING SITE DEVELOPMENT. PIPE JOINTS MATCH CORRECTLY, AND THAT GENERAL DESIGN ELEVATIONS FOR NEW CONSTRUCTION PROVIDE PROPER DRAINAGE SLOPES FROM EXISTING TIE IN POINTS. REPORT DISCREPANCIES TO ENGINEER PRIOR TO CONSTRUCTION.
5. THE DESIGN FEATURES INCLUDING HORIZONTAL AND VERTICAL ALIGNMENTS, TYPICAL SECTIONS, APPROACHES, AND OTHER DESIGN DETAILS SHOWN ON THESE DESIGN PLANS SHALL NOT BE ALTERED OR MODIFIED IN ANY WAY DURING CONSTRUCTION WITHOUT THE EXPRESSED, WRITTEN DIRECTION AND APPROVAL OF THE ENGINEER.
6. UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA AND THE EXISTING ACCESS ROAD FREE OF DEBRIS AND UNUSED MATERIAL. ALL DAMAGE CAUSED BY THE CONTRACTOR SHALL BE RESTORED TO AN "AS GOOD OR BETTER" CONDITION.
7. CONTRACTOR TO MAINTAIN TRAFFIC (VEHICULAR AND PEDESTRIAN) ACCESS TO ALL AREAS OF PUBLIC RIGHT-OF-WAY AT ALL TIMES. CONTRACTOR TO COORDINATE ANY PROPOSED SHUT DOWNS WITH OWNER.
8. CONTRACTOR SHALL CONTACT THE ENGINEER AND OWNER TO COORDINATE WITH THE OWNER'S REPRESENTATIVE TO HAVE THE OPPORTUNITY TO BE PRESENT DURING ANY GROUND DISTURBING ACTIVITIES.
9. IN THE EVENT CULTURAL RESOURCES (I.E., HISTORICAL, ARCHAEOLOGICAL, AND PALEONTOLOGICAL RESOURCES, AND HUMAN REMAINS) ARE DISCOVERED DURING GRADING OR OTHER CONSTRUCTION ACTIVITIES, WORK SHALL BE HALTED WITHIN A 100 FOOT RADIUS OF THE FIND. A QUALIFIED ARCHEOLOGIST SHALL BE CONSULTED FOR AN ON-SITE EVALUATION. ADDITIONAL MITIGATION MAY BE REQUIRED BY THE COUNTY PER THE ARCHEOLOGIST'S RECOMMENDATIONS. IF HUMAN BURIALS OR HUMAN REMAINS ARE ENCOUNTERED, THE CONTRACTOR SHALL ALSO NOTIFY THE COUNTY CORONER.
10. MATERIAL NOT SUITABLE FOR REUSE SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A MANNER CONSISTENT WITH APPLICABLE REGULATIONS. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY AND EXPENSE FOR LEGAL DISPOSAL OF ALL MATERIALS TAKEN FROM SITE.
11. CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER TWO (2) WEEKS PRIOR TO ANY CONSTRUCTION ACTIVITIES SO THAT THE OWNER-SUPPLIED BIOLOGICAL MONITOR CAN SURVEY THE AREA FOR MIGRATORY NESTING BIRDS.

GRADING NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL TOPOGRAPHIC DATA. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING RIGHT- OF-WAY LINES, SLOPE EASEMENTS, AND ALL HORIZONTAL AND VERTICAL CONTROL PRIOR TO CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND SHALL ARRANGE FOR STAKING WITH A LICENSED SURVEYOR. STAKING WILL BE REVIEWED BY OWNER FOR CONFIRMATION TO DESIGN PRIOR TO CONSTRUCTION. THE NATURE AND EXTENT OF STAKING SHALL BE AS PER CONTRACTOR'S MEANS AND METHODS.
3. ALL GRADES BETWEEN SPOT ELEVATIONS SHALL HAVE UNIFORM SLOPE UNLESS OTHERWISE INDICATED, MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING WALLS AND DOORS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION, ADEQUATE SHORING BRACING, TIES, AND SUPPORTS SHALL BE USED TO PROVIDE PROPER TEMPORARY INTEGRITY DURING ALL PHASES OF CONSTRUCTION.
5. ALL EXISTING LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE HAND RAKED SMOOTH, DEBRIS REMOVED, RESEEDED AND RETURNED TO ORIGINAL EXISTING CONDITIONS.
6. ALL DITCHES, SWALES, GUTTERS, ETC. SHOULD BE CONSIDERED ACTIVE STORM CONVEYANCES UNLESS OTHERWISE INDICATED. CONTRACTOR IS RESPONSIBLE FOR ADDRESSING STORM WATER DRAINAGE AND DEWATERING OF WORK AREAS DURING CONSTRUCTION.
7. DURING WET WEATHER PERIODS, CONTRACTOR IS RESPONSIBLE FOR SEQUENCING CONSTRUCTION IN A MANNER TO MINIMIZE IMPACT ON OPEN EARTHWORK AND COMPACTION OPERATIONS.
8. COMPLETELY COVER ANY SOIL STOCKPILES WITH 6 MIL BLACK PLASTIC AND PROVIDE RESTRAINTS TO HOLD PLASTIC IN PLACE. MONITOR PLASTIC COVER AS PART OF CONTINUOUS EROSION CONTROL PLAN. PLACE SILT FENCE COMPLETELY AROUND STOCKPILE.

SURVEY NOTES

1. ORIGINAL TOPOGRAPHIC SURVEY WAS PERFORMED BY POINTS WEST SURVEYING CO., DATED NOVEMBER 2020.
2. AERIAL IMAGERY FROM MCKINLEYVILLE CSD, DATED 2019, UNLESS NOTED OTHERWISE, AND IS PROVIDED FOR REFERENCE ONLY.
3. SEE SURVEY CONTROL NOTES ON SHEET G-004.
4. SUPPLEMENTAL MANHOLE DATA BASED ON MCKINLEYVILLE CSD GIS DATA AND ADJUSTED TO SURVEY DATUM, AND ARE APPROXIMATE. CONTRACTOR TO VERIFY.

UTILITY NOTES

1. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM INFORMATION AVAILABLE AND INTERPOLATION OF PHYSICAL EVIDENCE ON THE SITE AND ARE SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR. SEE GENERAL NOTES 2 AND 3.
2. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION.
3. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, OR FITTING REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE AND WORKING SYSTEM.
4. CONTRACTOR SHALL COORDINATE A UTILITY LOCATE 72 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION FOR LOCATION MARK-UP OF ALL EXISTING UTILITIES. CONTRACTOR SHALL COORDINATE THE UTILITY LOCATE WITH THE OWNER FOR ALL UTILITY WORK. INFORM OWNER IMMEDIATELY IF LOCATE INDICATES THAT EXISTING UTILITIES ARE DIFFERENT THAN SHOWN ON DRAWINGS.
5. CONTRACTOR IS RESPONSIBLE FOR POTHOLING ALONG THE ALIGNMENTS OF ALL NEW UTILITIES TO IDENTIFY POTENTIAL UTILITY CONFLICTS, SOILS CONDITIONS, AND TIE-IN POINTS. CONTRACTOR RESPONSIBLE FOR MAKING ADJUSTMENTS IN ALIGNMENTS TO ACCOMMODATE ACTUAL FIELD CONDITIONS.
6. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES, FEATURES, AND STRUCTURES LOCATED ON THE SITE. LOCATE, PROTECT, AND AVOID DISRUPTION OF ALL ABOVE AND BELOW GRADE UTILITIES DURING CONSTRUCTION.
7. ALL UTILITY CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA PLUMBING CODE (CPC).
8. ALL BURIED LINES TO HAVE 36 INCHES MINIMUM COVER, UNLESS NOTED OTHERWISE. SEE TRENCH DETAIL SHEET C-501.
9. ALL EXISTING UTILITIES AND TIE-IN POINTS SHOULD BE CONSIDERED ACTIVE UTILITIES UNLESS OTHERWISE INDICATED.
10. CONFIRM ALL UTILITY VALVE VAULTS, VALVES, METERS, BACKFLOW PREVENTION ASSEMBLIES, AND OTHER PUBLIC UTILITY APPURTENANCES IN THE RIGHT-OF-WAY WITH THE UTILITY OWNERS.
11. PROVIDE POLYETHYLENE ENCASEMENT FOR ALL BURIED DUCTILE IRON PIPE PER AWWA C105.
12. ALL BOLTS USED FOR UNDERGROUND CONNECTIONS SHALL BE 304 STAINLESS STEEL. ALL CORROSION PROTECTION SHALL BE IN PLACE. ALL BOLTED JOINT ACCESSORIES SHALL BE CLEANED AND THOROUGHLY COATED WITH ASPHALT OR OTHER CORROSION-RETARDING MATERIAL AFTER INSTALLATION, AND WRAPPED IN PLASTIC.
13. CONTRACTOR TO VERIFY SIZE, TYPE, AND LOCATION OF ALL INTERCONNECTIONS AND PROVIDE COUPLERS AND TRANSITION FITTINGS AS NECESSARY.
14. CONTRACTOR MAY PROPOSE ALTERNATIVE FITTING TYPES AND CONFIGURATIONS FOR APPROVAL BY ENGINEER.
15. CONTRACTOR SHALL MAINTAIN UTILITY MINIMUM WATER AND SEWER HORIZONTAL AND VERTICAL SEPARATIONS AS REQUIRED BY CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64572, WATER MAIN SEPARATION.

HAZARDOUS MATERIAL NOTES

1. CONTRACTOR TO PROPERLY HANDLE AND DISPOSE OF HAZARDOUS MATERIALS INCLUDING ASBESTOS CONTAINING PIPE.
2. EXISTING HAZARDOUS MATERIALS BELIEVED TO OCCUR ON SITE INCLUDES BUT IS NOT LIMITED TO ASBESTOS MATERIALS AND PIPING.

GEOTECHNICAL NOTES

1. PROJECT SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE GEOTECHNICAL ENGINEERING REPORT TITLED "GEOTECHNICAL DATA REPORT" REPARED BY CRAWFORD & ASSOCIATES, INC., DATED <MONTH YEAR>. THE REPORT HAS BEEN INCLUDED AS PART OF THE APPENDICES OF THE PROJECT DOCUMENTS.
2. GROUNDWATER ELEVATION DATA INDICATED ON PLAN WERE OBSERVED OCTOBER 14-16, 2025. ACTUAL CONDITIONS MAY VARY.

TUNNELING NOTES

ALL TUNNELING WORK SHALL CONFORM TO THE CALTRANS PERMIT REQUIREMENTS AND THE FOLLOWING SECTIONS OF THE SPECIFICATIONS:

1. GEOTECHNICAL SETTLEMENT MONITORING PER SECTION 31 09 13.
2. DEWATERING PER SECTION 31 23 19.
3. SHAFT PER SECTION 33 05 07.21.
4. HORIZONTAL AUGER BORING PER SECTION 33 05 07.22.
5. STEEL CASING PER SECTION 33 05 07.24.
6. BACKFILL GROUT PER SECTION 33 05 08
7. CARRIER PIPE PER SECTION 33 05 31.19 (FPVC) OR 33 05 31.20 (HDPE).
8. CARRIER PIPE INSTALLATION PER SECTION 33 05 07.23.

VEGETATION PROTECTION AND RESTORATION NOTES

1. NO CUTTING OF ANY PART OF TREES, INCLUDING ROOTS, SHALL BE DONE OUTSIDE LIMITS OF DISTURBANCE WITHOUT SECURING APPROVAL FROM ENGINEER AND OWNER.
2. DISPOSAL OF TREES SHALL NOT INCLUDE SALE, BARTER, TRADE, OR EXCHANGE BY THE OWNER, THE OWNER'S CONTRACTOR, OR ANY SUCCESSORS. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE MINIMUM AMOUNT OF TREES REQUIRED TO CONSTRUCT THE PROJECT.
3. WHEN CONSTRUCTION OCCURS WITHIN DRIP LINE ON EXISTING TREES, CONTRACTOR IS TO PILE THE SOIL ON THE SIDE AWAY FROM THE TREE. WHEN THIS IS NOT POSSIBLE, PLACE SOIL ON PLYWOOD, A TARP, OR THICK BED OF MULCH. THIS IS TO HELP PREVENT CUTTING INTO THE SOIL SURFACE WHEN THE BACKHOE OR TRACTOR BLADE REFILLS THE TRENCH.
4. REFILL OPEN TRENCHES QUICKLY WITHIN HOURS OF EXCAVATION WHEN THEY OCCUR WITHIN THE DRIP LINE OF EXISTING TREES. IF THIS IS NOT POSSIBLE AND WEATHER IS HOT, DRY, OR WINDY, CONTRACTOR MUST KEEP ROOT ENDS MOIST BY COVERING THEM WITH WET BURLAP. IF TEMPERATURE IS 80°F OR GREATER, THE BURLAP MUST BE INSPECTED EVERY HOUR AND RE-WET AS NECESSARY TO MAINTAIN A CONSTANT COOL MOIST CONDITION. IF TEMPERATURE IS BELOW 80°, THE BURLAP MUST BE INSPECTED EVERY FOUR HOURS AND RE-WET AS NECESSARY TO MAINTAIN A CONSTANT COOL MOIST CONDITION. SMALL ROOTS CAN DRY OUT AND DIE IN 10-15 MINUTES. LARGER ROOTS CAN SUCCUMB IN AN HOUR OR LESS UNDER UNFAVORABLE WEATHER CONDITIONS.
5. WHEN ROOTS 2" OR LARGER MUST BE CUT, SHOVEL BY HAND NEAR THE ROOTS AND SAW THE ROOTS. ACCIDENTALLY BROKEN ROOTS SHOULD BE SAWED A COUPLE OF INCHES BEHIND THE RAGGED END. CRUSHED OR TORN ROOTS ARE MORE LIKELY TO ALLOW DECAY TO BEGIN. SHARPLY CUT ROOTS PRODUCE A FLUSH OF NEW ROOTS HELPING THE TREE TO RECOVER FROM ITS INJURY.
6. MATERIALS, EQUIPMENT, TEMPORARY BUILDINGS, FUELS, PAINTS AND OTHER CONSTRUCTION ITEMS ARE NOT TO BE PLACED WITHIN THE DRIP LINE OF EXISTING TREES.
7. GRADING SHOULD NOT CREATE DRAINAGE PROBLEMS FOR TREES BY CHANNELING WATER INTO THEM, OR CREATING SUNKEN AREAS.
8. LANDSCAPING THAT IS REMOVED TO FACILITATE CONSTRUCTION SHALL BE REPLACED IN KIND.

EROSION CONTROL NOTES

1. PERFORM EROSION, SEDIMENT, POLLUTION, AND WASTE CONTROL IN ACCORDANCE WITH THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP HAS BEEN INCLUDED IN THE APPENDICES OF THE PROJECT DOCUMENTS.
2. ALL WOODY DEBRIS FROM CLEARING AND GRUBBING ACTIVITIES SHALL BE CHIPPED AND USED FOR EROSION CONTROL COVER PRIOR TO SEEDING.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE PROJECT SWPPP PER THE CURRENT NPDES GENERAL PERMIT REQUIREMENTS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MONITORING AND REPORTING. THE OWNER SHALL REGISTER THE PROJECT VIA SMARTS AND ESTABLISH ACCESS FOR THE QUALIFIED STORMWATER PRACTITIONER (QSP).
5. THE EROSION CONTROL MEASURES SHOWN ON THE SWPPP EROSION CONTROL PLANS ARE THE MINIMUM RECOMMENDED. THE CONTRACTOR SHALL ADHERE TO THE QSD/QSP SPECIFIC PLAN OF BMP'S (BEST MANAGEMENT PRACTICES) AS DESCRIBED IN THE CURRENT CASQA BMP HANDBOOK FOR THE PROJECT SITE APPROPRIATE TO THE PHASE OF CONSTRUCTION AND THE TIME OF YEAR.
6. SOIL STABILIZATION BMPs SHALL BE IMPLEMENTED ON GRADED OR DISTURBED AREAS AS SOON AS FEASIBLE WHERE THERE IS A POTENTIAL FOR SOIL EROSION TO LEAD TO DISCHARGE OF SEDIMENT OFF-SITE OR INTO WATERS OF THE U.S./STATE OR LOCAL DRAINAGEWAYS.
7. ALL NEWLY GRADED CUT AND FILL SLOPES AND ANY OTHER DISTURBED AREAS WHICH WILL NOT BE COMPACTED WITH AGGREGATE ARE TO BE SEEDED. THE PERMANENT PLANTING/SEED MIXTURE SHALL BE AS DIRECTED IN THE SPECIFICATIONS, SWPPP, OR THESE PLANS.
8. AFTER SEEDING, A MULCH CONSISTING OF GRASS, HAY, OR STRAW PER CALTRANS SPECIAL PROVISIONS SHALL BE BLOWN ON AND PUNCHED INTO ALL NEWLY SEEDED AREAS AT A RATE OF TWO TONS PER ACRE, IMMEDIATELY FOLLOWING APPLICATION. THE MULCH SHALL BE PUNCHED INTO THE SOIL BY A TILLER CONSISTING OF A SERIES OF DULL FLAT DISKS WITH NOTCHED OR CUTOUT EDGES.
9. BACK UP EROSION CONTROL MATERIALS SHALL BE STOCKPILED ON THE SITE TO ALLOW FOR TIMELY REPAIR AND MAINTENANCE OF ALL BMPS.
10. DURING WET WEATHER PERIODS, CONTRACTOR IS RESPONSIBLE FOR SEQUENCING CONSTRUCTION IN A MANNER TO MINIMIZE IMPACT ON OPEN EARTHWORK AND COMPACTION OPERATIONS.
11. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIX ANY DEFICIENCIES INDICATED BY THE OWNER OR THE ENGINEER TO PREVENT EROSION AND CONTROL SEDIMENT.
12. ANY PUMPS USED ON-SITE (DEWATERING, ETC.) SHALL BE PLACED ON ABSORBENT PADS. THE CONTRACTOR SHALL HAVE SPILL CONTAMINATION MATERIALS LOCATED AT THE SITE WITH OPERATORS TRAINED IN SPILL CONTROL PROCEDURES. PUMPS SHALL BE SCREENED TO PREVENT THE INTAKE OF FISH.
13. CONSTRUCTION MATERIALS, DEBRIS, AND WASTE SHALL NOT BE PLACED OR STORED WHERE IT CAN ENTER INTO OR BE WASHED AWAY BY RAINFALL INTO WATERS OF THE U.S./STATE OR LOCAL DRAINAGEWAYS.
14. PRIOR TO FINAL ACCEPTANCE, TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED AND ALL AREAS OF SOIL DISTURBANCE, INCLUDING BUT NOT LIMITED TO CUT AND FILL SLOPES, SWALES, AND DITCHES SHALL BE STABILIZED.

TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL PREPARE A DETAILED TRAFFIC CONTROL PLAN FOR ALL WORK AREAS WITHIN ROADWAY, AND SHALL SUBMIT THE PLAN TO THE ENGINEER FOR APPROVAL AT THE PRECONSTRUCTION MEETING. THE TRAFFIC CONTROL PLAN SHALL COMPLY WITH ALL REQUIRED PERMITS (INCLUDING STATE AND COUNTY ENCROACHMENT PERMITS) AND OTHER GUIDELINES LISTED ON THESE PLANS AND IN THE SPECIFICATIONS.
2. THE CONTRACTOR SHALL KEEP ONE LANE OF TRAFFIC OPEN THROUGH THE WORK AREA AT ALL TIMES. NO LANE CLOSURES IN STATE HIGHWAY RIGHT-OF-WAY ARE ALLOWED.
3. THE CONTRACTOR SHALL COORDINATE WITH ALL PROPERTY OWNERS POTENTIALLY AFFECTED BY CONTRACTOR'S CONSTRUCTION PLANS. TRAFFIC CONTROL PLAN SHALL SHOW HOW ACCESS TO THE PROPERTIES WILL BE MAINTAINED THROUGHOUT THE PROJECT.
4. CONTRACTOR SHALL CONDUCT OPERATION AS TO OFFER THE LEAST POSSIBLE OBSTRUCTION AND INCONVENIENCE TO THE PUBLIC, AND SHALL HAVE UNDER CONSTRUCTION NO GREATER AMOUNT OF WORK THAN CAN PROSECUTE PROPERLY WITH DUE RESPECT TO THE RIGHTS OF THE PUBLIC. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED PARTIES 72-HOURS PRIOR TO ANY AUTHORIZED LANE OR DRIVEWAY CLOSURES.
5. WORK SHALL BE ACCOMPLISHED IN SUCH A MANNER AS TO PROVIDE ACCESS TO ALL INTERSECTING STREETS AND ADJACENT PROPERTIES WHENEVER POSSIBLE. ACCESS TO PRIVATE PROPERTY SHALL BE MAINTAINED AT ALL TIMES TO THE EXTENT PRACTICABLE. ANY ACCESS RESTRICTIONS SHALL BE APPROVED IN ADVANCE BY THE ENGINEER. NO FULL ROAD CLOSURES WILL BE ALLOWED.
6. THE CONTRACTOR SHALL BE PREPARED TO REMOVE CLOSURES AND PROVIDE EMERGENCY VEHICLE ACCESS AT ALL TIMES. THE CONTRACTOR WILL NOT BE ENTITLED TO COMPENSATION FOR THE DELAYS OF WORK RESULTING FROM A CLOSURE NEEDING TO BE OPENED IN ORDER TO PROVIDE EMERGENCY VEHICLE ACCESS. ANY ACCESS RESTRICTIONS SHALL BE APPROVED IN ADVANCE BY THE ENGINEER.

MCKINLEYVILLE COMMUNITY SERVICES DISTRICT NOTES

1. CONTRACTOR TO NOTIFY ADJACENT PROPERTY OWNERS 72 HRS PRIOR TO START OF WORK.
2. CONTRACTOR TO NOTIFY MCSD 72 HRS PRIOR TO WORK IMPACTING SEWER PIPELINE.
3. CONTRACTOR TO COORDINATE ENTRY ACCESS WITH LANDOWNERS 7 DAYS PRIOR TO TO START OF WORK.

TEMPORARY SEWER BYPASS PUMPING NOTES

1. CONSTRUCTION UNDER THIS CONTRACT INVOLVES WORK AT AN EXISTING SANITARY SEWER COLLECTION SYSTEM, WHICH MUST CONTINUE TO OPERATE AT ALL TIMES.
2. THE CONTRACTOR SHALL PREPARE DETAILED TEMPORARY BYPASS PUMPING PLANS, AND SHALL SUBMIT THE PLANS TO THE ENGINEER FOR APPROVAL, PER SPECIFICATION SECTION 01 55 60.
3. THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING AT LEAST 72 HOURS IN ADVANCE OF ANY REQUIRED SHUT DOWN. IN GENERAL, THE CONTRACTOR SHALL MAINTAIN FLOWS AT ALL TIMES.
4. SEE SHEETS C-105 THROUGH C-106 FOR PROPOSED BYPASS PLANS.

CONSTRUCTION SEQUENCING NOTES

1. THE WORK SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. THE CONTRACTOR MAY PROPOSE OTHER METHODS OR MODIFICATIONS TO THE WORK SEQUENCE. ANY ALTERNATIVE METHOD OR SEQUENCE PROPOSED BY THE CONTRACTOR IS SUBJECT TO APPROVAL BY THE OWNER. THE FOLLOWING PROPOSED SEQUENCE OF WORK IS NOT A COMPREHENSIVE LIST OF THE WORK INCLUDED IN THE PROJECT. CONTRACTOR SHALL REFER TO THE CONTRACT DOCUMENTS FOR THE SCOPE OF WORK FOR THE PROJECT.
   - 1.1. WORK SHALL PROCEED AS FOLLOWS, UNLESS A CHANGE IS FORMALLY AGREED UPON WITH THE OWNER:
     - 1.1.1. MIDDLE CROSSING
     - 1.1.2. SOUTH CROSSING
   - 1.2. FOR EACH CROSSING WORK AREA:
     - 1.2.1. VEGETATION REMOVAL, ACCESS ROAD STABILIZATION, AND WATERCOURSE PROTECTION WHERE SPECIFIED.
     - 1.2.2. UTILITY PROTECTION
     - 1.2.3. POTHOLE EXISTING UTILITIES
     - 1.2.4. INSTALL SETTLEMENT MONITORING SYSTEM
     - 1.2.5. INSTALL NEW CROSSING, INCLUDING TEMPORARY BYPASS PUMPING. SEE BYPASS PLANS ON SHEETS C-105 TO C-106 FOR DETAILED SEQUENCE OF NEW WORK.

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Client MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
Project HIGHWAY SEWER CROSSING RETROFIT
Title GENERAL NOTES
Size ANSI D

Project No. 12669030 | Date 4/9/2026 | Scale AS SHOWN
Sheet No. G-003 | Sheet 3 of 16

Plot Date: 9 April 2026 - 1:47 PM | Plotted By: Thomas Rodriguez | Filename: f:\ghd\ref\ghd\US\Eureka\Projects\561\12669030\Digital_Design\ACAD\Sheets\12669030_G-003.dwg

SURVEY CONTROL

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	2227948.8888	5977728.7152	51.617	CP_R&C_PWS
101	2227652.0924	5978254.9129	34.936	CP_R&C_PWS
102	2235102.6899	5976629.4438	82.669	CP_R&C_PWS
103	2229027.8886	5976460.0266	60.164	CP_R&C_PWS
104	2228899.4586	5976103.7540	23.346	CP_R&C_PWS
105	2227815.6465	5978786.5422	32.707	CP_SPK
106	2227911.9244	5978584.3636	47.355	CP_SPK
107	2228871.7017	5975919.1069	12.715	CP_SPK
108	2228826.9958	5976795.2179	61.980	CP_SPK
109	2226720.1050	5976023.2692	17.594	CP_SPK
110	2226729.9726	5976257.7932	17.686	CP_SPK
111	2226758.6960	5977026.5316	17.695	CP_SPK
150	2219990.0076	5987592.3317	40.950	CP_R&C_PWS
160	2234856.6144	5976752.8253	82.762	CP_SPK
165	2227667.2672	5978451.0557	30.818	CP_SPK
167	2227730.0043	5978752.6822	13.076	CP_SPK
168	2235094.5181	5977068.9875	89.381	CP_PWS_RBR_PP
169	2235094.9623	5976938.0602	87.284	CP_SPK
170	2235085.4188	5977016.6601	88.282	CP_SPK
171	2235051.3897	5977365.2670	93.972	CP_CUT_X
172	2234835.8275	5977396.7046	92.622	CP_MAG

RECORD SURVEY MONUMENTS

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
166	2227996.9641	5978564.1778	49.314	FD_2.5"BT_ADD3962
173	2234474.3396	5977371.7989	90.868	FD_2"BRD_RCE13184
174	2235028.9113	5977387.6316	93.791	FD_2"BRD_RCE13184
10000	2227646.8854	5978737.3317	29.135	FD_2.25"BC_SM7
10001	2228867.0473	5977847.7753	58.228	FD_2.25"BC_SM9
10002	2230198.3131	5977517.6919	54.339	FD_2.25"BC_SM10
10003	2233845.9885	5977132.5061	86.689	FD_2.25"BC_SM15
10004	2237843.4670	5977258.6638	97.846	FD_2.25"BC_SM19

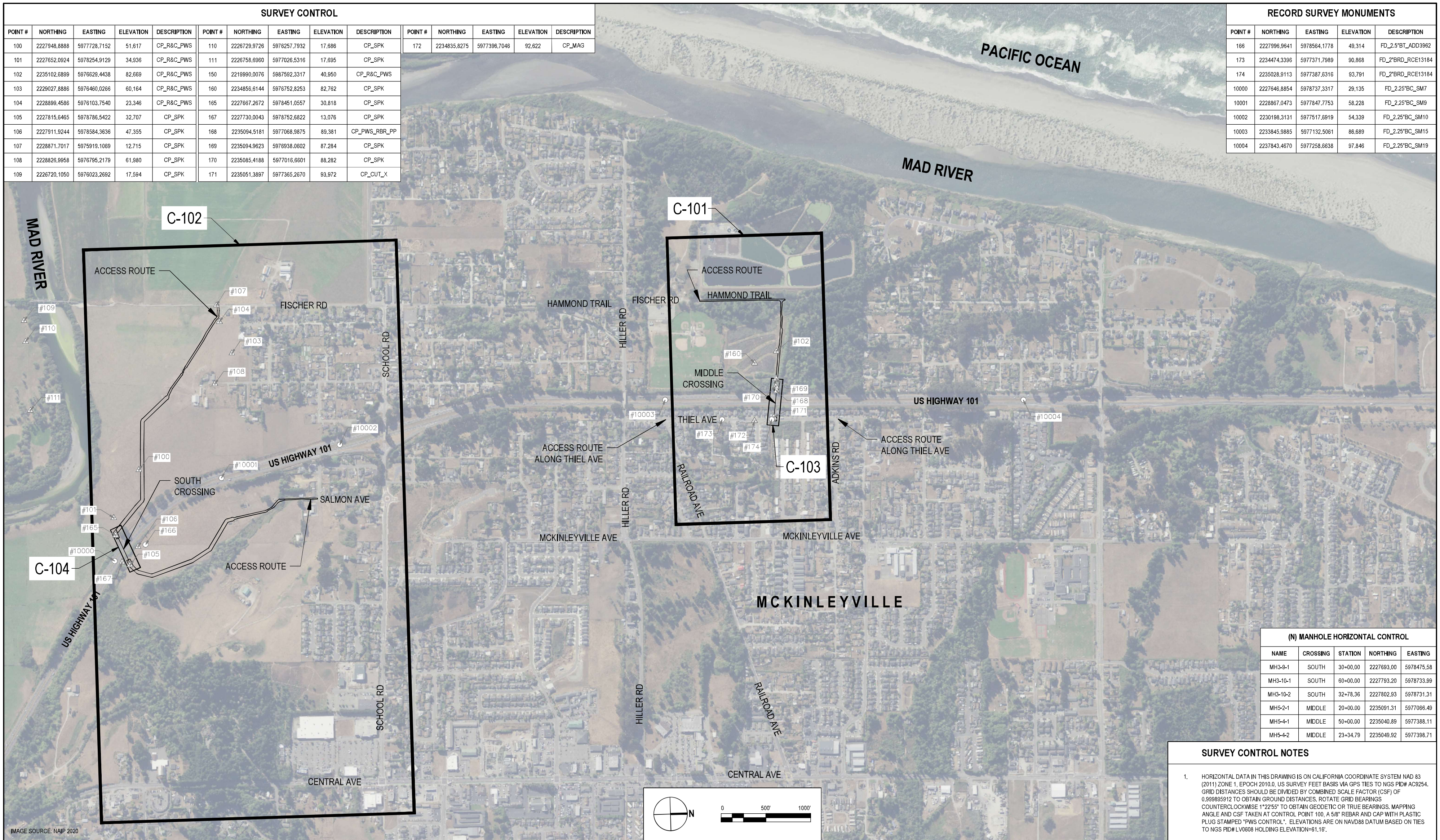

IMAGE SOURCE: NAIP 2020

(N) MANHOLE HORIZONTAL CONTROL

NAME	CROSSING	STATION	NORTHING	EASTING
MH3-9-1	SOUTH	30+00.00	2227693.00	5978475.58
MH3-10-1	SOUTH	60+00.00	2227793.20	5978733.99
MH3-10-2	SOUTH	32+78.36	2227802.93	5978731.31
MH5-2-1	MIDDLE	20+00.00	2235091.31	5977066.49
MH5-4-1	MIDDLE	50+00.00	2235040.89	5977388.11
MH5-4-2	MIDDLE	23+34.79	2235049.92	5977398.71

SURVEY CONTROL NOTES

1. HORIZONTAL DATA IN THIS DRAWING IS ON CALIFORNIA COORDINATE SYSTEM NAD 83 (2011) ZONE 1, EPOCH 2010.0, US SURVEY FEET BASIS VIA GPS TIES TO NGS PID# AC9254. GRID DISTANCES SHOULD BE DIVIDED BY COMBINED SCALE FACTOR (CSF) OF 0.999895912 TO OBTAIN GROUND DISTANCES. ROTATE GRID BEARINGS COUNTERCLOCKWISE 1°22'55" TO OBTAIN GEODETIC OR TRUE BEARINGS. MAPPING ANGLE AND CSF TAKEN AT CONTROL POINT 100, A 5/8" REBAR AND CAP WITH PLASTIC PLUG STAMPED "PWS CONTROL". ELEVATIONS ARE ON NAVD88 DATUM BASED ON TIES TO NGS PID# LV0608 HOLDING ELEVATION=61.16'.

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Designer R. RIOS | Design Check P. SULLIVAN | Project Director S. ALLEN

McKINLEYVILLE COMMUNITY SERVICES DISTRICT

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0 1"

REGISTERED PROFESSIONAL ENGINEER
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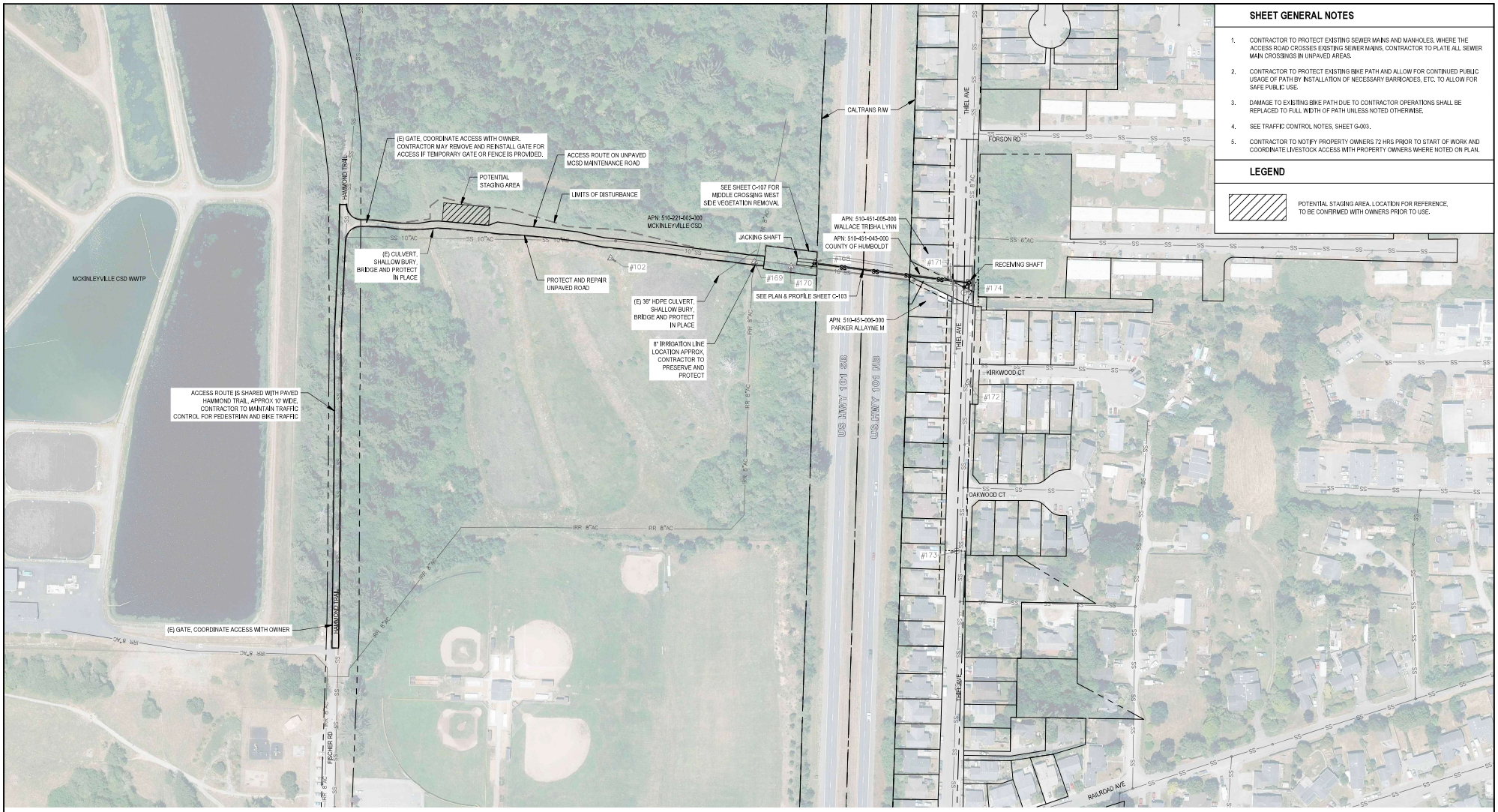
Client **MCKINLEYVILLE COMMUNITY SERVICES DISTRICT**

Project **HIGHWAY SEWER CROSSING RETROFIT**

Title **PROJECT OVERVIEW AND SURVEY CONTROL**

Size ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12669030	4/9/2026	AS SHOWN	G-004	4 of 16



SHEET GENERAL NOTES

1. CONTRACTOR TO PROTECT EXISTING SEWER MAINS AND MANHOLES. WHERE THE ACCESS ROAD CROSSES EXISTING SEWER MAINS, CONTRACTOR TO PLATE ALL SEWER MAIN CROSSINGS IN UNPAVED AREAS.
2. CONTRACTOR TO PROTECT EXISTING BIKE PATH AND ALLOW FOR CONTINUED PUBLIC USAGE OF PATH BY INSTALLATION OF NECESSARY BARRICADES, ETC. TO ALLOW FOR SAFE PUBLIC USE.
3. DAMAGE TO EXISTING BIKE PATH DUE TO CONTRACTOR OPERATIONS SHALL BE REPLACED TO FULL WIDTH OF PATH UNLESS NOTED OTHERWISE.
4. SEE TRAFFIC CONTROL NOTES, SHEET G-003.
5. CONTRACTOR TO NOTIFY PROPERTY OWNERS 72 HRS PRIOR TO START OF WORK AND COORDINATE LIVESTOCK ACCESS WITH PROPERTY OWNERS WHERE NOTED ON PLAN.

LEGEND

POTENTIAL STAGING AREA, LOCATION FOR REFERENCE, TO BE CONFIRMED WITH OWNERS PRIOR TO USE.

STAGING AND ACCESS PLAN - MIDDLE CROSSING

0 100' 200'

N

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Title: STAGING AND ACCESS PLAN - MIDDLE CROSSING
Size: ANSI D
Project No. 12669030 | Date 4/9/2026 | Scale AS SHOWN
Sheet No. C-101 | Sheet 5 of 16

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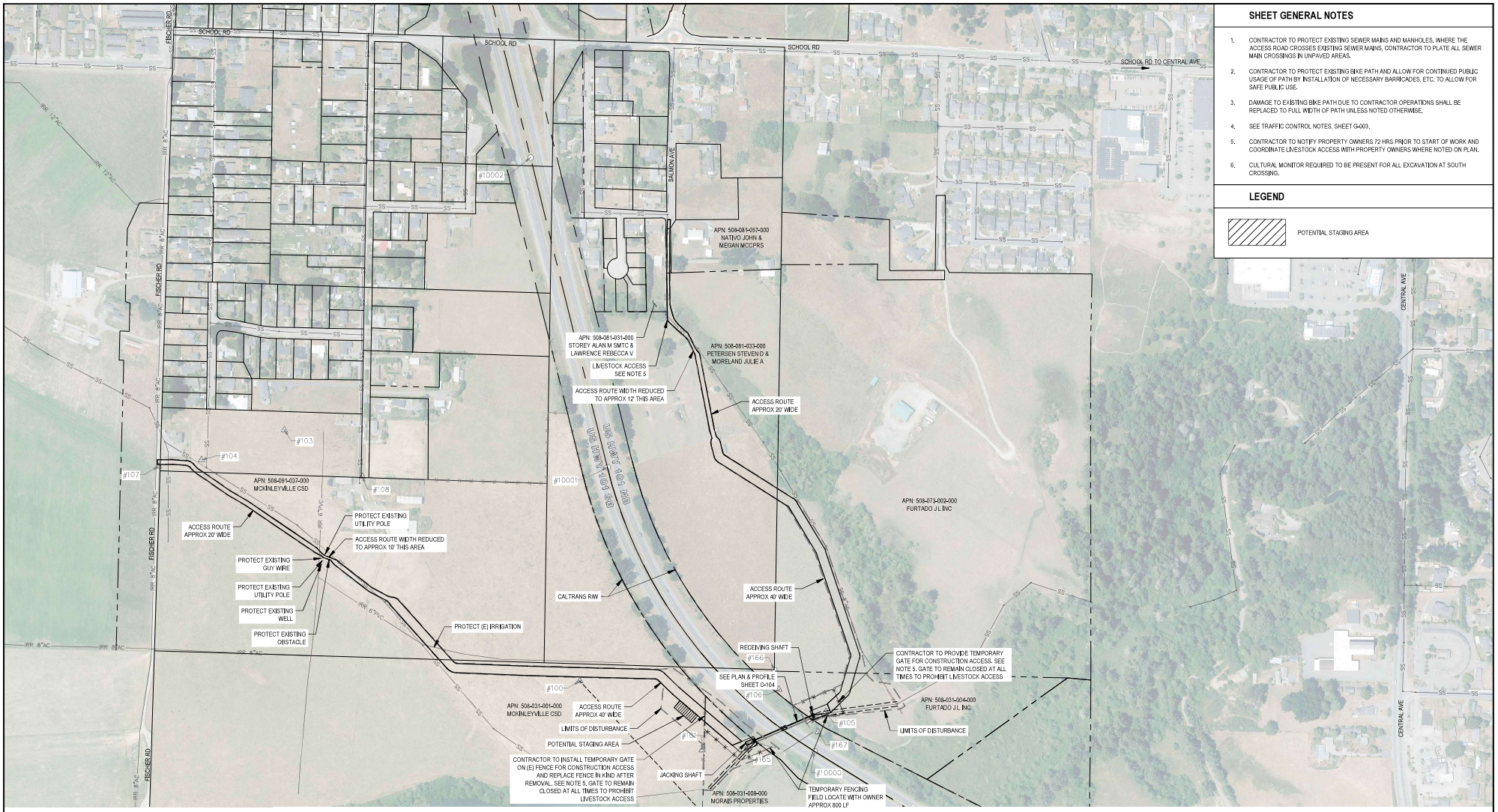

SHEET GENERAL NOTES

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4. SEE TRAFFIC CONTROL NOTES, SHEET G-003.
5. CONTRACTOR TO NOTIFY PROPERTY OWNERS 72 HRS PRIOR TO START OF WORK AND COORDINATE LIVESTOCK ACCESS WITH PROPERTY OWNERS WHERE NOTED ON PLAN.
6. CULTURAL MONITOR REQUIRED TO BE PRESENT FOR ALL EXCAVATION AT SOUTH CROSSING.

LEGEND

POTENTIAL STAGING AREA

STAGING AND ACCESS PLAN - SOUTH CROSSING

0 200' 400'

N

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Title: STAGING AND ACCESS PLAN - SOUTH CROSSING
Size: ANSI D

Project No. 12669030 | Date 4/9/2026 | Scale AS SHOWN
Sheet No. C-102 | Sheet 6 of 16

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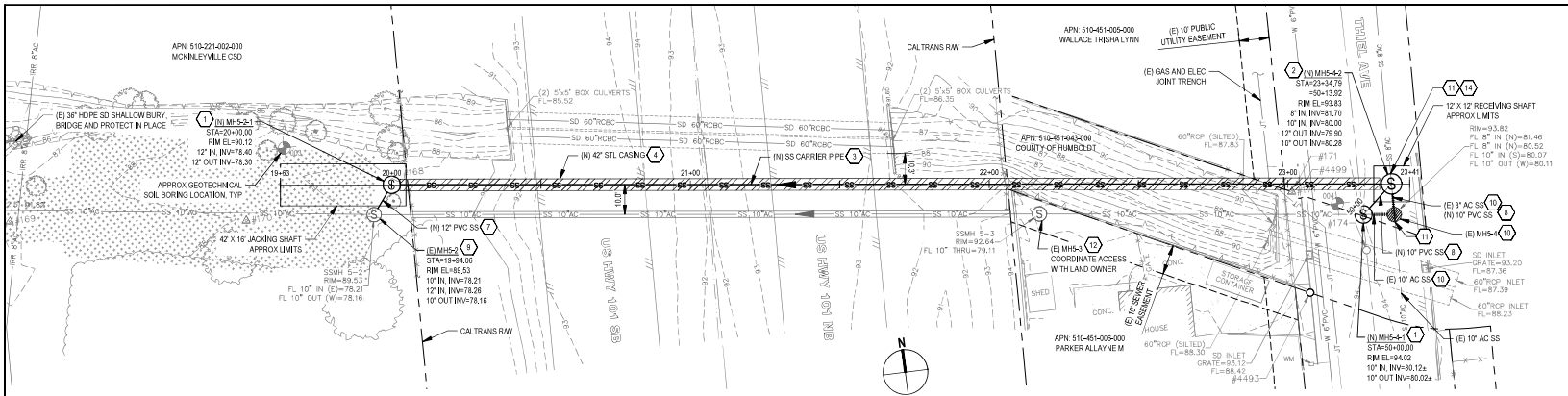
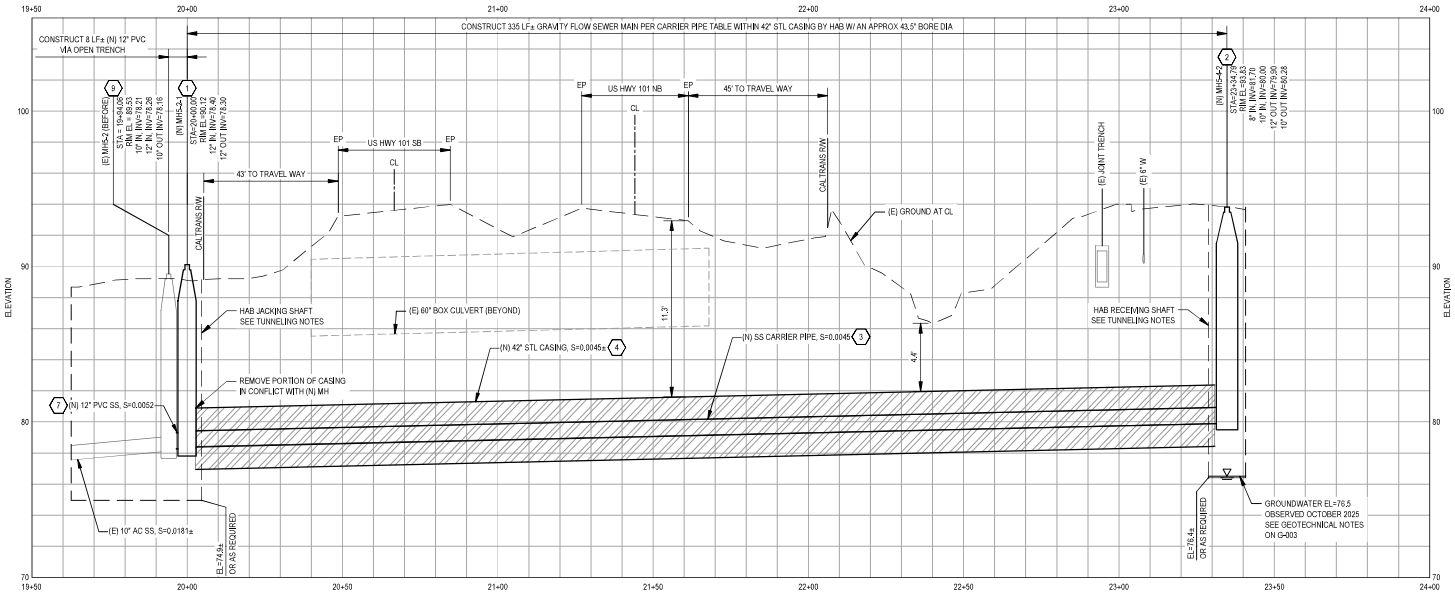


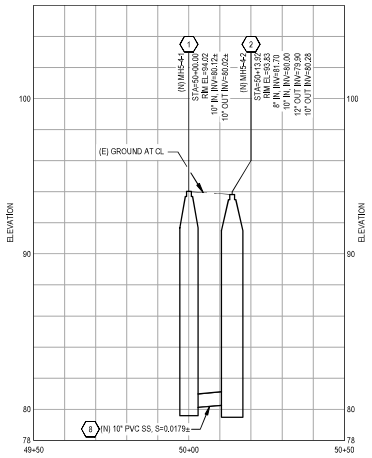
MIDDLE CROSSING - PLAN

0 10' 20' 40'



MIDDLE CROSSING - PROFILE

0 2' 4' 8' VERTICAL
0 10' 20' 40' HORIZONTAL



MIDDLE CROSSING OVERFLOW - PROFILE

0 2' 4' 8' VERTICAL
0 10' 20' 40' HORIZONTAL

SHEET GENERAL NOTES

1. LOCATION OF EXISTING UTILITIES AND STRUCTURES ARE FROM INFORMATION AVAILABLE AT THE TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT (800) 227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND SHALL POTHOLE FOR EXACT LOCATION. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UTILITIES.
2. PROVIDE ALL TRANSITION COUPLINGS AS NECESSARY.
3. SEE TUNNELING NOTES ON SHEET G-003.

SHEET KEYNOTES (C-103 TO C-104)

1. (N) 60" SSMH PER MCSD STANDARD DETAIL S-3, SHEET C-501.
2. (N) 72" SSMH SIMILAR TO MCSD STANDARD DETAIL S-3, SHEET C-501.
3. (N) FPVC OR HDPE SS CARRIER PIPE SIZE PER CARRIER PIPE TABLE BELOW, INSIDE 42" STL CASING PER DETAIL 1, SHEET C-502.
4. (N) 42" STL CASING INSTALLED VIA HORIZONTAL AUGER BORING PER DETAIL 1, SHEET C-502. INSTALL SMP ARRAY PER DETAIL 1, SHEET C-503.
5. (N) 18" PVC SDR35 SS. TRENCH PER DETAIL 1, SHEET C-501.
6. (N) 15" PVC SDR35 SS. TRENCH PER DETAIL 1, SHEET C-501.
7. (N) 12" PVC SDR35 SS. TRENCH PER DETAIL 1, SHEET C-501.
8. (N) 10" PVC SDR35 SS. TRENCH PER DETAIL 1, SHEET C-501.
9. RECHANNEL EXISTING MANHOLE PER MCSD STANDARD DETAILS S-3 AND S-6, SHEET C-501 AND SPECIFICATIONS. COAT INTERIOR PER SPECIFICATIONS.
10. DEMOLISH (E) PIPE OR MANHOLE PER PLAN. SEE HAZARDOUS MATERIAL NOTES ON G-003.
11. CONNECT TO (E) PIPE WITH ECCENTRIC COUPLER. MATCH (N) AND (E) INVERTS.
12. COAT INTERIOR OF (E) MANHOLE PER SPECIFICATIONS.
13. PLUG AND ABANDON (E) SS PIPE PER DETAIL 2, SHEET C-501.
14. INSTALL INSIDE DROP PER MCSD STANDARD DETAIL S-4, SHEET C-501.

MIDDLE CROSSING CARRIER PIPE TABLE

NOMINAL SIZE (IN)	PIPE STIFFNESS	O.D. SERIES	MATERIAL	O.D. (IN)	AVG. I.D. (IN)
12	DR 18	DIPS	FPVC	13.20	11.85
12	DR 17	DIPS	HDPE	13.20	11.55

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Project No.: 12669030
Date: 4/9/2026
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Sheet No.: C-103
Sheet: 7 of 16

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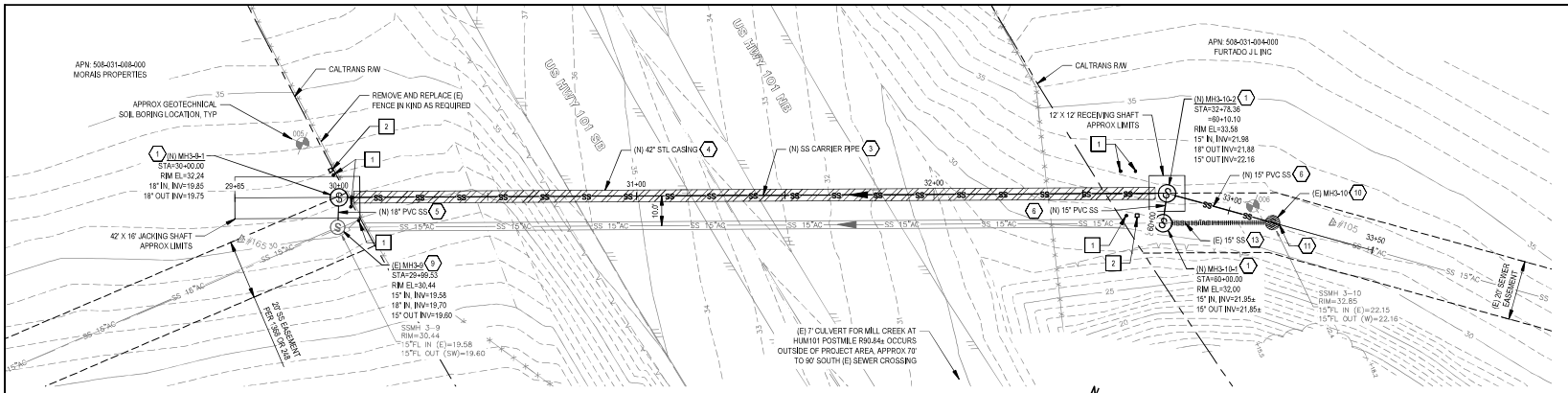


SOUTH CROSSING - PLAN

0 10' 20' 40'

SHEET GENERAL NOTES

1. LOCATION OF EXISTING UTILITIES AND STRUCTURES ARE FROM INFORMATION AVAILABLE AT THE TIME OF DESIGN. EXACT LOCATION AND COMPLETENESS ARE NOT GUARANTEED. CONTRACTOR SHALL NOTIFY THE OWNER AND UNDERGROUND SERVICES ALERT (800) 227-2600 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION AND SHALL POTHOLE FOR EXACT LOCATION. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UTILITIES.
2. PROVIDE ALL TRANSITION COUPLINGS AS NECESSARY.
3. SEE TUNNELING NOTES ON SHEET G-003.

SHEET KEYNOTES (C-103 TO C-104)

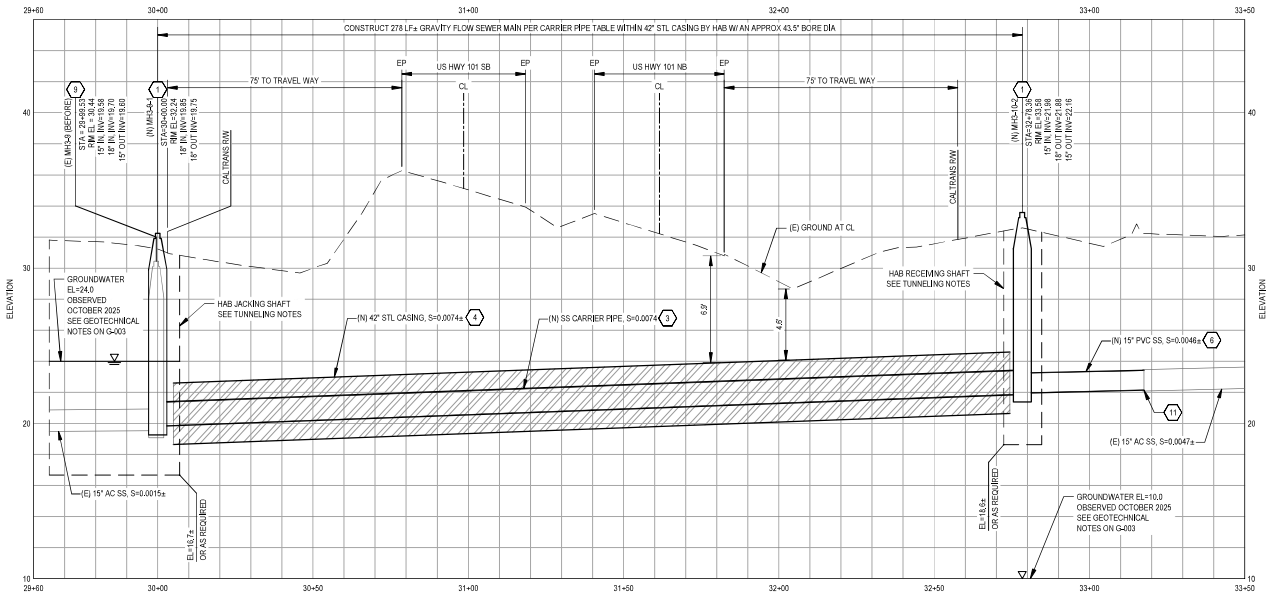
1. (N) 60" SSMH PER MCSD STANDARD DETAIL S-3, SHEET C-501.
2. (N) 72" SSMH SIMILAR TO MCSD STANDARD DETAIL S-3, SHEET C-501.
3. (N) FPVC OR HDPE SS CARRIER PIPE SIZE PER CARRIER PIPE TABLE BELOW, INSIDE 42" STL CASING PER DETAIL 1, SHEET C-502.
4. (N) 42" STL CASING INSTALLED VIA HORIZONTAL AUGER BORING PER DETAIL 1, SHEET C-502. INSTALL SMP ARRAY PER DETAIL 1, SHEET C-503.
5. (N) 18" PVC SDR35 SS. TRENCH PER DETAIL 1, SHEET C-501.
6. (N) 15" PVC SDR35 SS. TRENCH PER DETAIL 1, SHEET C-501.
7. (N) 12" PVC SDR35 SS. TRENCH PER DETAIL 1, SHEET C-501.
8. (N) 10" PVC SDR35 SS. TRENCH PER DETAIL 1, SHEET C-501.
9. RECHANNEL EXISTING MANHOLE PER MCSD STANDARD DETAILS S-3 AND S-6, SHEET C-501 AND SPECIFICATIONS, COAT INTERIOR PER SPECIFICATIONS.
10. DEMOLISH (E) PIPE OR MANHOLE PER PLAN. SEE HAZARDOUS MATERIAL NOTES ON G-003.
11. CONNECT TO (E) PIPE WITH ECCENTRIC COUPLER. MATCH (N) AND (E) INVERTS.
12. COAT INTERIOR OF (E) MANHOLE PER SPECIFICATIONS.
13. PLUG AND ABANDON (E) SS PIPE PER DETAIL 2, SHEET C-501.
14. INSTALL INSIDE DROP PER MCSD STANDARD DETAIL S-4, SHEET C-501.

CATHODIC PROTECTION KEYNOTES

1. ANODE INSTALLATION (TOTAL 3 EACH TEST STATION) PER DETAIL 1, SHEET C-505. FIELD LOCATE WITH OWNER.
2. CASING ANODE TEST STATION PER DETAIL 3, SHEET C-505. FIELD LOCATE WITH OWNER.

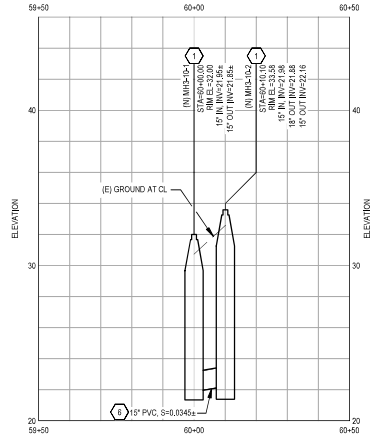
SOUTH CROSSING CARRIER PIPE TABLE

NOMINAL SIZE (IN)	DR/PIPE STIFFNESS	O.D. SERIES	MATERIAL	O.D. (IN)	AVG. I.D. (IN)
18	DR 21	DIPS	FPVC	19.50	17.53
18	DR 17	DIPS	HDPE	19.50	17.07



SOUTH CROSSING - PROFILE

0 2' 4' 8' VERTICAL
0 10' 20' 40' HORIZONTAL



SOUTH CROSSING OVERFLOW - PROFILE

0 2' 4' 8' VERTICAL
0 10' 20' 40' HORIZONTAL

No.	Issue	Checked	Approved	Date
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Author E. STOCKWELL | Drafting Check L. HALONEN | Project Manager P. SULLIVAN
Designer C. CAMP | Design Check P. SULLIVAN | Project Director S. ALLEN

Bar is one inch on original size sheet
0 1"

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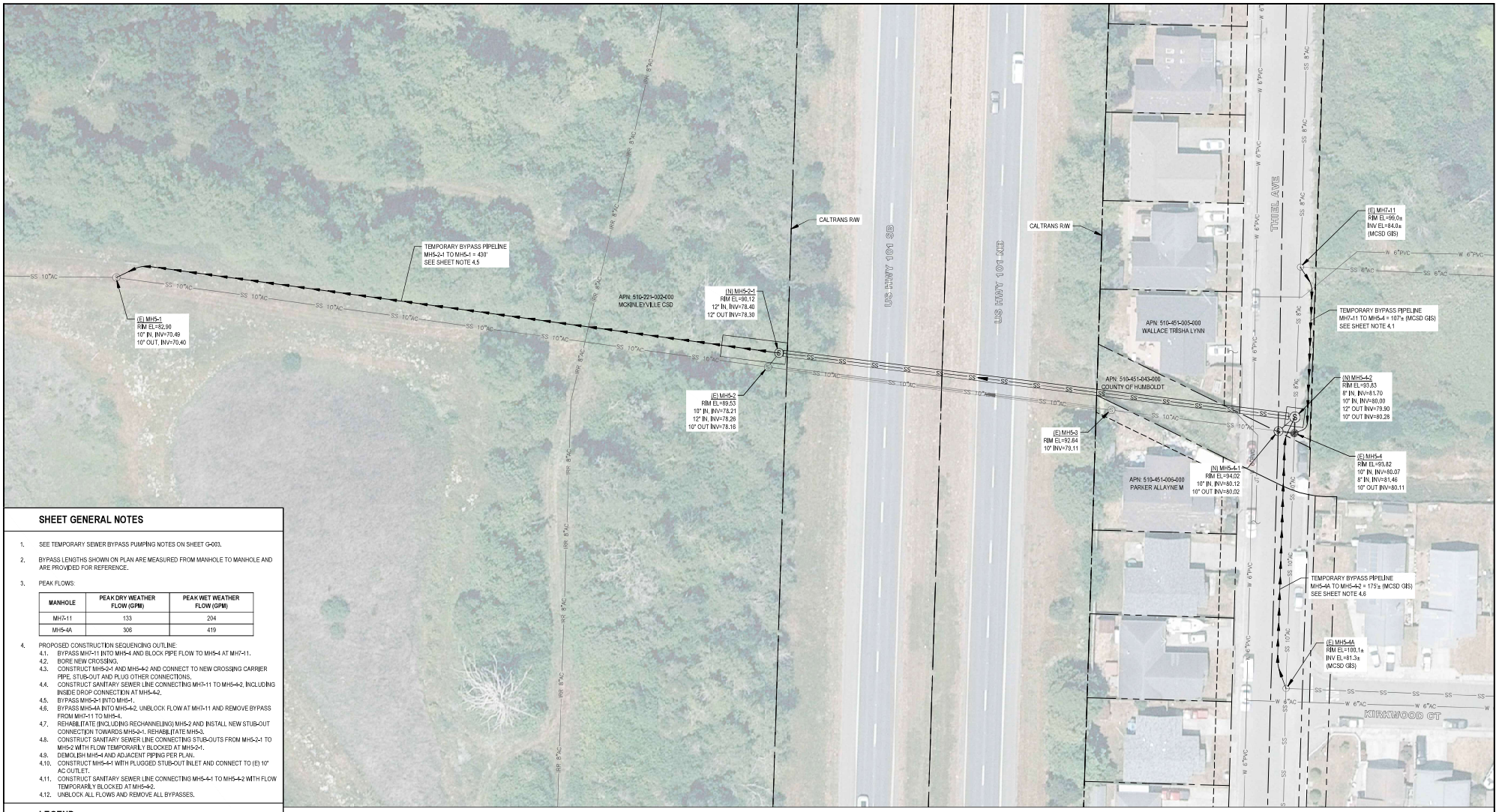
Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
Project: HIGHWAY SEWER CROSSING RETROFIT
Title: PLAN AND PROFILE - SOUTH CROSSING
Size: ANSI D

Project No. 12669030 | Date 4/9/2026 | Scale AS SHOWN
Sheet No. C-104 | Sheet 8 of 16

Plot Date: 9 April 2026 - 1:49 PM | Plotted By: Thomas Rodriguez | Filename: f:\ghd\ref\ghdUS\Eureka\Projects\61\12669030\Digital_Design\ACAD\Sheets\12669030_C-104-105.dwg



SHEET GENERAL NOTES

1. SEE TEMPORARY SEWER BYPASS PUMPING NOTES ON SHEET G-003.
2. BYPASS LENGTHS SHOWN ON PLAN ARE MEASURED FROM MANHOLE TO MANHOLE AND ARE PROVIDED FOR REFERENCE.
3. PEAK FLOWS:

MANHOLE	PEAK DRY WEATHER FLOW (GPM)	PEAK WET WEATHER FLOW (GPM)
MH7-11	133	204
MH5-4A	306	419

4. PROPOSED CONSTRUCTION SEQUENCING OUTLINE:
   - 4.1. BYPASS MH7-11 INTO MH5-4 AND BLOCK PIPE FLOW TO MH5-4 AT MH7-11.
   - 4.2. BORE NEW CROSSING.
   - 4.3. CONSTRUCT MH5-2-1 AND MH5-4-2 AND CONNECT TO NEW CROSSING CARRIER PIPE STUB-OUT AND PLUG OTHER CONNECTIONS.
   - 4.4. CONSTRUCT SANITARY SEWER LINE CONNECTING MH7-11 TO MH5-4-2, INCLUDING INSIDE DROP CONNECTION AT MH5-4-2.
   - 4.5. BYPASS MH5-2-1 INTO MH5-1.
   - 4.6. BYPASS MH5-4A INTO MH5-4-2. UNBLOCK FLOW AT MH7-11 AND REMOVE BYPASS FROM MH7-11 TO MH5-4.
   - 4.7. REHABILITATE (INCLUDING RECHANNELING) MH5-2 AND INSTALL NEW STUB-OUT CONNECTION TOWARDS MH5-2-1. REHABILITATE MH5-3.
   - 4.8. CONSTRUCT SANITARY SEWER LINE CONNECTING STUB-OUTS FROM MH5-2-1 TO MH5-2 WITH FLOW TEMPORARILY BLOCKED AT MH5-2-1.
   - 4.9. DEMOLISH MH5-4 AND ADJACENT PIPING PER PLAN.
   - 4.10. CONSTRUCT MH5-4-1 WITH PLUGGED STUB-OUT INLET AND CONNECT TO (E) 10" AC OUTLET.
   - 4.11. CONSTRUCT SANITARY SEWER LINE CONNECTING MH5-4-1 TO MH5-4-2 WITH FLOW TEMPORARILY BLOCKED AT MH5-4-2.
   - 4.12. UNBLOCK ALL FLOWS AND REMOVE ALL BYPASSES.

LEGEND

TEMPORARY BYPASS PIPELINE (SCHEMATIC)

BYPASS PLAN - MIDDLE CROSSING

SCALE AS SHOWN

0 30' 60'

N

No.	Issue	Checked	Approved	Date
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Project: HIGHWAY SEWER CROSSING RETROFIT
Title: BYPASS PLAN - MIDDLE CROSSING
Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12669030	4/9/2026	AS SHOWN	C-105	9 of 16

Plot Date: 9 April 2026 - 1:44 PM
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SHEET GENERAL NOTES

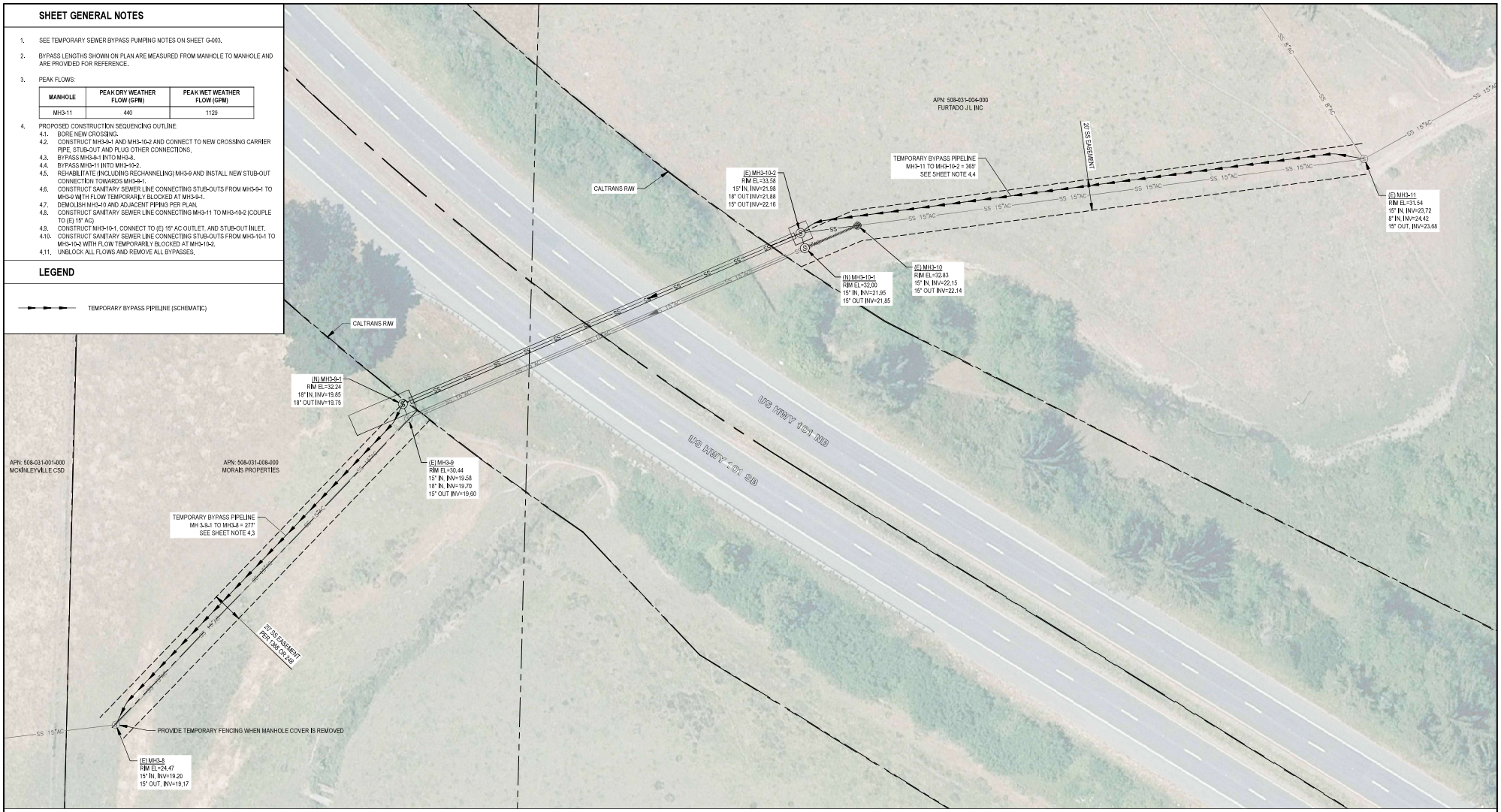
1. SEE TEMPORARY SEWER BYPASS PUMPING NOTES ON SHEET G-003.
2. BYPASS LENGTHS SHOWN ON PLAN ARE MEASURED FROM MANHOLE TO MANHOLE AND ARE PROVIDED FOR REFERENCE.
3. PEAK FLOWS:

MANHOLE	PEAK DRY WEATHER FLOW (GPM)	PEAK WET WEATHER FLOW (GPM)
MH3-11	440	1129

4. PROPOSED CONSTRUCTION SEQUENCING OUTLINE:
   - 4.1. BORE NEW CROSSING.
   - 4.2. CONSTRUCT MH3-9-1 AND MH3-10-2 AND CONNECT TO NEW CROSSING CARRIER PIPE, STUB-OUT AND PLUG OTHER CONNECTIONS.
   - 4.3. BYPASS MH3-9-1 INTO MH3-8.
   - 4.4. BYPASS MH3-11 INTO MH3-10-2.
   - 4.5. REHABILITATE (INCLUDING RECHANNELING) MH3-9 AND INSTALL NEW STUB-OUT CONNECTION TOWARDS MH3-9-1.
   - 4.6. CONSTRUCT SANITARY SEWER LINE CONNECTING STUB-OUTS FROM MH3-9-1 TO MH3-9 WITH FLOW TEMPORARILY BLOCKED AT MH3-9-1.
   - 4.7. DEMOLISH MH3-10 AND ADJACENT PIPING PER PLAN.
   - 4.8. CONSTRUCT SANITARY SEWER LINE CONNECTING MH3-11 TO MH3-10-2 (COUPLE TO (E) 15" AC)
   - 4.9. CONSTRUCT MH3-10-1, CONNECT TO (E) 15" AC OUTLET, AND STUB-OUT INLET.
   - 4.10. CONSTRUCT SANITARY SEWER LINE CONNECTING STUB-OUTS FROM MH3-10-1 TO MH3-10-2 WITH FLOW TEMPORARILY BLOCKED AT MH3-10-2.
   - 4.11. UNBLOCK ALL FLOWS AND REMOVE ALL BYPASSES.

LEGEND

TEMPORARY BYPASS PIPELINE (SCHEMATIC)



BYPASS PLAN - SOUTH CROSSING

SCALE AS SHOWN

0 30' 60'

N

No.	Issue	Checked	Approved	Date
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Designer E. STOCKWELL | Design Check P. SULLIVAN | Project Director S. ALLEN

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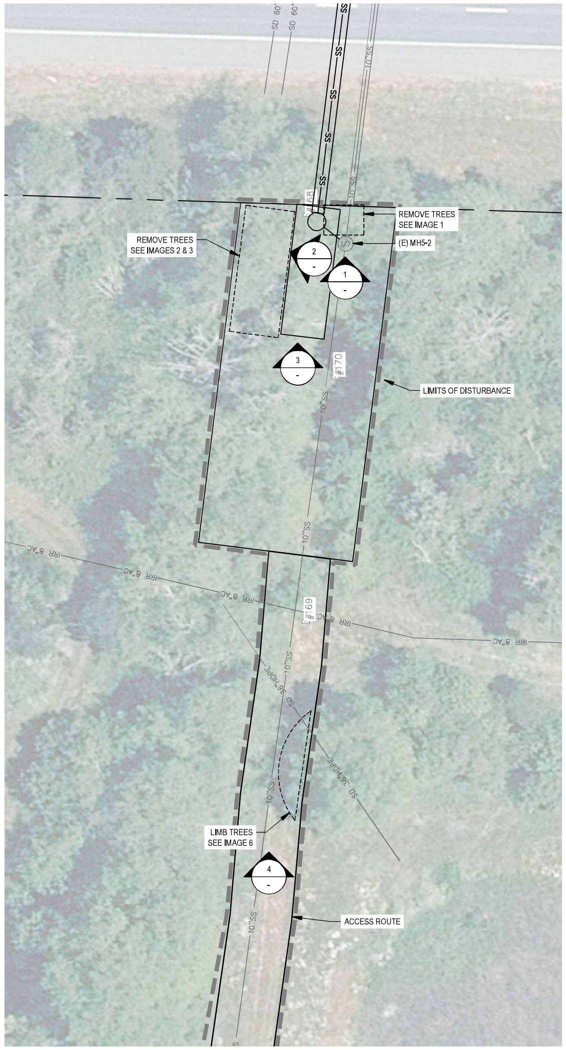
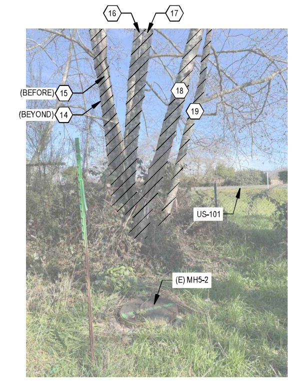
Title: BYPASS PLAN - SOUTH CROSSING
Size: ANSI D
Project No. 12669030 | Date 4/9/2026 | Scale AS SHOWN
Sheet No. C-106 | Sheet 10 of 16

Plot Date: 9 April 2026 - 1:48 PM | Plotted By: Thomas Rodriguez | Filename: f:\ghd\ref\ghd\US\Eureka\Projects\561\12669030\Digital_Design\ACAD\Sheets\12669030_C-101-105.dwg

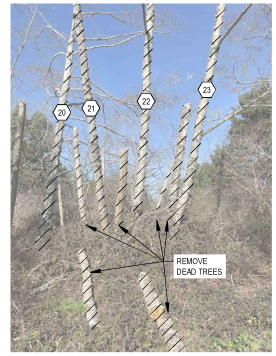


MIDDLE CROSSING WEST SIDE PLAN

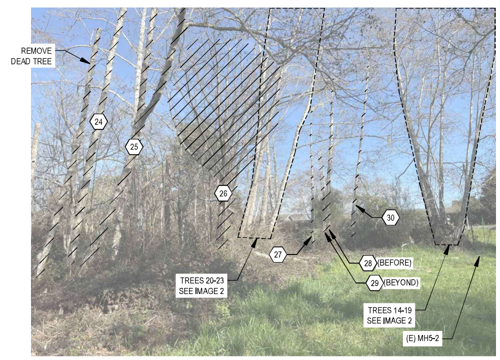
0 60' 120'



1 **IMAGE 1**
NOT TO SCALE



2 **IMAGE 2**
NOT TO SCALE



3 **IMAGE 3**
NOT TO SCALE

4 **IMAGE 4**
NOT TO SCALE

SHEET GENERAL NOTES

1. IMAGES SHOWN WERE TAKEN ON FEBRUARY 3, 2026.
2. LOCATIONS ON PLAN AND TREE DIAMETERS ARE BASED ON FIELD MEASUREMENTS AND ARE APPROXIMATE.
3. TREES ARE TO BE REMOVED SHALL BE CUT FLUSH TO THE GROUND, AND TREE ROOT BALLS TO REMAIN.
4. TREE LIMBS SHALL BE SAWCUT. TREE LIMBING EXTENTS ARE APPROXIMATELY 10 FEET OVERHEAD AND WITHIN ACCESS ROUTE LIMITS.
5. TREE AND VEGETATION REMOVAL SHALL BE FLAGGED FOR CONFIRMATION WITH OWNER PRIOR TO PERFORMING THE WORK.
6. SEE VEGETATION PROTECTION AND RESTORATION NOTES ON G-003.

TREE REMOVAL

TREE ID	DIA (IN)	TYPE
14	<12"	RED ALDER
15	<12"	RED ALDER
16	<12"	RED ALDER
17	<12"	RED ALDER
18	<12"	RED ALDER
19	<12"	RED ALDER
20	<12"	RED ALDER
21	<12"	RED ALDER
22	<12"	RED ALDER
23	<12"	RED ALDER
24	<12"	RED ALDER
25	<12"	RED ALDER
26	<12"	RED ALDER
27	<12"	RED ALDER
28	<12"	RED ALDER
29	<12"	RED ALDER
30	<12"	RED ALDER

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	LH	PS	4/9/2026

Author E. STOCKWELL Drafting Check L. HALONEN Project Manager P. SULLIVAN
Designer E. STOCKWELL Design Check P. SULLIVAN Project Director S. ALLEN

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Project HIGHWAY SEWER CROSSING RETROFIT

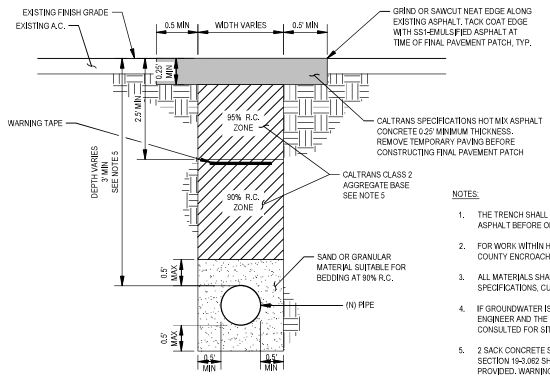
Title VEGETATION REMOVAL AND PROTECTION PLAN - MIDDLE CROSSING

Size ANSI D

Project No. 12669030 Date 4/9/2026 Scale AS SHOWN

Sheet No. C-107 Sheet 11 of 16

Plot Date: 9 April 2026 - 1:42 PM Plotted By: Thomas Rodriguez Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12669030\Digital_Design\ACAD\Sheets\12669030_C-110-112.dwg

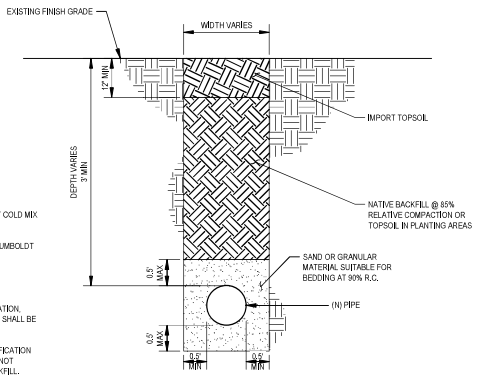


TRENCH DETAIL - PAVED SURFACE

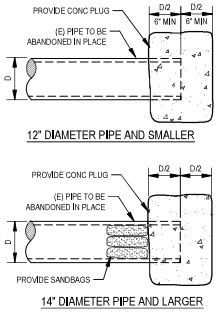
NOTES:

1. THE TRENCH SHALL HAVE AT LEAST 0.25 FEET OF TEMPORARY COLD MIX ASPHALT BEFORE OPENING ROAD TO TRAFFIC.
2. FOR WORK WITHIN HUMBOLDT COUNTY RIGHT-OF-WAY, SEE HUMBOLDT COUNTY ENCROACHMENT PERMIT.
3. ALL MATERIALS SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS, CURRENT EDITION.
4. IF GROUNDWATER IS ENCOUNTERED DURING TRENCH EXCAVATION, ENGINEER AND THE COUNTY DEPARTMENT OF PUBLIC WORKS SHALL BE CONSULTED FOR SITE SPECIFIC CORRECTIVE MEASURES.
5. 2 SACK CONCRETE SLURRY PER CALTRANS STANDARD SPECIFICATION SECTION 19-3.062 SHALL BE USED WHERE MINIMUM COVER IS NOT PROVIDED. WARNING TAPE NOT REQUIRED WITH SLURRY BACKFILL.

1 C-501 **TYPICAL TRENCH DETAIL**
SCALE: NTS



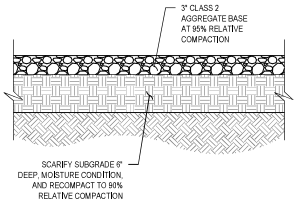
TRENCH DETAIL - UNPAVED SURFACE



NOTES:

1. PIPE PLUGS SHALL BE INSTALLED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
2. PIPE PLUGS SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE BEFORE COVERING.
3. SMALLER PIPES MAY BE CAPPED.
4. ABANDONED PIPES WITHIN HIGHWAY RIGHT-OF-WAY SHALL BE FILLED WITH SAND, 2-SACK SLURRY CEMENT, OR CLSM.

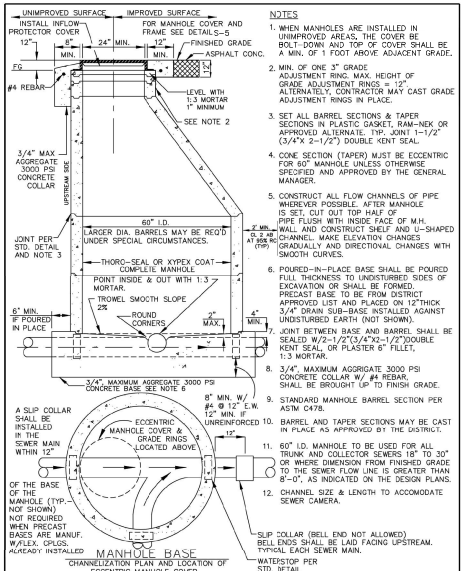
2 C-501 **PLUG AND ABANDON EXISTING PIPE**
NOT TO SCALE



NOTE:

1. REMOVE UPPER 3" OF TOPSOIL PRIOR TO RESURFACING.

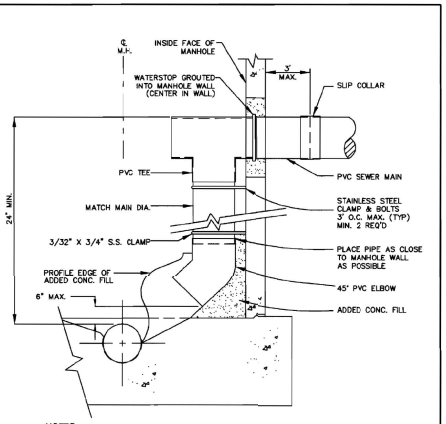
3 C-501 **TYPICAL GRAVEL SURFACING SECTION**
SCALE: NTS



NOTES

1. WHEN MANHOLES ARE INSTALLED IN UNIMPROVED AREAS, THE COVER BE BOLT-DOWN AND TOP OF COVER SHALL BE A MIN. OF 1 FOOT ABOVE ADJACENT GRADE.
2. MIN. OF ONE 3" GRADE ADJUSTMENT RING. MAX. HEIGHT OF GRADE ADJUSTMENT RINGS = 12". ALTERNATELY, CONTRACTOR MAY CAST GRADE ADJUSTMENT RINGS IN PLACE.
3. SET ALL BARREL SECTIONS & TAPER SECTIONS IN PLASTIC GASKET, RAM-NEK OR APPROVED ALTERNATE, TYP. JOINT 1-1/2" (3/4"X 2-1/2") DOUBLE KENT SEAL.
4. CONE SECTION (TAPER) MUST BE ECCENTRIC FOR 60" MANHOLE UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE GENERAL MANAGER.
5. CONSTRUCT ALL FLOW CHANNELS OF PIPE WHEREVER POSSIBLE. AFTER MANHOLE IS SET, CUT OUT TOP HALF OF PIPE FLUSH WITH INSIDE FACE OF M.H. WALL AND CONSTRUCT SHELF AND U-SHAPED CHANNEL. MAKE ELEVATION CHANGES GRADUALLY AND DIRECTIONAL CHANGES WITH SMOOTH CURVES.
6. POURED-IN-PLACE BASE SHALL BE POURED FULL THICKNESS TO UNDISTURBED SIDES OF EXCAVATION OR SHALL BE FORMED. PRECAST BASE TO BE FROM DISTRICT APPROVED LIST AND PLACED ON 12"THICK 3/4" DRAIN SUB-BASE INSTALLED AGAINST UNDISTURBED EARTH (NOT SHOWN).
7. JOINT BETWEEN BASE AND BARREL SHALL BE SEALED W/2-1/2"(SIKA)"X2-1/2"DOUBLE KENT SEAL, OR PLASTER 6" FILLET, 1:3 MORTAR.
8. 3/4" MAXIMUM AGGREGATE 3000 PSI CONCRETE COLLAR W/ #4 REBAR, SHALL BE BROUGHT UP TO FINISH GRADE.
9. STANDARD MANHOLE BARREL SECTION PER ASTM C478.
10. BARREL AND TAPER SECTIONS MAY BE CAST IN PLACE AS APPROVED BY THE DISTRICT.
11. 60" I.D. MANHOLE TO BE USED FOR ALL TRUNK AND COLLECTOR SEWERS 18" TO 30" OR WHERE DIMENSION FROM FINISHED GRADE TO THE SEWER FLOW LINE IS GREATER THAN 8'-0", AS INDICATED ON THE DESIGN PLANS.
12. CHANNEL SIZE & LENGTH TO ACCOMODATE SEWER CAMERA.

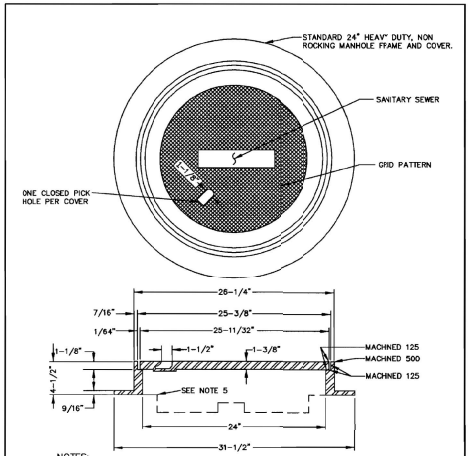
McKINLEYVILLE COMMUNITY SERVICES DISTRICT	STANDARD 60" DIA. PRECAST CONCRETE MANHOLE	APPROVED DATE: 1/2028 STD. DWG. S-3



NOTES:

1. TO BE USED ONLY WITH PRIOR APPROVAL OF DISTRICT. DISTRICT STANDARD IS OUTSIDE DROP MANHOLE AS PER STD. DETAIL.
2. INSTALL WATERSTOP IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AS SHOWN.
3. ENCLOSE ELBOWS IN CONCRETE. FORM SMOOTH CHANNEL TO MANHOLE FLOWLINE.
4. PVC PIPE AND FITTINGS TO BE SDR-35.
5. DROP MANHOLES SHALL NOT BE USED FOR PIPE DIAMETERS GREATER THAN 8 INCH.

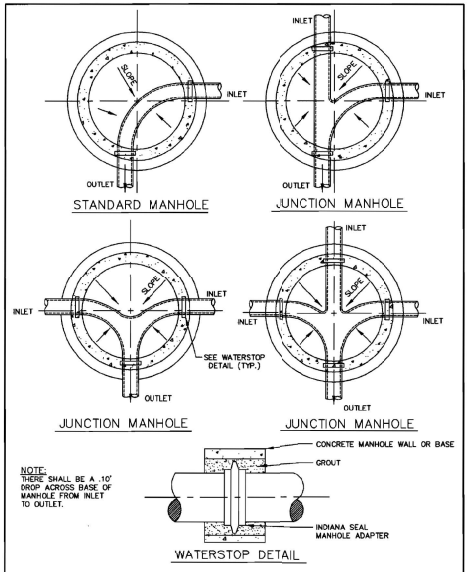
McKinleyville C.S.D.	INSIDE DROP IN SANITARY SEWER MANHOLE	APPROVED DATE: STD. DWG. S - 4



NOTES:

1. SPECIFY SANITARY SEWER WHEN ORDERING. ALL CASTING SHALL BE DIPPED IN APPROVED ASPHALT PAINT.
2. ALL MATERIAL USED IN MANUFACTURING SHALL CONFORM TO A.S.T.M. DESIGNATION A-159-G3000, OR OF UNITED STATES GOVERNMENT SPECIFICATIONS QQI-652B.
3. MINIMUM WEIGHT COMPONENTS: COVER – 130 POUNDS FRAME – 135 POUNDS
4. PROVIDE PHOENIX P-1090 MANHOLE FRAME & COVER OR APPROVED EQUAL.
5. MANHOLES IN NON-PAVED AREAS SHALL HAVE "DUST" COVERS AT THE OPTION OF DISTRICT.
6. ALL MANHOLE COVERS SHALL BE BOLT-DOWN WHERE INDICATED ON STANDARD DRAWING S-3.

McKinleyville C.S.D.	STANDARD MANHOLE FRAME AND COVER	APPROVED DATE: STD. DWG. S - 5



NOTE:
THERE SHALL BE A .10' DROP ACROSS BASE OF MANHOLE FROM INLET TO OUTLET.

McKinleyville C.S.D.	STANDARD MANHOLE CHANNEL DETAILS	APPROVED DATE: STD. DWG. S - 6

No.	Issue	Checked	Approved	Date
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Bar is one inch on original size sheet
0 1"

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Project: HIGHWAY SEWER CROSSING RETROFIT
Title: CIVIL DETAILS 1 OF 5
Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12669030	4/9/2026	AS SHOWN	C-501	12 of 16

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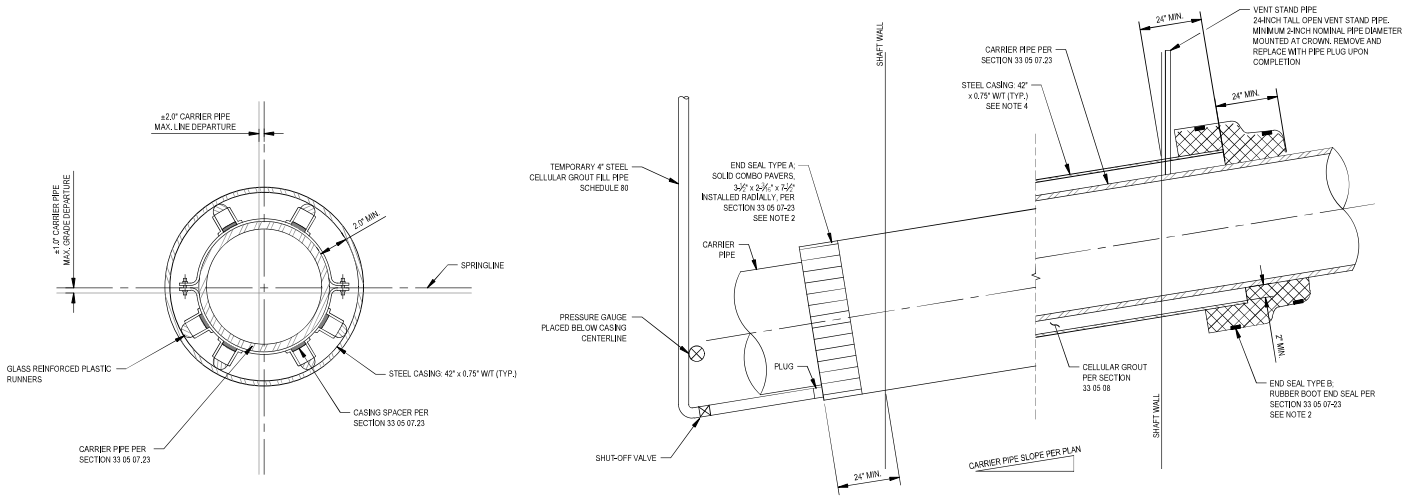
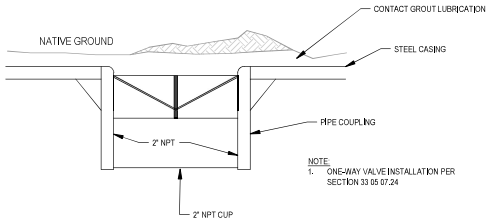
SHEET GENERAL NOTES

1. SPECIFICATION SECTIONS:
   - 31 09 13 GEOTECHNICAL INSTRUMENTATION FOR SETTLEMENT MONITORING
   - 33 05 07.21 SHAFT CONSTRUCTION
   - 33 05 07.23 CARRIER PIPE INSTALLATION
   - 33 05 07.24 JACKED STEEL CASING
   - 33 05 08 BACKFILL GROUT
2. END SEAL SHALL BE CONSTRUCTED AT EACH END OF THE STEEL CASING. END SEAL TYPES ARE SHOWN IN THE DETAIL AS A PROOF OF CONCEPT ONLY. CONTRACTOR MAY ELECT TO CONSTRUCT EITHER TYPE OF END SEAL AT THEIR DISCRETION.
3. CARRIER PIPE SHALL BE TESTED BEFORE INSTALLATION OF END SEALS.
4. A 42-INCH STEEL CASING IS REQUIRED FOR UNGUIDED HAB INSTALLATION AS SHOWN ON PLAN. CASING SIZE MAY BE REDUCED TO MINIMUM 30-INCH STEEL CASING IF AN APPROVED GUIDED SYSTEM IS USED.



1 C-502 STEEL PIPE CASING SECTION AND PROFILE

NOT TO SCALE



2 C-502 ONE-WAY VALVE

NOT TO SCALE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	LH	PS	4/9/2026

Author E. STOCKWELL | Drafting Check L. HALONEN | Project Manager P. SULLIVAN
Designer R. RIOS | Design Check P. SULLIVAN | Project Director S. ALLEN

Bar is one inch on original size sheet (0 — 1")

GHD Inc.
718 Third Street
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Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
Project: HIGHWAY SEWER CROSSING RETROFIT
Title: CIVIL DETAILS 2 OF 5
Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12669030	4/9/2026	AS SHOWN	C-502	13 of 16

Plot Date: 9 April 2026 - 1:41 PM | Plotted By: Thomas Rodriguez | Filename: fghdnetfghdUS/Eureka/Projects/561/12669030/Digital_Design/ACAD/Sheets/12669030_C-501-505.dwg

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT GUIDELINES

SURVEY GRID
TR-0151 (Rev 07/2023)

LEGEND:

- Octagon Data Points required when the casing pipe diameter is < 96 inches
- Octagon & Triangle Data Points required when the casing pipe diameter is 96 inches or greater
- Settlement rod may be required when the casing diameter ≥ = 60 inches (See TR-0132 in Appendix E for settlementrod detail)

EP Edge of Pavement

ETW Edge of Travel Way (Fog line, Yellow Stripe, etc.)

S Offset distance away from the pipe alignment must be a minimum of:

- 3' for casing outer diameters < 30"
- 5' for casing outer diameters < 72", but ≥ 30"
- 10' for casing outer diameters < 108", but ≥ 72"
- 15' for casing outer diameters ≥ 108"

For longitudinal installations, surve the EP and ETW:

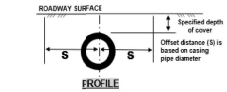
- every 50' if they fall within "S" for installation greater than 500' in engtn;
- every 20' if they fall within "S" for installation less than or equal b 500' in length;
- at locations of angle points or sharp turns.

If any deformations or settlements are observed, Caltrans at its discretion may require surveys at shorter intervals as deemed necessary.

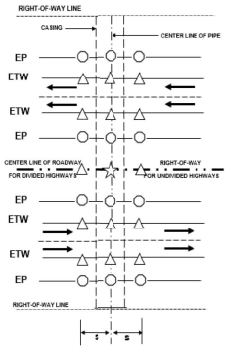
Survey improvements such as concrete pads, overhead signs, traffic loops, electrical boxes/vaults, and other man-made improvements within 5 × 3'.

NOTES:
Survey data is to be collected at the specific points along the casing alignment at the following times:

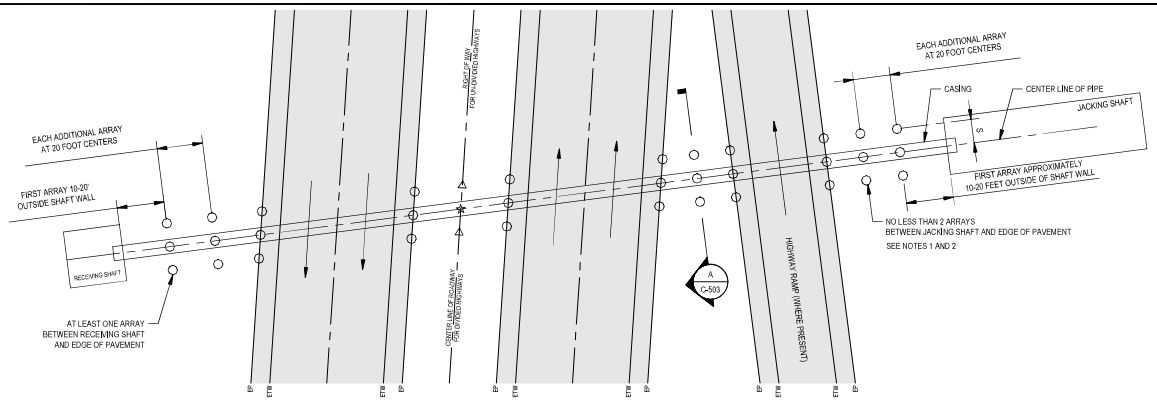
1. Prior to Start of Work.
2. Every two (2) hours continuousry throughout the project.
3. Upon completion of the project
4. Every two (2) months, during a six-month period after the data of



PROFILE



FOR REFERENCE ONLY

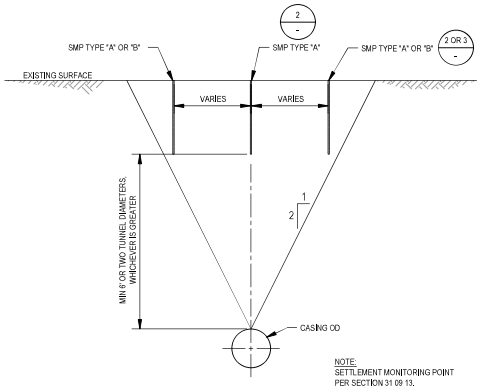


1 C-503 **TYPICAL SETTLEMENT MONITORING POINT (SMP) ARRAY SURVEY GRID**
NOT TO SCALE

SHEET GENERAL NOTES

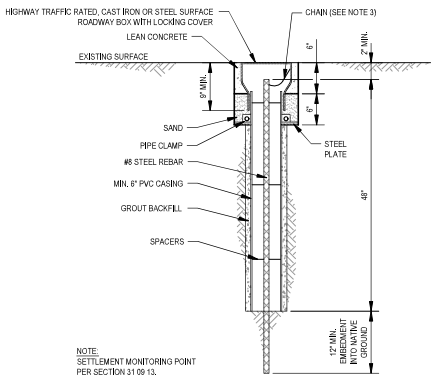
1. MODIFIED SETTLEMENT ARRAY SURVEY GRID PER CALTRANS STANDARD TO SHOW MONITORING ON NON-PERPENDICULAR INCIDENCE ANGLES BETWEEN ALIGNMENT AND TRAVELLED WAY.
2. SMP ARRAY SURVEY GRID PER SECTION 31 09 13.
3. CHAIN TO RESTRAIN REBAR FROM FALLING INTO SMP. CHAIN SHALL NOT INTERFERE WITH THE ABILITY TO TAKE MEASUREMENTS.
4. SPECIFICATION SECTIONS:

   31 09 13 GEOTECHNICAL INSTRUMENTATION AND MONITORING



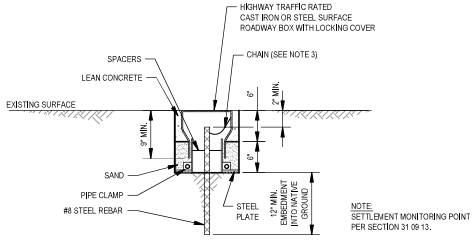
SECTION VIEW

A C-503 **SMP 3-POINT ARRAY**
NOT TO SCALE



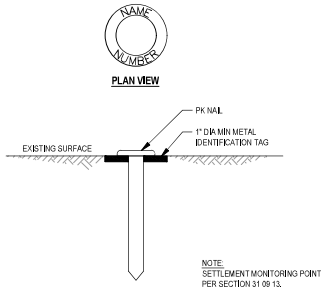
SECTION VIEW

2 C-503 **TYPE "A" SMP DETAIL**
NOT TO SCALE



SECTION VIEW

3 C-503 **TYPE "B" SMP DETAIL**
NOT TO SCALE



SECTION VIEW

4 C-503 **TYPE "C" SMP DETAIL**
NOT TO SCALE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	LH	PS	4/9/2026

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Designer R. RIOS | Design Check P. SULLIVAN | Project Director S. ALLEN

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0 1"

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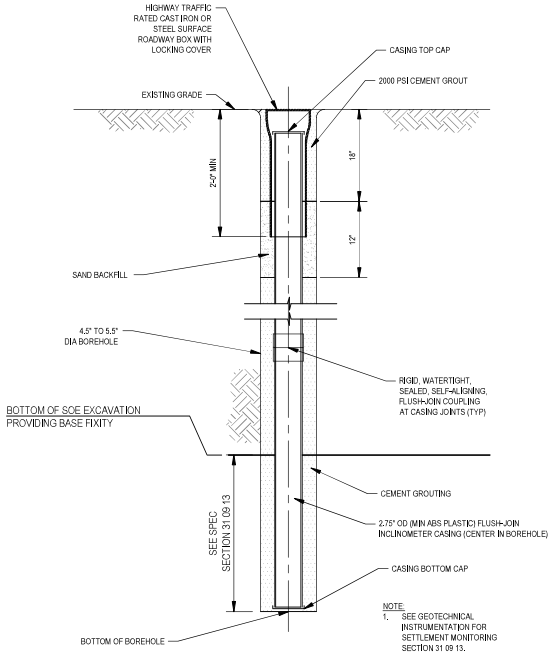
Project: HIGHWAY SEWER CROSSING RETROFIT
Title: CIVIL DETAILS 3 OF 5
Size: ANSI D

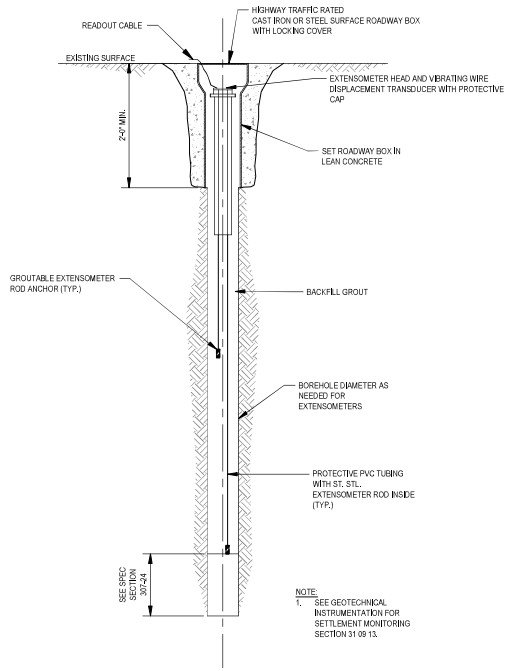
Project No.	Date	Scale	Sheet No.	Sheet
12669030	4/9/2026	AS SHOWN	C-503	14 of 16

Plot Date: 9 April 2026 - 1:39 PM | Plotted By: Thomas Rodriguez | Filename: I:\ghd\nef\ghd\US\Eureka\Projects\561\12669030\Digital_Design\ACAD\Sheets\12669030_C-501-505.dwg



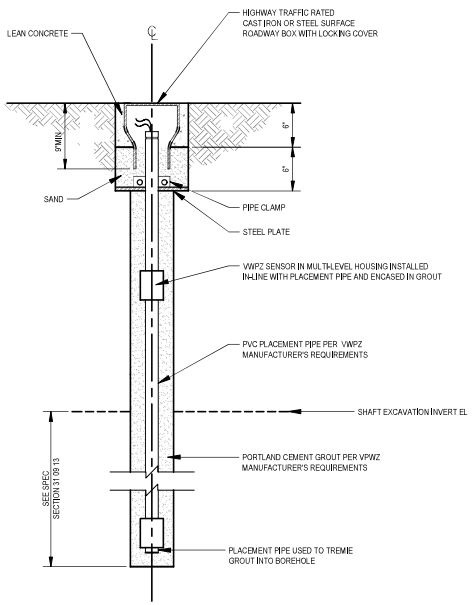
1 C-504 **INCLINOMETER (INC)**

NOT TO SCALE



2 C-504 **MULTI-POINT BOREHOLE EXTENSOMETER (MPBX)**

NOT TO SCALE



3 C-504 **VIBRATING WIRE PIEZOMETER (VWPZ)**

NOT TO SCALE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	LH	PS	4/9/2026

Author	E. STOCKWELL	Drafting Check	L. HALONEN	Project Manager	P. SULLIVAN
Designer	R. RIOS	Design Check	P. SULLIVAN	Project Director	S. ALLEN

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0 1"

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Client: MCKINLEYVILLE COMMUNITY SERVICES DISTRICT

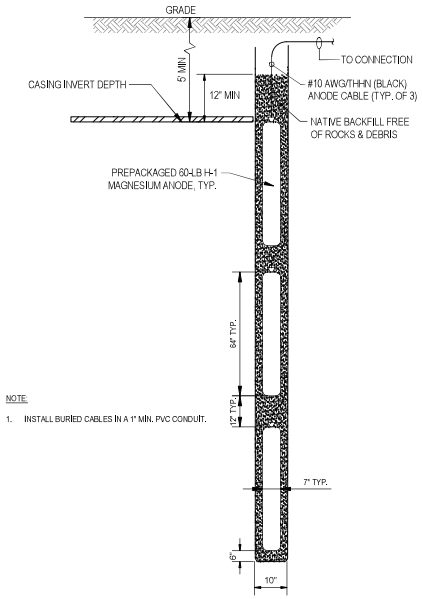
Project: HIGHWAY SEWER CROSSING RETROFIT

Title: CIVIL DETAILS 4 OF 5

Size: ANSI D

Project No.	Date	Scale	Sheet No.	Sheet
12669030	4/9/2026	AS SHOWN	C-504	15 of 16

Plot Date: 9 April 2026 - 1:41 PM
Plotted By: Thomas Rodriguez
Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12669030\Digital_Design\ACAD\Sheets\12669030_C-501-506.dwg



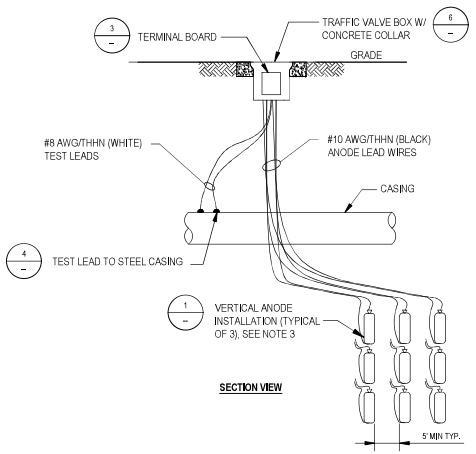
NOTE:

1. INSTALL BURIED CABLES IN A 1" MIN. PVC CONDUIT.

VERTICAL INSTALLATION

1 C-505 ANODE INSTALLATION

NOT TO SCALE



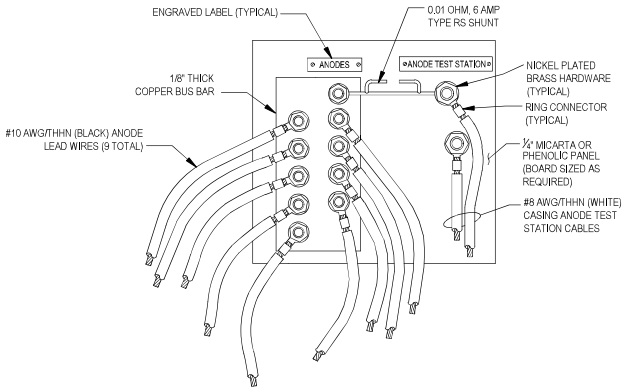
SECTION VIEW

NOTES:

1. INSTALL ANODES WITH 5-FEET MINIMUM AND 15-FEET MAXIMUM LATERAL SEPARATION FROM CASING.
2. INSTALL BURIED CABLES IN A 1" MIN. PVC CONDUIT.
3. INSTALL TOTAL OF (9) 60-LB H-1 MAGNESIUM ANODES EACH TEST STATION LOCATION.

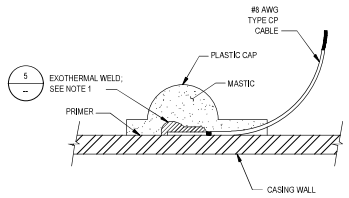
2 C-505 CASING ANODE TEST STATION

NOT TO SCALE



3 C-505 TERMINAL BOARD FOR CASING ANODE TEST STATION

NOT TO SCALE

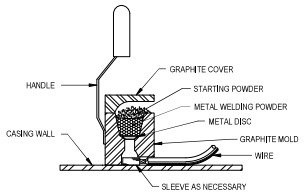


NOTES:

1. COAT EXOTHERMAL WELD, PIPE AND WIRE WITH "747" PRIMER BY ROYSTON LABORATORIES OR EQUAL AND INSTALL ROYSTON HANDY CAP OR EQUAL TO PROTECT WELD.

4 C-505 TEST LEAD TO STEEL CASING

NOT TO SCALE



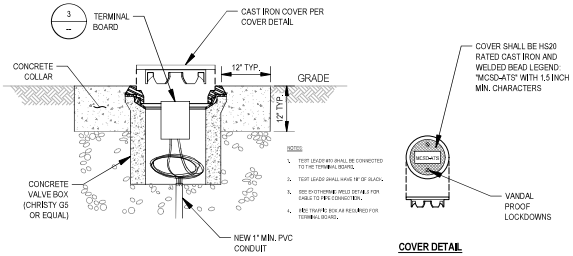
HORIZONTAL SETUP

5 C-505 EXOTHERMIC WELD

NOT TO SCALE

EXOTHERMAL WELDING PROCEDURE:

1. PREPARE STRUCTURE CONNECTION AREA TO BARE SHINY METAL AND CLEAN. REMOVE A MINIMUM AMOUNT OF THE EXISTING COATING REQUIRED FOR PLACEMENT OF THE WELD MOLD ON THE STEEL STRUCTURE. THE STEEL'S SURFACE MUST BE COMPLETELY CLEAN AND DRY (NEAR WHITE METAL SURFACE PREPARATION).
2. PLACE GRAPHITE MOLD OVER OR NEXT TO PIPE SURFACE, INSERT A STEEL DISK INTO THE BOTTOM OF THE CAVITY INSIDE THE MOLD. STANDARD WELD CARTRIDGES SHALL BE USED FOR STEEL SURFACES. FOR DUCTILE IRON, USE XF-19 ALLOY OR EQUIVALENT. DUMP THE WELD METAL INTO MOLD BEING CAREFUL NOT TO UPSET THE STEEL DISK. TAP THE BOTTOM OF THE TUBE TO LOOSEN ALL THE STARTING POWDER AND SPREAD IT EVENLY OVER THE WELD METAL. PLACE A SMALL AMOUNT OF STARTING POWDER ON THE TOP EDGE OF MOLD UNDER THE COVER OPENING FOR EASY IGNITION. CLOSE THE COVER.
3. STRIP INSULATION FROM WIRE. WHEN USING NO 10 TO NO 14 AWG WIRE CONDUCTORS, IT WILL BE NECESSARY TO INSTALL A COPPER SLEEVE OF ADEQUATE SIZE OVER THE BARE END WIRE AND CRIMP IN PLACE BEFORE ATTEMPTING TO MAKE THE CONNECTION. THE WIRE SHOULD PROTRUDE AT LEAST 1/8" FROM THE END OF THE SLEEVE.
4. INSERT THE CONDUCTOR INTO THE MOLD NOTING ANY SPECIAL INFORMATION UNDER "POSITIONING" IN THE MANUFACTURERS INSTRUCTIONS PACKAGED WITH THE WELDER.
5. FOLLOW ALL PERTINENT SAFETY PRECAUTIONS PER THE MANUFACTURER'S INSTRUCTIONS. HOLD MOLD FIRMLY WITH OPENING AWAY FROM OPERATOR AND IGNITE WITH FLINT GUN. MOVE FLINT GUN AWAY QUICKLY TO PREVENT FOULING. IF FLINT GUN SHOULD BECOME FOULED, SOAK IT IN HOUSEHOLD AMMONIA.
6. AFTER IGNITION, HOLD THE WELDER IN PLACE FOR A MOMENT TO ALLOW THE WELD TO SOLIDIFY. AFTER THE WELD HAS COOLED, REMOVE THE SLAG WITH A CHIPPING HAMMER OR WIRE BRUSH.
7. TEST THE WELD INTEGRITY BY STRIKING IT FROM THE SIDE WITH A TWO POUND. A TYPICAL PROBLEM FOR THIS TYPE OF WELD IS POOR SURFACE PREPARATION OF THE STEEL. THIS SITUATION WILL RESULT IN THE WELD NUGGET BEING ABLE TO BE KNOCKED OFF THE STEEL WITH THE TAP OF A HAMMER. IF THE WELD COMES OFF, MOVE AWAY A MINIMUM OF 3" AND REPEAT STEPS 1 THROUGH 7. DO NOT REWELD IN THE SAME LOCATION.
8. WET OR DAMP MOLDS WILL PRODUCE POROUS WELDS. MOLDS MUST BE DRIED OUT BEFORE ATTEMPTING TO WELD.



COVER DETAIL

6 C-505 FLUSH MOUNTED TRAFFIC VALVE BOX DETAIL

NOT TO SCALE

No.	Issue	Checked	Approved	Date
0	ISSUE FOR BID	LH	PS	4/9/2026

Author	E. STOCKWELL	Drafting Check	L. HALONEN
Designer	J. KNAUER	Design Check	P. SULLIVAN
Project Manager	P. SULLIVAN		
Project Director	S. ALLEN		

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Client	MCKINLEYVILLE COMMUNITY SERVICES DISTRICT
Project	HIGHWAY SEWER CROSSING RETROFIT
Title	CIVIL DETAILS 5 OF 5
Size	ANSI D
Project No.	12669030
Date	4/9/2026
Scale	AS SHOWN
Sheet No.	C-505
Sheet	16 of 16

Plot Date: 9 April 2026 - 1:48 PM
Plotted By: Thomas Rodriguez
Filename: \\ghdnet\ghd\US\Eureka\Projects\561\12669030\Digital_Design\ACAD\Sheets\12669030_C-501-505.dwg

DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT OFFICE
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3152
FAX (805) 549-3062
TTY 711
http://www.dot.ca.gov/dist05

Serious drought
Help save water!

AUTHORIZATION OF AGENT

I, the owner as the Permit Applicant or legal representative for the Permit Applicant identified below, hereby authorize my agent, listed below, to apply for a State of California Department of Transportation Encroachment Permit and act on my behalf. In completing and signing this form I acknowledge that I have reviewed the State of California Department of Transportation Standard Encroachment Permit Application Form and agree to its terms and conditions.

Property Information, Encroachment Location, or Description

Property Address or Facility Description: McKinleyville CSD Highway Sewer Crossing Retrofit Project

State Route Number: Highway 101
City or County: McKinleyville (unincorporated)
Additional Information: Postmiles 90.5 to 93.5
(Project Reference No., APN, Tract Number, Subdivision Name, etc.)

Permit Applicant Information:

Name: McKinleyville Community Services District
Street Address: 1656 Sutter Road
City, State, Zip Code: McKinleyville, California, 95519
Phone Number: 707-839-3251

Print Name: Pat Kaspari
Signature: Patrick Kaspari
Title: General Manager
(Owner, Partner, Corporation Officer, Specify Other)
Date: 1/14/2026

Agent Information:

Name: Luke Halonen
Firm Name: GHD
Street Address: 718 3rd Street
City, State, Zip Code: Eureka, California, 95501
Phone Number: 707-267-2228

Print Name: Luke Halonen
Signature of Agent:
Date: 1/14/2026

STANDARD ENCROACHMENT PERMIT APPLICATION

DOT TR-0100 (REV 08/2025)

Complete ALL fields, write "N/A" if not applicable. Type or print clearly.

This application is not complete until all requirements have been approved.

Permission is requested to encroach on the State Highway right-of-way as follows:

FOR CALTRANS USE
TRACKING NO. 01-26-X-XX-0234
DIST/CO/RTE/PM 01/HUM/101/PM R93.3-Var
SIMPLEX STAMP
DATE OF SIMPLEX STAMP

1. COUNTY	2. ROUTE	3. POST MILE
HUM	101	R93.3-Var

4. ADDRESS OR STREET NAME	5. CITY
NA	McKinleyville

6. CROSS STREET (Distance and direction from project site)
2100 ft from Murray Rd 1600 ft from Hiller Rd 3000 ft from School Rd

7. WORK TO BE PERFORMED BY
☐ APPLICANT ☒ CONTRACTOR

8. IS THIS APPLICATION FOR A RIDER?
☒ NO ☐ YES. If "YES", provide the Parent Permit Number

9. ESTIMATE START DATE	10. ESTIMATED COMPLETION DATE
June 01, 2026	August 01, 2027

11. ESTIMATED NUMBER OF WORKING DAYS WITHIN STATE HIGHWAY RIGHT-OF-WAY
90

12. ESTIMATED CONSTRUCTION COSTS WITHIN STATE HIGHWAY RIGHT-OF-WAY
$4000000

13. HAS THE PROJECT BEEN REVIEWED BY ANOTHER CALTRANS BRANCH?
☒ NO ☐ YES. If "YES", which branch?

14. FUNDING SOURCE(S)
☐ FEDERAL ☐ STATE ☒ LOCAL ☐ PRIVATE ☐ SB 1 (ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017)

15. CALTRANS PROJECT CODE (ID)	16. APPLICANT'S REFERENCE / UTILITY WORK ORDER NUMBER
	12669030

17. DESCRIBE WORK TO BE DONE WITHIN STATE HIGHWAY RIGHT-OF-WAY (in 20 lines or less)
Attach 6 complete sets of plans (folded to 8.5" x 11") and any applicable specifications, calculations, maps, traffic control plans, etc.

The primary purpose of the project is to retrofit the three existing gravity sewer crossings beneath U.S Highway 101 in McKinleyville. See Caltrans EP cover memo for full project description.

18 (a). PORTION OF STATE HIGHWAY RIGHT-OF-WAY WHERE WORK IS BEING PROPOSED (check all that apply)
☐ Traffic lane ☐ Shoulder ☐ Sidewalk ☐ Median ☐ At or near an intersection ☐ Mobile work
☒ Outside of the shoulder, 43 feet from edge of pavement ☒ Other Under highway

18 (b). PROPOSED TRAFFIC CONTROL PLANS AND METHOD
☐ No traffic control needed ☐ State Standard Plans (T-Sheets) #
☐ Project specific Traffic Control Plans included ☒ To be submitted by contractor

STANDARD ENCROACHMENT PERMIT APPLICATION

DOT TR-0100 (REV 08/2025)

TRACKING NO.
01-26-X-XX-0234

19. EXCAVATION	MAX. DEPTH (in)	MIN. DEPTH (in)	AVG. WIDTH (in)	LENGTH (ft)	SURFACE TYPE (e.g. Asphalt, concrete, soil, etc.)
	324	164	168	27	BareSoil

20. PIPES	PRODUCT BEING TRANSPORTED	CARRIER PIPE	CASING PIPE
	Sewer	DIAMETER 18 (in.) MATERIAL HDPE	DIAMETER 42 (in.) MATERIAL Steel

PROPOSED INSTALLATION METHOD (e.g. HDD, Bore & Jack, Open Cut, etc.)	VOLTAGE / PSIG
BoreJack	NA

DOES THE PROPOSED PROJECT INVOLVE THE REPLACEMENT AND/OR ABANDONMENT OF AN EXISTING FACILITY?

☒ NO ☐ YES. If "YES", provide a description The project will retrofit the existing pipes and install new parallel pipes.

21. IS A CITY, COUNTY OR OTHER PUBLIC AGENCY INVOLVED IN THE APPROVAL OF THIS PROJECT?

☒ YES (if "YES", check the type of project AND attach the environmental documentation and conditions of approval)

☐ COMMERCIAL DEVELOPMENT ☐ BUILDING ☐ GRADING ☐ OTHER UJ - Transverse encroachments

☐ CATEGORICALLY EXEMPT ☒ NEGATIVE DECLARATION ☐ ENVIRONMENTAL IMPACT REPORT ☐ OTHER

☐ NO (if "NO", check the category below which best describes the project AND answer questions A-K)

☐ DRIVEWAY OR ROAD APPROACH, RECONSTRUCTION, MAINTENANCE OR RESURFACING ☐ FENCE ☐ EROSION CONTROL

☐ PUBLIC UTILITY MODIFICATION, EXTENSIONS, HOOKUPS ☐ MAILBOX ☐ LANDSCAPING

☐ FLAGS, SIGNS, BANNERS, DECORATIONS, PARADES AND CELEBRATIONS ☐ OTHER

The following questions must be answered when a City, County or other public agency IS NOT involved in the approval of this project.

Your answers to these questions will assist Caltrans staff in identifying any physical, biological, social or economic resources that may be affected by your proposed project within State Highway right-of-way and to determine which type of environmental studies may be required to approve your application for an encroachment permit. It is the applicant's responsibility for the production of all required environmental documentation and supporting studies and in some cases this may be costly and time consuming. If possible, attach photographs of the location of the proposed project. Answer these questions to the best of your ability. Provide a description of any "YES" answers (type, name, number, etc.).

A. Will any existing vegetation and/or landscaping within State Highway right-of-way be disturbed?

B. Are there waterways (e.g. river, creek, pond, natural pool or dry streambed) adjacent to or within the limits of the proposed project?

C. Is the proposed project located within five miles of the coast line?

D. Will the proposed project generate construction noise levels greater than 86 decibels (dBA) (e.g. Jack-hammering, pile driving)?

E. Will the proposed project incorporate land from a public park, recreation area or wildlife refuge open to the public?

F. Are there any recreational trails or paths within the limits of the proposed project?

G. Will the proposed project impact any structures, buildings, rail lines or bridges within State Highway right-of-way?

H. Will the proposed project impact access to any businesses or residences?

I. Will the proposed project impact any existing public utilities or public services?

J. Will the proposed project impact any existing pedestrian facilities, such as sidewalks, crosswalks or overcrossings?

K. Will new lighting be constructed within or adjacent to State Highway right-of-way?

STANDARD ENCROACHMENT PERMIT APPLICATION

DOT TR-0100 (REV 08/2025)

TRACKING NO.
01-26-X-XX-0234

22. Will the proposed project cause a substantial change in the significance of a historical resource (45 years or older), or cultural resource? ☐ YES ☒ NO (if "YES", provide a description)

23. Will the proposed project be on an existing State Highway or street where the activity involves removal of a scenic resource? (e.g. A significant tree or stand of trees, a rock outcropping or a historic building) ☐ YES ☒ NO (if "YES", provide a description)

24. Is work being done on the applicant's property in addition to State Highway right-of-way? ☐ YES ☒ NO
(If "YES", attach 6 complete sets of site and grading plans)

25. Will the proposed project require the disturbance of soil? ☐ YES ☒ NO
If "YES", estimate the area of disturbed soil within State Highway right-of-way in acres: 0.0000
and estimate the area of disturbed soil outside State Highway right-of-way in acres: 0.0000

26. Will the proposed project require dewatering? ☐ YES ☒ NO
If "YES", estimate Total gallons AND gallons/month. N/A (Total gallons) AND N/A (gallons/month)
SOURCE*: ☐ STORMWATER ☒ NON-STORMWATER
*(*See Caltrans SWMP for definition of non-storm water discharge: https://www.dot.ca.gov/programs/environmental-analysis/stormwater-management-program)*

27. How will any storm water or ground water be disposed?
☐ Storm Drain System ☐ Combined Sewer / Stormwater System ☐ Stormwater Retention Basin ☐ N/A
☐ Other (explain) _____

STANDARD ENCROACHMENT PERMIT APPLICATION

DOT TR-0100 (REV 08/2025)

TRACKING NO.
01-26-X-XX-0234

READ THE FOLLOWING CLAUSES PRIOR TO SIGNING THIS ENCROACHMENT PERMIT APPLICATION.

The applicant's submission of this application to the California Department of Transportation constitutes the applicant's agreement and representation that the work or other activity contemplated by the encroachment permit application shall comply with all applicable standards, specifications, policies, requirements, conditions, and regulations of the California Department of Transportation, and the applicant understands the application may be denied if there is non-compliance with any of the above. An exception process exists and may result in approval of a non-compliant encroachment, in the discretion of the California Department of Transportation, but the exception process may require additional time to complete. The applicant understands and agrees all work or other activity contemplated by the encroachment permit application is subject to inspection and oversight by the California Department of Transportation. The applicant understands and agrees encroachment permit fees must still be paid if an application is withdrawn or denied. The applicant understands a denial may be appealed, in accordance with California Streets and Highways Code, Section 671.5, and the related regulations found in California Code of Regulations, Title 21, Division 2, Chapter 8, Article 2.

The applicant understands and agrees that immediately upon issuance of the encroachment permit the applicant is bound by, subject to, and must comply with the "Encroachment Permit General Provisions" (TR-0045), "Stormwater Special Provisions" (TR-0400) and any other applicable Special Provisions and Conditions of the encroachment permit. The "Encroachment Permit General Provisions" (TR-0045), and the Stormwater Special Provisions (TR-0400) are available at: *https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/encroachment-permits/appendix-k-ada-a11y.pdf*. If a paper copy is needed of the "Encroachment Permit General Provisions" (TR-0045) and/or "Stormwater Special Provisions" (TR-0400), please contact the District Office of Encroachment Permits. Their contact information is available at: *https://dot.ca.gov/programs/traffic-operations/ep/district-contacts*. The "Encroachment Permit General Provisions" (TR-0045) and any other applicable Special Provisions and Conditions will be provided as part of the encroachment permit. Information about Stormwater requirements is available at the Internet address: *https://dot.ca.gov/programs/environmental-analysis/stormwater-management-program*.

The applicant understands an encroachment permit may be denied, revoked, and/or a bond may be required, for non-payment of prior or present encroachment permit fees. An encroachment permit is not a property right and does not transfer with the property to a new owner.

Each of the persons purporting to execute this application on behalf of the applicant and/or on behalf of the applicant's authorized agent or engineer represents and warrants such person has full and complete legal authority to do so and to thereby bind applicant to the terms and conditions herein and to the terms and/or conditions of the encroachment permit. Applicant understands and agrees this application may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Executed copies of this application and/or its counterparts may be reproduced and/or exchanged by copy machine, mailing, facsimile, or electronic means (such as e-mail), and such copies shall be deemed to be effective as originals.

28. NAME OF APPLICANT (Project or Property Owner or Organization)
Mckinleyville Community Services District

ADDRESS OF APPLICANT (Include City, State and Zip Code)
1656 Sutter Road Mckinleyville CA 95519

E-MAIL ADDRESS	PHONE NUMBER	FAX NUMBER
pkaspari@mckinleyvillecsd.com	(707)839-3251	

29. NAME OF AUTHORIZED AGENT / ENGINEER / APPLICANT'S EMPLOYEE
(A "Letter of Authorization" is required if different from #28)
Ray Rios

IS A LETTER OF AUTHORIZATION ATTACHED?
☐ YES ☐ NO

ADDRESS OF AUTHORIZED AGENT / ENGINEER (Include City, State and Zip Code)
718 3rd St Eureka CA 95501

E-MAIL ADDRESS	PHONE NUMBER	FAX NUMBER
ray.rios@ghd.com	(707)267-2260	

30. NAME OF BILLING CONTACT (Same as #28 ☐ Same as #29 ☐)

BILLING ADDRESS WHERE INVOICE(S) IS / ARE TO BE MAILED (Include City, State and Zip Code)

E-MAIL ADDRESS	PHONE NUMBER	FAX NUMBER

* I hereby certify under penalty of perjury under the laws of the State of California that the information in this application and any document submitted with or in support of this application are true and correct to the best of my knowledge and belief, and that copies of any documents submitted with or in support of this application are true and correct copies of unaltered original documents. I further understand that if I have provided information that is false, intentionally incomplete, or misleading I may be charged with a crime and subjected to fine or imprisonment, or both fine and imprisonment. (Penal Code Section 72)

31. SIGNATURE OF APPLICANT OR AUTHORIZED AGENT*	32. PRINT OR TYPE NAME	
Ray Rios	Ray Rios	
33. TITLE		34. DATE 3/16/2026

Americans with Disabilities Act (ADA) Notice: This document is available in alternative accessible formats. For more information, please contact the Forms Management Unit at (279) 234-2284, TTY 711, in writing at Forms Management Unit, 1120 N Street, MS-89, Sacramento, CA 95814, or by email at Forms.Management.Unit@dot.ca.gov.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

STANDARD ENCROACHMENT PERMIT APPLICATION

DOT TR-0100 (REV 08/2025)

INSTRUCTIONS

Complete ALL fields, write "N/A" if not applicable. Type or print clearly. All dimensions must be in U.S. Customary (English) units.

Print your application single sided and submit all of the required attachments (See Section VII A&B of the "Encroachment Permit Application Guide Booklet" found at: https://dot.ca.gov/programs/traffic-operations/ep/guidelines).

1. County (e.g. Fresno, San Francisco, Los Angeles, etc.)
2. State Highway Route Number (e.g. I-5, SR-99, etc.)
3. Highway Postmile: (location of work, see https://postmile.dot.ca.gov/) If unable to determine, contact the appropriate District Encroachment Permits Office for assistance at: https://dot.ca.gov/programs/traffic-operations/ep/district-contacts
4. Address of project site (if the property has a physical address with a Number and Street/Road Name)
5. City (e.g. Sacramento, Redding, Irvine, etc.)
6. Distance and the direction from the nearest cross street to the project site (e.g. 500 ft. north of "C" Street).
7. Indicate whether the work will be performed by the applicant (your own forces) or by a contractor.
8. Indicate if you are applying for a "Rider Permit" (Time extension, change in scope of work, etc. and provide the “Parent Permit Number”.
9. Estimated start date for the proposed work. (Allow a minimum of 60 calendar days from the submittal date of your application for processing)
10. Estimated completion date for the proposed work.
11. Estimated number of working days within State Highway right-of-way.
12. Estimated construction costs for all work to be done within State Highway right-of-way.
13. Has another Caltrans' branch seen or reviewed your project? Which branch? (e.g. Design, Project Management, Right-of-Way, Environmental, etc.)
14. Identify funding source(s) for the proposed work.
15. Caltrans’ Project Code (ID) if this is a State project, capital project, or joint venture project.
16. Your company’s reference number or utility work order number for this project.
17. Describe the proposed work to be done entirely. If applicable, attach six (6) complete sets of FOLDED plans (folded 8-½” X 11”) and any applicable specifications, calculations, maps, etc.
18. (a) Identify portion(s) of State right-of-way where work will occur and (b) proposed traffic control plans to be used if any.
19. Maximum and minimum depth, average width, and length of the excavation area. Existing surface type (e.g. Asphalt, concrete, soil, etc.)
20. Product being transported (e.g. water, natural gas, etc.) Carrier pipe, diameter (inches) and material (e.g. Steel, HDPE, etc.) Casing pipe (if any), diameter and material Proposed installation method, Voltage of electrical current or pressure of liquid or gas. Replacement and/or abandonment of an existing facility (e.g. Abandoning pipe and filling it with two-sack slurry cement)
21. Check “YES”, if you are getting a permit or approval from another agency (City, County, etc.), and an environmental determination has been made. Then check the Categorically Exempt, Negative Declaration, Environmental Impact Report box or Other if one has been prepared. Attach a copy of the approved document and a copy of the Notice of Determination. Skip questions A-K.

    If you checked “NO”, check the box of the appropriate type of work to be done,or check “other” and fill in the type of work to be done. Also answer questions A-K.
22. A Historical Resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript that has historical or archaeological significance, or significance in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.
23. In this context a Scenic Resource includes, but is not limited to, trees that display outstanding features of form or age; unique, massive rock formations; historic buildings that are rare examples of their period, style, design, or which have special architectural features and details of importance.
24. Is there any work being done on the applicant’s property?
25. Indicate if the proposed project will require the disturbance of soil. If “YES,” estimate the area within AND outside of State Highway right-of-way in acres.
26. Indicate if the proposed project will require dewatering. If “YES,” estimate volume in total gallons AND gallons per month. Also indicate the source: Stormwater or Non-Stormwater (see Caltrans Stormwater Management Plan for definitions of non-stormwater discharge at: https://dot.ca.gov/programs/environmental-analysis/stormwater-management-program).
27. Indicate how any stormwater or ground water will be disposed of from or near the limits of the proposed project.
28. Name of the applicant or organization applying for the permit. List the mailing address, e-mail address, phone and fax numbers.
29. Name of the authorized agent or engineer acting on behalf of the applicant or organization. Attach a letter of authorization signed by the applicant or organization. List the mailing address, e-mail address, phone and fax numbers.
30. Name of the billing contact. List the mailing address where invoices are to be mailed, email address, phone and fax numbers.
31. Signature of the applicant or applicant's authorized agent.
32. Name of the applicant or applicant's authorized agent.
33. Title (owner, president, etc.) of the applicant or applicant's authorized agent.
34. Date of the signature.

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. **REVOCATION:** 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

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

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:
    a) Upon completion of the work provided herein, the Permittee must submit a paper set of As-Built plans to the Department's representative.
    b) All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
    c) 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.
    d) 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.
    e) As-Built plans must contain the Encroachment Permit Number, County, Route, and Post Mile on each sheet.
    f) 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:
    a) 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.
    b) 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:**
    a) 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.
    b) 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

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

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

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, § 1119.1 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:
    a) 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
    b) 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
    c) In addition, for projects disturbing one acre or more of soil in the Lahontan Region with Order No. R6T-2016-0010, NPDES No CAG616002.
    d) 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.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

NOTICE OF COMPLETION

DOT TR-0128 (REV 03/2026)

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

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

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

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.

   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.

Infrastructure Projects – As-Built Subsurface Infrastructure

TR – 0449 (New 09/2025)

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

1. **GENERAL:** The California Department of Transportation is responsible for operating, maintaining and constructing the State Highway System which requires accurate information about subsurface utility infrastructure for both Caltrans and any third-party infrastructure located within the state highway right-of-way. Government Code section 4216.3 (Senate Bill 865, approved by the Governor on September 29, 2020), requires network operators to maintain records of the locations of subsurface installations. "Subsurface installation" means any underground pipeline, conduit, duct, wire, or other structure, except non-pressurized sewer lines, non-pressurized storm drains, or other non-pressurized drain lines. Starting January 1, 2023, all new subsurface installations are to be mapped using a geographic information system (GIS) and maintain permanent records by the network operator. The legislation did not specify the accuracy of the as-builts submitted for newly installed facilities. For accuracy of as-builts and consistency of all as-builts received, Caltrans has adopted the national standard developed by the American Society of Civil Engineers under ASCE/UESI/CI 38-22 Standard Guideline for Investigating and Documenting Existing Utilities.

2. **APPLICABILITY:** These provisions apply to projects that construct subsurface infrastructure within the Caltrans state highway right-of-way. The following requirements for collecting information, analyzing, and documenting new underground infrastructure apply to all underground infrastructure and meet the requirements of Government Code section 4216.3 for utilities.

3. **DEFINITIONS:**

   excavation: Any operation in which earth, rock, or other material in the ground is moved, removed, or otherwise displaced by means of tools, equipment, or explosives in grading, trenching, digging, ditching, drilling, augering, tunneling, scraping, cable or pipe plowing and driving, or any other way.

global navigation satellite system (GNSS): Satellite system used to pinpoint the geographic location of a user's receiver anywhere in the world. Two GNSS systems are in operation: the US GPS and the Russian Federation's GLONASS. Each of the GNSS systems uses a constellation of orbiting satellites working in conjunction with a network of ground stations.

GNSS base station: Single ground-based system consisting of a GNSS receiver, antenna, and telemetry equipment that provides differential GNSS correction signals to other GNSS receivers or rovers. Multiple base stations can be combined into a GNSS network.

GNSS correction service subscription: Subscription service to receive differential GNSS correction signals for higher accuracy GNSS positioning without the need of a GNSS base station. Signals are normally received via cellular wireless data services.

GNSS rover: Portable GNSS antenna, receiver, rod, and data collector with telemetry equipment for real-time point measurements.

network real time kinematic (Network RTK): System that uses multiple bases in real-time to provide high-accuracy GNSS positioning within the coverage area that is generally larger than that covered by a single GNSS base station.

Project Survey Datum: The Project Survey Datum is a type of reference Metadata. It is necessary to document what datum was used to collect, process, and deliver the geodatabase. The Project Survey Datum used should be consistent for the topographic and base mapping, design and as-builts. Project Survey Datum Metadata may include the name of a standard national or state coordinate reference system or of the individual parameters required to define the system, such as origin, projection system, scale factors, and grid versus ground factors, benchmarks, or control points. Benchmarks or control points are a type of reference Metadata. It is necessary to document what benchmarks or control points were used, what was the source of the X, Y, and Z (i.e., surveyors' control report), and what errors may be associated with survey accuracy.

real time kinematic global positioning system (RTK-GNSS): System based on the use of carrier phase measurements of the available GNSS signals where a single GNSS base station or RTK network provides the corrections to achieve centimeter-level accuracy in real time.

site calibration or localization: Process that establishes the relationship between the observed control point coordinates and the site coordinate system, which is usually grid. The term applies to both GNSS and robotic total station equipment.

subsurface utility engineering: The specialty practice of civil engineering's utility engineering branch that includes the investigation, analysis, judgment, and documentation of existing Utility networks.

utility quality level A: Value assigned to that portion (x-, y-, and z-geometry) of a utility segment or subsurface utility feature that is directly exposed and measured and whose location and dimensions are tied to the project survey datum. The utility segment or subsurface utility feature must be tied to the project survey datum with an accuracy of 0.1-foot (30 mm) vertical and to 0.2-foot (60 mm) horizontal for the measurements of the outside limits of the utility feature or utility segment that is exposed.

utility quality level B: Value assigned to a utility segment or subsurface utility feature whose existence and horizontal position is based on geophysical methods combined with professional judgment and whose location is tied to the project survey datum.

4. SUBMITTALS:

Submit the name and qualifications of the licensed land surveyor in the State of California, in responsible charge for the data collection of underground infrastructure, five (5) business days before starting data collection.

Submit site calibration or localization results within one (1) business day of the calibration or localization testing. Allow three (3) business days for the review of the results.

Submit a digital copy and hard copy of the new subsurface infrastructure report.

5. QUALITY CONTROL:

General

Horizontal Northing (Y) and Easting (X) coordinates must be referenced to horizontal survey datum North American Datum of 1983 (NAD 83) or the North American Terrestrial Reference Frame of 2022 (NATRF2022), or the Pacific Terrestrial Reference Frame of 2022 (PATRF2022) and have a 0.2-foot (60 mm) horizontal accuracy.

Elevations (Z) must be referenced to the North American Vertical Datum of 1988 (NAVD 88) or the North American-Pacific Geopotential Datum of 2022 (NAPGD2022) and have a 0.1-foot (30 mm) vertical accuracy.

Coordinates and elevations must be in decimal format and have two significant figures after the decimal point.

Project Survey Datum

All GNSS devices for the project must be set to the same state plane survey datum, coordinate system, and CCS83 zone per California Coordinate System of 1983 (CCS83) as defined in Public Resource Codes §§ 8801, 8850 through 8860, and site calibration or localization.

GNSS Site Calibration or Localization

Perform GNSS site calibration or Localization using Caltrans control point information or when Caltrans control points are not available within the project limits, other control points maybe used but must be converted to the datums specified above.

Check each survey control point for accuracy per Caltrans Surveys Manual Chapters 4, 5, 6, 7, 8 and 9.

GNSS Check Test

Check GNSS equipment, including rovers to ensure equipment is setup correctly. Measure a known control point and verify the GNSS equipment achieves accuracies within 0.1-foot for vertical elevations and 0.2-foot for horizontal coordinates.

6. INFRASTRUCTURE DATA COLLECTION:

General

Perform locating of new underground infrastructure. Comply with the analysis, and documentation requirements for subsurface utility engineering quality level A under ASCE/UESI/CI 38-22 Standard Guideline for Investigating and Documenting Existing Utilities.

Use GNSS real time kinematic from one of the following:

1. Network RTK
2. RTK-GNSS

A different high precision position system that meets or exceeds the precision requirements may be used when authorized.

Perform GNSS site calibration or localization at least five (5) business days before starting underground infrastructure data collection.

Perform GNSS check test before starting underground infrastructure data collection and at the end of each workday. Maintain a log of check test measurements.

Collecting Data

Collect location data for new underground infrastructure, including any underground pipeline, sewer lines, storm drains, drain lines, conduit, duct, wire, or other structure.

Measure the coordinates that define the horizontal and vertical location of underground infrastructure relative to a preestablished datum (X-Y-Z) at the center of above ground facility features including, manholes, handholds, storm drains, pull boxes, vaults, and above ground equipment enclosures.

For trenching installation, measure the X-Y-Z values on top of each distinct linear infrastructure at:

1. Horizontal bends
2. Vertical bends
3. Points of deflection
4. Maximum 50-foot intervals

Measurement of X-Y-Z values in trench installation must be by direct survey while the infrastructure is exposed and before backfilling; or by establishing reference tie points with known horizontal and vertical offsets while the infrastructure is exposed, followed by a post-backfill survey. This ensures the licensed surveyor can accurately depict the infrastructure's location to meet Quality Level A standards.

For trenchless installation, measure the X-Y-Z values of each distinct linear infrastructure at:

1. The entrance and exit of the borehole and at all required test pit verification points.
2. Maximum 50-foot intervals between the entrance and exit of the bore hole. Use the installation equipment bore logs or geophysical equipment for indirect locating.

3. The last observed entrance and exit locations where the linear infrastructure passes below a structure or body of water, or the infrastructure is too deep to be detected.

When using geophysical methods for trenchless installation, use at least two geophysical methods for collecting locating data to comply with Utility Quality Level B.

7. **SUBSURFACE INFRASTRUCTURE REPORTS:** New subsurface infrastructure report includes data collected for new subsurface infrastructure, for compliance with subsurface utility engineering quality levels A and B.

   Subsurface infrastructure report includes:

   1. A file geodatabase using Caltrans' as-built GIS schema.
   2. Files with data collected as points. For linear features, lines must be created from the points collected and the points must remain in the file. All data must be collected using the latest as-built feature code library (fxl). Data files must be compatible with Trimble Business Center, TBC.
   3 Information for datum tag and epochs, geoid models, benchmarks, and reference stations used for the collection of horizontal and vertical values.
   4 Information and qualifications of the licensed land surveyor who certifies the accuracy and nature of the collected subsurface utility data.

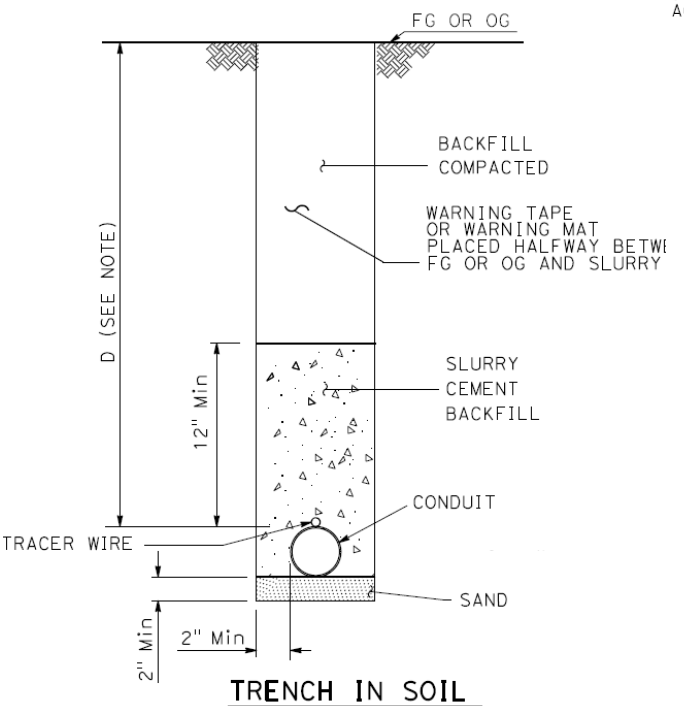
   Adhere to the standardized field names, domain values, and depicted geometries shown in Table 2-2 through Table 2-7 of ASCE 75-22 Standard Guideline for Recording and Exchanging Utility Infrastructure Data, include depth information from original ground to located utility, and as provided in the Middle Mile Broadband As-built feature code library (fxl).

   The Caltrans survey templates for as-built GIS schema and feature code library are available at:

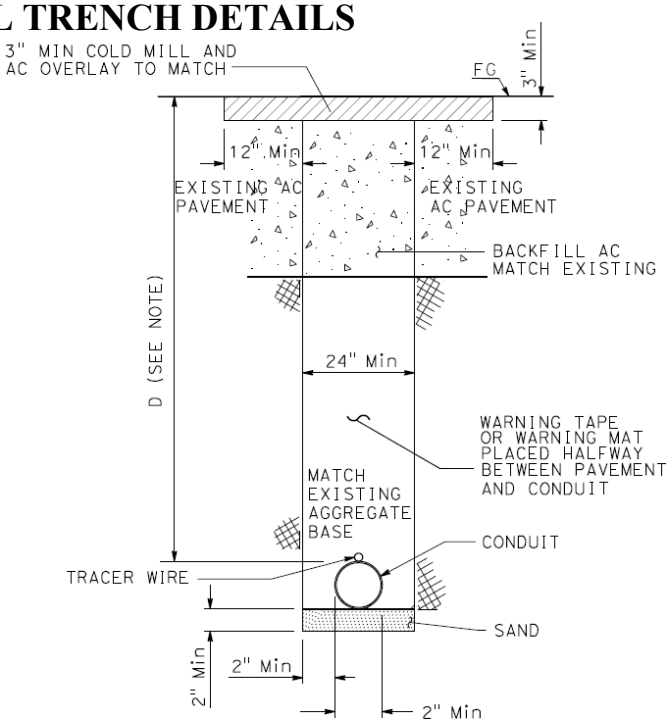
   https://misc-external.dot.ca.gov/cadd/index.htm

   A responsible charge statement per California Code of Regulations (CCR) 404.2 is required by the licensed land surveyor to ensure the subsurface infrastructure report is valid. A signed, sealed and dated report is required per §411(g)(2)(h) by the licensed land surveyor in responsible charge.

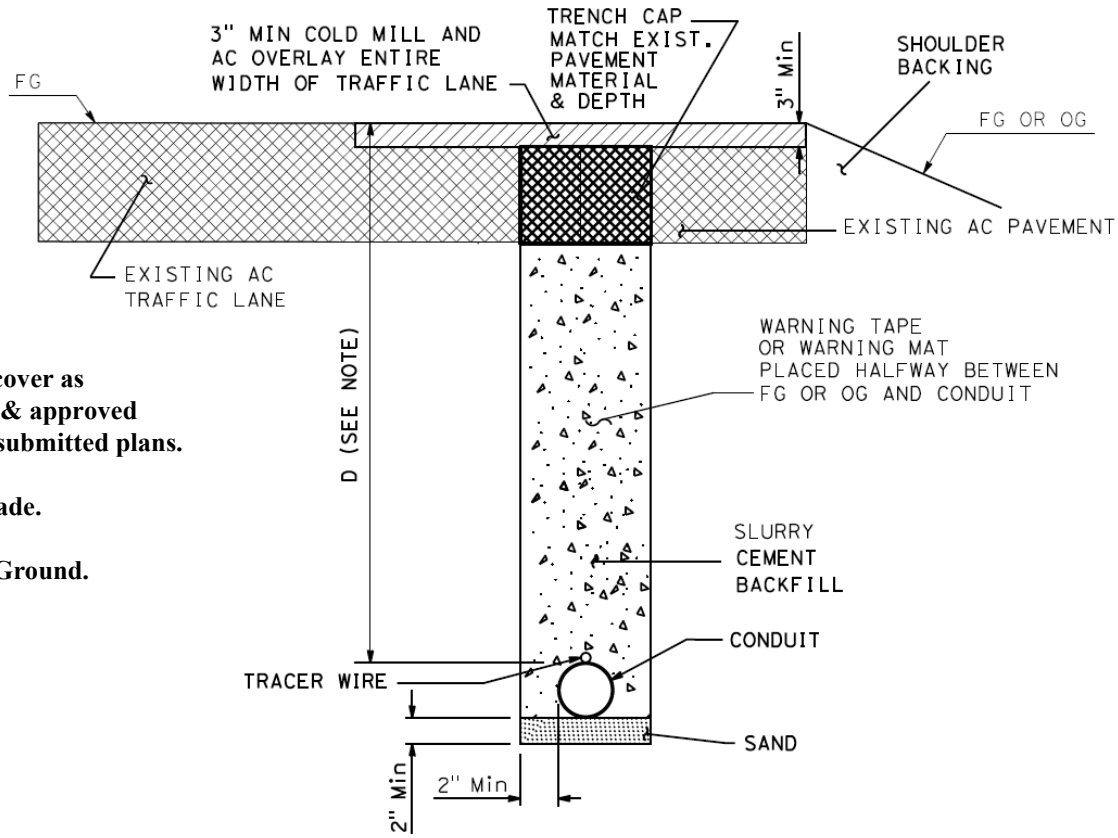
TYPICAL TRENCH DETAILS



TRENCH IN SOIL



TRENCH IN ASPHALT PAVEMENT



LONGGITUDINAL TRENCH IN ASPHALT PAVEMENT

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)

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

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

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

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)

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.