



DEPARTMENT OF PUBLIC WORKS
COUNTY OF HUMBOLDT
MAILING ADDRESS: 1106 SECOND STREET, EUREKA, CA 95501-0579
AREA CODE 707

EP 25020

On-line
Web: humboldt.gov.org

	Public Works Building		
	Second & L St., Eureka		
	Fax 445-7409		
Administration	445-7491	Natural Resources	445-7741
Business	445-7652	Natural Resource Planning	267-9542
Engineering	445-7377	Parks	445-7651
Facility Management	445-7621	Roads	445-7421

Clark Complex	
Harris & H St., Eureka	
Fax 445-7388	
Land Use	445-7205

ENCROACHMENT PERMIT

PERMIT NO. EP 25020

PERMITTEE: ORLEANS MUTUAL WATER COMPANY
% PENNY ECKERT
P.O. BOX 54
ORLEANS, CA 95556

DATE ISSUED:
EXPIRATION:

DATES ADDED
AFTER
SIGNATURE

CONTRACTOR: TO BE DETERMINED

In response to your request received 04/07/2025 and subject to all the terms, conditions, and restrictions written below or printed as general or special provisions on any part of this form and/or attachments, permission is hereby granted, as per the attached special and general provisions and the Humboldt County Code Title IV, Division 1, pertaining to the protection and control of County roads, to perform the following work within COUNTY rights of ways:

To trench and install approximately 2000 feet of 6 inch potable and 6 inch raw water mainlines, service laterals, hydrants and appurtenances on Camp Creek Road (8R100) connecting to existing lines fronting APN 529-341-023 (#173) running east to Placer Drive (8R105) and running to the end of Placer Drive fronting APN 529-341-008 (#210). Demolish and remove all existing pipe within 3 feet of new pipe, abandon remaining existing pipe in place. All work shall be performed to COUNTY standards found in County Code Section 411.

NOTE: This permit is not valid without an approved planset and contractor information. Permit shall be amended to include this information.

Note: Final pavement patch shall extend a minimum of 6" beyond each edge of trench (See Item 2.2j).

If any conflicts occur between this permit and the submitted plans, the conditions of this permit shall prevail.

***ALL WORK AUTHORIZED BY THIS PERMIT SHALL BE PERFORMED BY
AN "A" LICENSED CONTRACTOR***

This permit is revocable, at the discretion of the Department of Public Works (hereinafter referred to as COUNTY), upon written notice by US mail to the address of PERMITTEE subject to nonconformance of this permit.

In accordance with the California Streets and Highways Code, §1463: All Permits are revocable on five days' notice and the encroachment must be removed or relocated as may be specified by the road

commissioner in the notice revoking the permit and within a reasonable time specified by the road commissioner unless the permit provides a specified time.

1.0 GENERAL REQUIREMENTS:

- 1.1 All work within COUNTY'S right of way shall be performed by a licensed contractor of Permittee's choice (hereinafter referred to as CONTRACTOR) in accordance with submitted and approved plans for the Orleans Mutual Water Company (hereinafter referred to as PERMITTEE.) If any conflicts occur between PERMITTEE submitted plans and the special or general conditions of this Encroachment Permit, the special and general conditions shall prevail.
- 1.2 CONTRACTOR shall submit to COUNTY the following document prior to conducting any work within COUNTY right of way for said project:

CONTRACTOR, at own expense, agrees to obtain and maintain policies of insurance as specified in Attachment "1", "Insurance Requirements" from the COUNTY RISK MANAGER.
- 1.3 All required inspections by COUNTY shall be scheduled by CONTRACTOR a minimum of forty-eight (48) hours (two County business days) in advance of the inspection. Inspection requests shall be made to Humboldt County Department of Public Works at 445-7205. COUNTY inspections will be required, at a minimum, during the following phases of construction:
 - a. An inspection prior to any excavation to assure the protection of all COUNTY maintained facilities.
 - b. An inspection after trench excavation adjacent to or exposing COUNTY storm drain structures and prior to placement of any PERMITTEE facilities adjacent to COUNTY storm drain structures.
 - c. An inspection before placement of road structural section.
 - d. Any and all other construction activities within COUNTY right of way requested by COUNTY.
 - e. A final inspection of all improvements within COUNTY right of way shall be held prior to issuance of a notice of completion.
- 1.4 All affected utilities shall be contacted prior to any excavation work. CONTRACTOR shall notify U.S.A. - Underground Service Alert at 1-800-227-2600.

Any utility conflicts encountered during construction shall be forwarded to COUNTY, PERMITTEE, and CONTRACTOR for resolution.

Note that COUNTY does not participate in the U.S.A. program. Therefore CONTRACTOR is responsible to research, locate, and protect any COUNTY maintained facilities that may be within the work area. Contact Public Works - Roads Division (445-7421) for assistance locating County maintained facilities. Typically these facilities include, but are not limited to, storm drain structures, traffic signal loop detectors, and traffic signal conduit.
- 1.5 During construction, roadways shall be periodically cleaned of mud, soil, rock, and debris and as directed by COUNTY.
- 1.6 CONTRACTOR shall be responsible to correct any involved drainage problems to the satisfaction of COUNTY.
- 1.7 CONTRACTOR shall minimize the transport of sediment to drainage courses during construction. COUNTY Inspector shall be notified by CONTRACTOR for review and approval of installed erosion control measures.

- 1.8 No work is authorized under this permit during wet weather periods, as determined by COUNTY, without submittal and approval by COUNTY of an erosion and sediment control plan. The plan shall be implemented for construction activities conducted between October 15 and April 15. It shall be at the discretion of the Department of Public Works to authorize work within COUNTY right of way during said period of time.
- 1.9 Relocation of signs and utilities shall be at CONTRACTOR'S expense. COUNTY shall relocate all necessary traffic signs to meet current specifications. CONTRACTOR shall provide COUNTY 48 hours (two County business days) advance notice of when sign relocation is needed.
- 1.10 This permit shall be valid until expiration date and shall be subject to periodic review by COUNTY and any preceding requirements may be revised by COUNTY whenever modifications or additional requirements are deemed necessary to protect COUNTY right of way and/or safety of the traveling public.
- 1.11 CONTRACTOR shall provide public notification regarding construction work scheduling and possible traffic delays to the following entities 48 hours (2 working days) prior to start of construction:
 - a. Humboldt County Sheriff's Department
 - b. California Highway Patrol
 - c. Cal-Fire (California Department of Forestry)
 - d. US Post Office
 - e. Local Ambulance Service(s)
 - f. Local Fire Response Agency
 - g. Local residents and vehicle traffic

CONTRACTOR shall coordinate construction activities with affected schools to ensure minimal delays in school bus routes, if applicable.
- 1.12 CONTRACTOR is responsible for preservation and/or perpetuation of all existing monuments which control subdivisions, tracts, boundaries, streets, highways, or other rights-of-way, easements or provide survey control which will be disturbed or removed due to CONTRACTOR'S work. CONTRACTOR shall provide a minimum of ten (10) working days notice to project engineer/surveyor prior to possible disturbance or removal of existing monuments. CONTRACTOR shall coordinate with Project engineer/surveyor to reset monuments or provide permanent witness monuments and file the required documentation with the COUNTY Surveyor pursuant Business and Professions Code Section 8771.

If centerline of trench is closer than seven feet (7') from monument, CONTRACTOR shall call COUNTY Surveyor (445-7205). CONTRACTOR may be required to consult with a licensed surveyor to set reference points and file a Corner Record.
- 1.13 Hours of operation for construction shall be Monday through Friday, during daylight hours for a maximum of 6:30 a.m. to 6:00 p.m. during the longer daylight season. Weekend operation may be acceptable to COUNTY, provided COUNTY is notified a minimum of forty-eight (48) hours (two County business days) in advance and agrees to the weekend operation.
- 1.14 All administration and inspection services rendered in connection with the work covered by this permit shall be paid for by PERMITTEE in accordance with the latest Humboldt County Schedule of Fees and Charges for Permits and Services adopted by the Board of Supervisors. Upon acceptance by COUNTY of all work authorized under this permit, a bill will be prepared and sent to PERMITTEE for reimbursement of COUNTY costs.

- 1.15 By applying for and obtaining this permit pursuant to Humboldt County Code Chapter 1, Title IV, Division 1, PERMITTEE/CONTRACTOR agree that, if PERMITTEE/CONTRACTOR fail to comply with the terms of this permit or to perform or complete the work according to the plans, COUNTY or State standard specifications, or fail to comply with any provisions of Chapter 1, COUNTY may elect to perform and complete the work by any method the Director of the Humboldt County Department of Public Works deems appropriate. PERMITTEE/CONTRACTOR shall reimburse COUNTY for the full cost, at the then current Associated General Contractor's Cost Schedule, for such work, of performing and completing the work according to this permit.
- 1.16 PERMITTEE/CONTRACTOR shall comply with Permit General Provisions, Public Safety, and Hold Harmless/Indemnification Handout (Attachment "3").
- 1.17 Any damage to existing COUNTY road improvements (i.e., adjacent curb and gutter, drainage structures, road surface, etc.) shall be repaired or replaced by CONTRACTOR to the satisfaction of the Department of Public Works. Damages shall be promptly reported to the Department of Public Works.

2.0 SPECIFIC REQUIREMENTS:

2.1 CEQA Mitigation Measures

- a. PERMITTEE shall be responsible for implementing all mitigation measures contained in the Mitigation Monitoring and Reporting Program (Attachment 4) for the Initial Study/Mitigated Negative Declaration prepared for compliance with the California Environmental Quality Act (CEQA) and adopted by the Humboldt County Board of Supervisors on May ____, 2025.

2.2 Traffic Control

- a. CONTRACTOR shall be responsible for all traffic control and public safety at work locations in COUNTY right of way in a manner satisfactory to COUNTY. This shall include working and non-working days and hours.
- Traffic control operations shall conform to **California Manual on Uniform Traffic Control Devices for Streets and Highways** (FHWA's MUTCD 2014 Edition, as amended for use in California), January 11, 2024 or latest edition, and to the satisfaction of COUNTY. Warning and flagging of motorists at work locations shall be conducted **AT ALL TIMES** by properly trained personnel.
- CONTRACTOR shall use current revisions of Caltrans 2024 Standard Plan T13 with T9 for a traffic control plan, when applicable, for closing one traffic lane – see Attachment "4".
 - CONTRACTOR shall use CAMUTCD Figure 6H-6, Titled "Shoulder Work with Minor Encroachment (TA-6)", when applicable, for working outside of the travelway and not affecting normal vehicle traffic – see Attachment "4".
 - Conditions requiring a traffic control plan other than Caltrans T13 with T9 or Fig 6H-6 will require submittal and Public Works approval of a traffic control plan prepared by a Registered Civil Engineer (or Traffic Engineer).
- b. Warning and flagging of motorists at work locations shall be conducted **AT ALL TIMES** by properly trained personnel.
- c. Only one (1) lane of traffic shall be closed at any time during construction or installation. **NO COMPLETE ROAD CLOSURE** is authorized under this permit.

- d. Should CONTRACTOR request the complete closure or closure of a portion of a COUNTY maintained road, CONTRACTOR must submit to COUNTY a road closure plan a minimum of five (5) County business days for review. Revisions to the road closure plan shall be made as necessary to obtain approval from COUNTY. Road closure shall conform to the COUNTY approved plan.
- e. Property owners shall be able to use their driveways when needed. PERMITTEE and/or CONTRACTOR shall notify residents along the affected streets that their driveways will be obstructed. Said obstructions shall not exceed eight (8) hours. CONTRACTOR shall provide COUNTY 24 hours (1 working day) advance notice before work is to be performed.

2.3 Trenching and Trench Requirements:

- a. CONTRACTOR shall be responsible for locating all substructures. Any damages to existing utilities are the responsibility of CONTRACTOR.
- b. Prior to commencement of any work, CONTRACTOR/PERMITTEE shall submit a construction activity permit issued by CalOSHA for trenches or excavations which are five feet (5') or deeper and into which a person is required to descend.
- c. All underground lines shall be placed a minimum of thirty inches (30") below finish road grade. All new underground lines shall be placed a minimum of one foot (1') below all drainage structures. PERMITTEE and/or CONTRACTOR shall be responsible for locating all substructures. Any damages are the responsibility of the PERMITTEE.
- d. All valve covers, manhole covers, sewer clean out covers, and monument well covers shall be raised to grade to the satisfaction of COUNTY.
- e. All work areas in or adjacent to the COUNTY roadway shall be properly barricaded and protected after working hours. **No open trenches** within COUNTY right of way shall be allowed during non-working hours.
- f. Excavations by CONTRACTOR in or adjacent to traffic lanes that remain open after working hours shall be plated with steel plates suitable for traffic loading and **shall be made drivable** with asphalt cold mix approach ramps. Construction equipment and project materials shall not be used to protect open trenches. **Bump signs (W8-1) shall be placed to notify vehicular traffic in advance of any steel plates that remain in traffic lanes after work hours.** Construction equipment and project materials shall not be stored within COUNTY right of way without approval from COUNTY.
- g. The areas that require permanent pavement restoration for trenches excavated across or parallel to existing paved traveled way section of COUNTY roads or areas disturbed by the project shall be restored as delineated on the attached "**Type I or Type II**" Trench Typical (Attachment "2") and/or as directed by the County Inspector. Temporary pavement shall be removed from all trenches prior to placing permanent paving. Trenches shall be sawcut a minimum of six inches (6") beyond the asphalt concrete disturbed by trench excavation or the edge of the area disturbed by the project, as determined by COUNTY, just prior to placing permanent paving. The finish paving SHALL NOT BE CROWNED across the trench section and **shall be placed no later than thirty (30) days after initial trench closure.**
- h. Backfill material in all trenches shall conform to Section 19 of Caltrans Standard Specifications dated 2023. The attached Standard **Trench Details "Type I or Type II"** (Attachment "2") **shall be used.** Backfill material, Class II aggregate base, shall be placed

to the subgrade of the pavement in uniform layers and shall be brought up uniformly on all sides of the structure or facility. Backfill material shall be mechanically compacted to a relative compaction of not less than 95% in the top 2.5 feet of the trench, with a minimum of 90% relative compaction below that point to the top of any conduit or pipe located within the traveled way and shoulder section of any COUNTY maintained road.

- i. All trenches shall be temporarily capped with a minimum of two inches (2") of cold mix asphalt concrete prior to opening the roadway to public traffic. CONTRACTOR shall maintain all temporary paving in trenches until permanent paving has been completed.
- j. All trenches shall be cleanly sawcut a minimum of six inches (6") beyond the asphalt concrete disturbed by trench excavation or the edge of the area disturbed by the project, as determined by COUNTY, just prior to placing permanent paving.
- k. Permanent paving on all trenches shall consist of a minimum of three inches (3") of Caltrans specifications hot mix asphalt concrete. Temporary cold mix asphalt concrete shall be removed from all trenches prior to placing permanent paving. All trenches shall be inspected and approved by COUNTY prior to placing permanent paving.
- l. Any asphalt concrete surface damaged by construction project shall be saw cut a minimum of six inches (6") beyond the damaged portion, removed, and resurfaced with a minimum of two inches (2") of Caltrans specifications hot mix asphalt concrete. Any temporary paving shall be removed from trench prior to placing final paving.
- m. **CONTRACTOR, or his Designee, shall be responsible for performing compaction tests.** COUNTY reserves the right to perform as many additional compaction tests as it deems reasonably necessary to ensure that the compaction requirements are met. CONTRACTOR agrees by the start of construction authorized by this permit to reimburse COUNTY for costs of such tests. Said costs shall be in conformance with the adopted Humboldt County Schedule of Fees and Charges for Permits and Services.
- n. **CONTRACTOR, at the time of completion, shall submit letter of acceptance of the project from PERMITTEE.** PERMITTEE shall be responsible to maintain all refilled trenches in perpetuity as per Humboldt County Code Title IV, Division 1, Chapter 1, Section 411-31-(c) pertaining to the protection and control of COUNTY roads. All trench failures shall be repaired by PERMITTEE within a reasonable length of time, as determined by COUNTY after notification of said failure.

2.4 Project Completion:

- a. All construction materials and debris shall be removed from within COUNTY right of way after project completion.
- b. CONTRACTOR shall replace all pavement markings and striping removed by project. All pavement markings and re-striping shall follow Caltrans 2023 standard plans.
- c. All COUNTY signs shall be replaced in their original location if disturbed or temporarily moved during trenching.
- d. Unless waived by COUNTY, for all underground installations, PERMITTEE shall furnish COUNTY with legible, survey quality, as-built/record drawing plans upon completion and acceptance of the work by the facility Owner and prior to acceptance of the work by COUNTY. The as-builts shall be submitted to the COUNTY for review and approval in PDF format. The as-built drawings shall be prepared by a registered civil engineer or licensed

land surveyor; shall be drawn to a standard engineering scale (1"=20', or 1"=40', etc.), and shall show the location of the improvements with respect to the existing road improvements and right of way.

e. CONTRACTOR shall provide a notice of completion to COUNTY.

3.0 AUTHORIZATIONS:

- 3.1 This permit shall not be executed by the Department of Public Works until certificates or other sufficient proof that these insurance provisions have been complied with are received by the Department of Public Works.
- 3.2 PERMITTEE is responsible to obtain and comply with any other permits necessary for the project. Such permits may include, but are not limited to, those issued by County of Humboldt, Planning and Building Department; County of Humboldt, California Department of Fish and Game; State of California Department of Transportation (Caltrans); Army Corps of Engineers; etc.
- 3.3 **This permit is not valid until all other permits required for the project have been issued.** The Department of Public Works will issue a stop work order if work commences without all other required permits properly issued.
- 3.4 PERMITTEE, or an authorized agent of PERMITTEE for which this permit is issued, hereby recognizes and accepts the terms of this permit by authorized signature below.

COUNTY OF HUMBOLDT BY:

PERMITTEE:

Erin Cearley, Engineering Technician
Land Use Division
3015 H Street
Eureka, CA 95501
(707) 445-7205

Authorized signature PERMITTEE

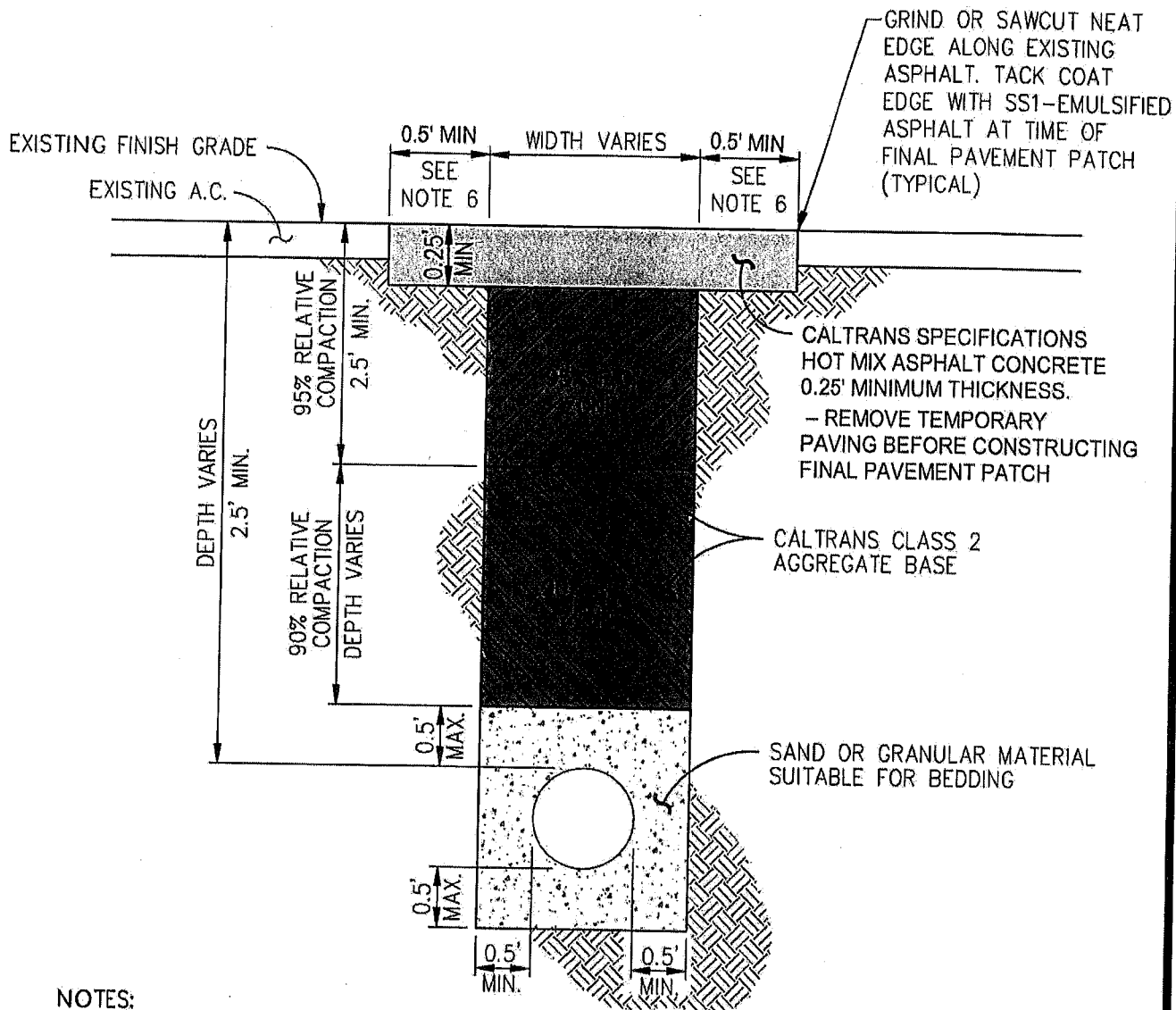
Print name

Date

cc: Adrian Wantt, Road Crew Supervisor, Paul Donoho, Road Division Manager, Roads Dispatch

Attachments:

- Attachment "1" – Insurance
- Attachment "2" – Type I Trench Detail revised 04/22/2013, Type II Trench Detail revised 04/22/2013
- Attachment "3" – General Provisions, Public Safety, and Hold Harmless/Indemnification Handout
- Attachment "4" – CEQA Mitigation Monitoring and Reporting Program
- Attachment "5" – 2014 CAMUTCD Figure 6H-6, Caltrans 2024 Standard Plans T9 and T13



NOTES:

1. THE TRENCH SHALL HAVE AT LEAST 0.25 FEET OF TEMPORARY COLD MIX ASPHALT BEFORE OPENING ROAD TO TRAFFIC.
2. FOR ITEMS NOT SHOWN, SEE ISSUED 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. THE PERMITEE, OR ITS DESIGNEE, SHALL BE RESPONSIBLE FOR PERFORMING COMPACTION TESTS. THE DEPARTMENT OF PUBLIC WORKS RESERVES THE RIGHT TO MAKE AS MANY COMPACTION TESTS AS IT DEEMS REASONABLE TO ENSURE THAT THE COMPACTION REQUIREMENTS ARE MET. PERMITEE SHALL REIMBURSE THE DEPARTMENT OF PUBLIC WORKS FOR ALL COSTS ASSOCIATED WITH SUCH TESTS. SAID COSTS SHALL BE IN CONFORMANCE WITH THE HUMBOLDT COUNTY SCHEDULE OF FEES AND CHARGES FOR PERMITS AND SERVICES, AS ADOPTED BY THE BOARD OF SUPERVISORS.
6. WHEN EXISTING AC PAVEMENT IS LESS THAN 5 YEARS OLD, USE 9' MINIMUM.
WHEN EXISTING AC PAVEMENT IS MORE THAN 5 YEARS OLD, USE 0.5' MINIMUM

NOTE: FIGURES HEREON ARE NOT DRAWN TO SCALE, UNLESS OTHERWISE NOTED.



COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS

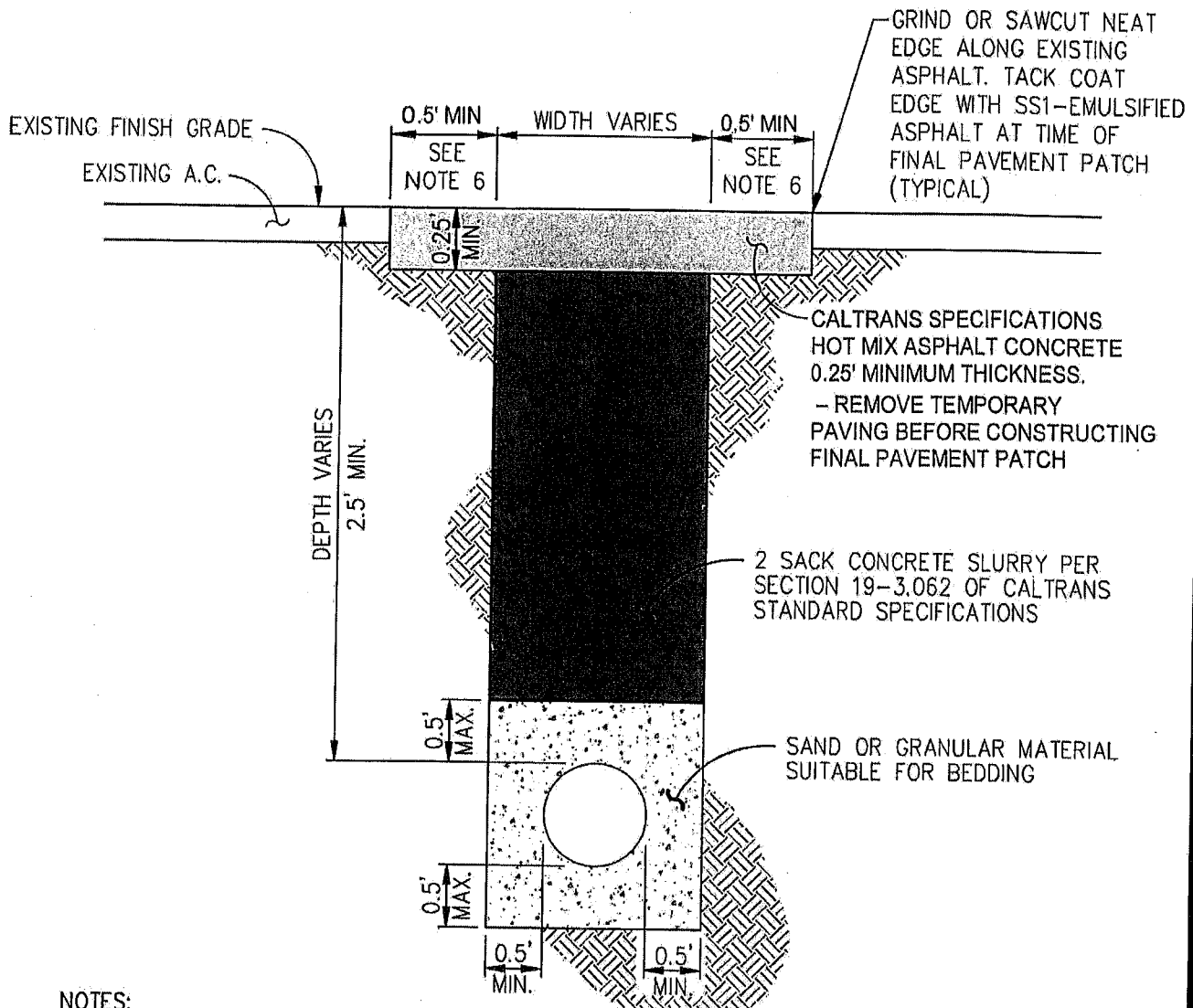
1106 SECOND STREET * EUREKA * CA * 95501
TEL (707) 445-7377 * FAX (707) 445-7409

TYPE I TRENCH DETAIL -AGGREGATE BASE BACKFILL-

ISSUED: 08/26/2009 REVISED 04/22/2013
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STD DWG

SHT 1 OF 1



NOTES:

1. THE TRENCH SHALL HAVE AT LEAST 0.25 FEET OF TEMPORARY COLD MIX ASPHALT BEFORE OPENING ROAD TO TRAFFIC.
2. FOR ITEMS NOT SHOWN, SEE ISSUED 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. THE PERMITEE, OR ITS DESIGNEE, SHALL BE RESPONSIBLE FOR PROVIDING CERTIFICATION OF MATERIALS TO THE COUNTY. THE DEPARTMENT OF PUBLIC WORKS RESERVES THE RIGHT TO MAKE AS MANY MATERIAL ASSURANCE TESTS AS IT DEEMS REASONABLE TO ENSURE THAT THE CONSTRUCTION MATERIAL REQUIREMENTS ARE MET. PERMITEE SHALL REIMBURSE THE DEPARTMENT OF PUBLIC WORKS FOR ALL COSTS ASSOCIATED WITH SUCH TESTS. SAID COSTS SHALL BE IN CONFORMANCE WITH THE HUMBOLDT COUNTY SCHEDULE OF FEES AND CHARGES FOR PERMITS AND SERVICES, AS ADOPTED BY THE BOARD OF SUPERVISORS.
6. WHEN EXISTING AC PAVEMENT IS LESS THAN 5 YEARS OLD, USE 9' MINIMUM.
WHEN EXISTING AC PAVEMENT IS MORE THAN 5 YEARS OLD, USE 0.5' MINIMUM

NOTE: FIGURES HEREON ARE NOT DRAWN TO SCALE, UNLESS OTHERWISE NOTED.



COUNTY OF HUMBOLDT

DEPARTMENT OF PUBLIC WORKS

1106 SECOND STREET * EUREKA * CA * 95501
TEL (707) 445-7377 * FAX (707) 445-7409

**TYPE II TRENCH DETAIL
-CONCRETE SLURRY BACKFILL-**

ISSUED: 08/26/2009 REVISED 04/22/2013

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STD DWG

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GENERAL PROVISIONS

DEFINITION - This permit is issued in accordance with the Encroachment Permit Ordinance #896 and any amendments thereof. This permit is revocable on notice by the Director of Public Works.

ACCEPTANCE OF PROVISIONS - It is understood and agreed by the Permittee that the doing of any work under this permit shall constitute an acceptance of the conditions and provisions relative to the permit.

NO PRECEDENT ESTABLISHED - This permit is granted with the understanding that this action is not to be considered as establishing any precedent on the question of the expediency of permitting any certain kind of encroachment to be erected within right of way of County highways.

NOTICE PRIOR TO STARTING WORK - The Department of Public Works shall be notified 24 hours in advance of pouring concrete to permit inspection of subgrade and forms.

KEEP PERMIT ON SITE - This permit shall be kept at the work site and must be shown to any representative of the Grantor or any law enforcement officer on demand.

PROTECTION OF TRAFFIC - Adequate provision shall be made for the protection of the traveling public. Barricades shall be placed with amber lights at night, also flagmen employed, all as may be required by the County for the particular work in progress.

MINIMUM INTERFERENCE WITH TRAFFIC - All work shall be planned and carried out so that there will be the least possible inconvenience to the traveling public.

STORAGE OF MATERIAL - No material shall be stored within 8 feet from the edge of pavement or graveled way or within the shoulder line when the shoulders are wider than 8 feet, unless specifically authorized by this permit.

CLEAN UP - Upon completion of the work, all brush, timber, scraps, and materials shall be entirely removed and the right of way left in as presentable a condition as before work started.

STANDARDS OF CONSTRUCTION - All work shall conform to the State of California Standard Specifications and County standards.

FUTURE MOVING OF INSTALLATION - It is understood by the Permittee that the installation authorized herein shall, upon demand of the Director of Public Works, be relocated by and at the sole expense of the Permittee whenever construction, reconstruction, or maintenance on the highway may require such relocation. The Permittee must complete such relocation within the time specified in said demand.

CARE OF DRAINAGE - Permittee shall undertake such measures to prevent interference with established drainage as may be required by the Director of Public Works.

EXCAVATION - All excavation shall comply with the provisions of Chapter 3, Article 2, Section 320, of the Encroachment Permit Ordinance #896.

BACKFILL - Backfill in all trenches shall comply with the provisions of Chapter 3, Article 2, Section 321, of the Encroachment Permit Ordinance #896.

LOCATION - The shallowest portion of any pipeline or other facility shall be installed not less than 30 inches below the roadway surface, or one foot below the flow line of any drainage structure, pipe, ditch, or creek.

CURB, GUTTERS, AND SIDEWALK - Shall comply with the provisions of Chapter 3, Article 3, of Encroachment Permit Ordinance #896 and any amendments thereof.

DEFAULT OF PERMITTEE - By applying for and obtaining a permit, the Permittee agrees that if the Permittee fails to comply with the terms of the Permit, the County may elect to perform and complete the work by any method the Director deems appropriate. The Permittee shall reimburse the County for the full cost of the work at the then current Associated General Contractor's Cost Schedule for such work. .

PUBLIC SAFETY

1. The Permittee in the conduct of work shall provide, erect, or maintain the lights, barriers, warning signs, and other safeguards necessary to protect the traveling public in accordance with Section 21406 of the California Vehicle Code. If at any time the Director of Public Works finds that suitable safeguards are not being provided, the County shall provide, erect, and/or maintain the safeguards deemed necessary. The Permittee shall reimburse the County for all expenses incurred by County providing, erecting, and maintaining the safeguards deemed necessary by the Director of Public Works.
2. All work shall be planned and carried out so that there will be the least possible inconvenience to the traveling public. Permittee is authorized to place flagmen to stop and warn traffic for necessary protection to public safety, but traffic shall not be unreasonably delayed. Complete closure of the road shall not be permitted unless authorized in writing by the Director of Public Works.

HOLD HARMLESS/INDEMNIFICATION

The Permittee shall agree to indemnify and hold harmless the County and each of its officers and employees from any liability or responsibility for accident, loss, or damage to persons or property arising by reason of the work done by the Permittee, or its agents, employees, or representatives. The Permittee shall, at its own expense, cost, and risk, defend any and all actions, suits, or other legal proceedings that may be brought or instituted against the County, its officers, or employees and pay or satisfy any judgment that may be rendered against the County and its officers or employees in any such action, suit, or legal proceedings arising by reason of the work done by the Permittee, its agents, employees, or representatives.

Appendix F

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

Orleans Mutual Water Company Water Treatment System Upgrade

Purpose of Mitigation Monitoring and Reporting Program: The California Environmental Quality Act (CEQA), Public Resources Code Section 21081.6, requires that a Mitigation Monitoring and Reporting Program (MMRP) be established upon completing findings. CEQA stipulates that “the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”

This MMRP has been prepared in compliance with Section 21081.6 of CEQA to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during the construction and operation of the project, as required. A table (attached) has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, monitoring/mitigation timing, the responsible person/agency for implementing the measure, and space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the Initial Study and Mitigated Negative Declaration.

Humboldt County (County) is the lead agency for the project under CEQA and shall administer and implement the MMRP. The County is responsible for reviewing all monitoring reports, enforcement actions, and document disposition. The County shall rely on information provided by the project site observers/monitors (e.g., construction manager, project manager, biologist, archaeologist, etc.) as accurate and up-to-date and shall provide personnel to field check mitigation measure status, as required.

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MITIGATION MONITORING AND REPORTING PROGRAM
Orleans Mutual Water Company Water Treatment System Upgrade

Mitigation Measure		Monitoring / Mitigation Timing	Reporting / Responsible Party	Verification of Compliance	
		Initials	Date		
BIOLOGICAL RESOURCES					
Mitigation Measure BIO-1: Worker Environmental Awareness Training					
Special-status plant and wildlife species have the potential to occur within the Study Area and be impacted by construction activities. As such, a qualified biologist shall conduct environmental awareness training for all project-related personnel before the initiation of work, including vegetation removal, grubbing, or other construction activities. The training shall include information on the identification of special-status species that may be encountered, nesting birds and bird nests, and any other sensitive species or communities with the potential to occur onsite and required practices to implement before the start of construction. General measures that are being implemented to protect species that may occur onsite shall be referenced, including penalties for non-compliance, and boundaries of the permitted disturbance zones. Upon completion of the training, all construction personnel shall sign a form stating that they have attended the training and understand all the measures. Proof of this instruction shall be kept on file with the project proponent.		Before initiation of project work	Qualified Biologist; Project Construction Personnel; Project Proponent		
Mitigation Measure BIO-2: Special-Status Plants					
The Study Area contains suitable habitat for Bald Mountain milk-vetch, coast fawn lily, small groundcone, white-flowered rein orchid, crinkled rag lichen, Hooker's catchfly, Marble Mountain campion, and robust false lupine. To avoid potential impacts to these species, the following measures shall be implemented:		Before the initiation of any ground-disturbing activities	Qualified Botanist; Project Proponent; CDFW		
<ul style="list-style-type: none">A qualified botanist shall conduct a special-status plant survey within the appropriate identification (blooming) period before the initiation of any ground-disturbing activities. Based on the methodology described in the California Department of Fish and Wildlife (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018), it is recommended that two botanical surveys of the Study Area spread throughout the growing season, one in May and one in July,					

<ul style="list-style-type: none"> to satisfy the blooming periods for Bald Mountain milk-vetch, coast fawn lily, small groundcone, white-flowered rein orchid, crinkled rag lichen, Hooker's catchfly, Marble Mountain campion, and robust false lupine. These surveys shall be spaced out between May and July to capture the floristic diversity at a level necessary to determine if special-status plants are present. If no special-status plants are observed, then a letter report documenting the survey results shall be prepared and submitted to the project proponent, and no further measures are recommended. If special-status plants are observed within the Study Area, the location of the special-status plants shall be marked with pin flags or other highly visible markers and may also be marked by global positioning system (GPS). The project proponent shall determine if the special-status plant(s) onsite can be avoided by project design or utilize construction techniques to avoid impacts to the special-status plant species. All special-status plants to be avoided shall have exclusion fencing or other highly visible material marking the avoidance area, and the avoidance area shall remain in place throughout the entire construction period. If special-status plants are found within the Study Area and cannot be avoided, the project proponent shall consult with the California Department of Fish and Wildlife (CDFW) to determine appropriate measures to mitigate the loss of special-status plant populations. These measures may include gathering seed from impacted populations for planting within nearby appropriate habitat, preserving or enhancing existing offsite populations of the plant species affected by the project, or restoring suitable habitat for special-status plant species habitat as directed by the regulatory agencies. 				
<p>Mitigation Measure BIO-3: Special-Status Fish</p> <p>The perennial drainage (Camp Creek) provides potential spawning and/or rearing habitat for Klamath River lamprey, coastal cutthroat trout, coho salmon, and Chinook salmon within the Study Area. Although the current project activities do not propose work within Camp Creek, potential construction activities shall potentially affect these species by increasing turbidity levels in the perennial drainage during project construction or</p>	<p>During and following construction</p>	<p>Project Proponent; CDFW</p>		

<p>through direct mortality associated in-stream work, if proposed in future iterations of the project design. Erosion control best management practices (BMP), such as the ones listed within the amphibian minimization and avoidance measures above, shall be implemented during and following construction to avoid sediment being placed into streams and their subsequent receiving waters. If BMP are properly implemented, the project shall be expected to have minimal temporary direct and/or indirect impacts to fish species and their habitat. If a project requires a 404 permit, the U.S. Army Corps of Engineers (USACE) would likely consult with National Marine Fisheries Service (NMFS) regarding potential impacts to these species. If a project only requires a Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW), CDFW will require avoidance and minimization measures in the Streambed Agreement to avoid and minimize impacts to these species during construction. Potential avoidance and minimization measures may include but are not limited to seasonal work restrictions to avoid the spawning season of special-status fish, work setbacks from the perennial drainages, use of appropriate BMP to avoid impacts to water quality during construction and minimizing the work area adjacent to the stream to avoid water quality impacts from operation and fueling of equipment.</p>				
<p>Mitigation Measure BIO-4: Special-Status Amphibians</p> <p>The Study Area provides potentially suitable habitat for Pacific tailed frog, Del Norte salamander, foothill yellow-legged frog (FYLF), and southern torrent salamander. In the absence of the proposed mitigation measures, potential adverse effects to these protected amphibian and reptile species shall include take of individuals using upland areas for dispersal and/or refugia during construction. No direct impacts to potential habitat in Camp Creek would be anticipated as a result of the proposed project, as the project will not occur in Camp Creek or montane riparian habitat. Impacts that could harm Pacific tailed frog, Del Norte salamander, FYLF, and southern torrent salamander would be considered potentially significant. Potential indirect impacts could occur as a result of reduced water quality if contaminated runoff were to enter Camp Creek during and following construction. The following mitigation shall be implemented to avoid potential direct and indirect impacts to special-status amphibians:</p> <ul style="list-style-type: none"> Before the commencement of construction, preconstruction surveys for Pacific tailed frog, Del Norte salamander, FYLF, and southern torrent salamander shall 	<p>Before commencement of construction</p>	<p>Qualified Biologist; CDFW, qualified Project Personnel and/or the site foreman</p>		

<p>be conducted in the Study Area within two weeks and immediately before the initiation of construction activities to ensure that Pacific tailed frog, Del Norte salamander, FYLF, and southern torrent salamander are not actively using the Study Area or adjacent areas as a dispersal corridor. Preconstruction surveys shall be conducted by a qualified biologist familiar with all life stages and would cover all terrestrial and aquatic habitats on and immediately adjacent to the Study Area that are suitable for Pacific tailed frog, Del Norte salamander, FYLF, and southern torrent salamander dispersal.</p> <ul style="list-style-type: none"> • If any life stage of Pacific tailed frog, Del Norte salamander, FYLF, and/or southern torrent salamander (e.g., egg, juvenile, or adult) is detected within the Study Area during any surveys or monitoring for the project during construction, the California Department of Fish and Wildlife (CDFW) shall be notified within 48 hours. The biologist shall monitor the animal to make sure it is not harmed and that it leaves the site on its own. Construction activities will not be allowed within 100 feet of the animal. • Clearing within the Study Area shall be confined to the minimum area necessary to facilitate construction. To ensure that construction equipment and personnel do not affect sensitive habitat outside of designated work areas, orange barrier fencing shall be erected to clearly define the habitat to be avoided. This will delineate the Environmentally Sensitive Area (ESA) on the project. The integrity and effectiveness of ESA fencing and erosion control measures shall be inspected daily. Corrective actions and repairs shall be carried out immediately for fence breaches and ineffective erosion control best management practices (BMP). • Standard construction BMP shall be implemented throughout construction to avoid and minimize adverse effects to the water quality within the Study Area. Appropriate erosion control measures shall be used (e.g., hay bales, filter fences, vegetative buffer strips, or other accepted equivalents) to reduce siltation and contaminated runoff from leaving the Study Area and entering the riparian corridor or Camp Creek. The integrity and effectiveness of the BMP shall be inspected daily by qualified project personnel and/or the site foreman. Corrective actions and repairs shall be carried out immediately. 				
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<ul style="list-style-type: none"> • Construction by-products and pollutants such as petroleum products, chemicals, or other deleterious materials shall not be allowed to enter Camp Creek. A plan for the emergency clean-up of any spills of fuel or other materials shall be available when construction equipment is in use. • Equipment shall be re-fueled and serviced at designated construction staging areas. All construction material and fill shall be stored and contained in a designated area that is located away from channel areas to prevent transport of materials into adjacent streams. The preferred distance is 100 feet from the wetted width of Camp Creek. In addition, a silt fence shall be installed to collect any discharge, and adequate materials shall be available for spill clean-up and during storm events. • Construction vehicles and equipment shall be monitored and maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. Leaking vehicles and equipment shall be removed from the site. • Building materials storage areas containing hazardous or potentially toxic materials such as herbicides and petroleum products shall be located outside of the 100-year flood zone, have an impermeable membrane between the ground and the hazardous material, and shall be bermed to prevent the discharge of pollutants to ground water and runoff water. The bermed area shall at a minimum have the capacity to store the volume of material placed in it. • All disturbed soils shall undergo erosion control treatment before October 15 and/or immediately after construction is terminated. Appropriate erosion control measures shall be used (e.g., hay bales, filter fences, vegetative buffer strips, or other accepted equivalents) to reduce siltation and contaminated runoff from leaving the Study Area. Erosion control blankets shall be installed on any disturbed soils steeper than a 2:1 slope or steeper. • During Project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work 				
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<p>areas.</p> <ul style="list-style-type: none"> No monofilament plastic shall be used for erosion control. 				
<p>Mitigation Measure BIO-5: Northern Goshawk, Rufed Grouse, Bald Eagle, Osprey, Other Raptors, and Migratory Birds</p> <p>The Study Area and adjacent areas provide suitable nesting habitat for a variety of native birds, including native songbirds and raptors. Removal of vegetation containing active nests would potentially result in destruction of eggs and/or chicks; and noise, dust, and other anthropogenic stressors in the vicinity of an active nest could lead to forced nest abandonment and mortality of eggs and/or chicks. Needless destruction of eggs or chicks would be a violation of the California Fish and Game Code. Pre-construction surveys shall be conducted before project implementation to determine if nesting birds are present on or adjacent to the site, so that measures could be implemented if needed to avoid harming nesting birds.</p> <p>The following mitigation shall be implemented to reduce potential project impacts to nesting birds:</p> <ul style="list-style-type: none"> If project construction, including ground-disturbing or vegetation clearing and grubbing activities, commence during the avian breeding season (February 1 through August 31), a qualified biologist shall conduct a pre-construction nesting bird survey no more than 14 days before initiation of project construction activities. The survey area shall include suitable raptor nesting habitat within 500 feet of the project footprint (inaccessible areas outside of the Study Area can be surveyed from the site or from public roads using binoculars or spotting scopes). Pre-construction surveys are not required in areas where project construction activities have been continuous since before February 1, as determined by a qualified biologist. Areas that have been inactive for more than 14 days during the avian breeding season shall be re-surveyed before the resumption of project construction activities. If no active nests are identified, no further mitigation is required. If active nests are identified, the following measure shall be 	<p>No more than 14 days before initiation of project construction</p>	<p>Qualified Biologist</p>		

<p>implemented:</p> <ul style="list-style-type: none"> ○ A suitable buffer (up to 500 feet for raptors; 100 feet for passerines) shall be established by a qualified biologist around active nests and no construction activities within the buffer shall be allowed until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest or the nest has failed). Encroachment into the buffer may occur at the discretion of a qualified biologist. Any encroachment into the buffer shall be monitored by a qualified biologist to determine whether nesting birds are being impacted. 				
<p>Mitigation Measure BIO-6: Northern Spotted Owl</p> <p>There are several documented Activity Centers and numerous observations for northern spotted owl (NSO) within two miles of the Study Area and there is potential for the species to occur in the surrounding Douglas fir forest. Before any ground-disturbing activities within 0.25 mile of suitable nesting, roosting, or foraging habitat for NSO, the following shall be followed to reduce impacts to NSO to less than significant:</p> <ul style="list-style-type: none"> • A qualified biologist, familiar with the life history of the NSO, shall conduct pre-construction surveys for nests as described in the <i>Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls</i> (USFWS 2012). Surveys shall take place between March 15 and August 31. <p>As per the U.S Fish and Wildlife Service (USFWS) 2012 survey protocol, a one-year, six-visit survey can apply to noise-disturbance only actions. The USFWS's 2012 survey protocol states that six visits that cover all NSO habitat within a 0.25-mile buffer of the project area will be effective until the beginning of the following breeding season, which is generally between February 1 to September 30. If operations are not completed by year two, three spot-check survey visits each year shall occur in years two and three or the project proponent can choose to utilize the two-year, six-visit survey protocol.</p> <ul style="list-style-type: none"> ○ If NSO are determined to be present within 0.25 mile of the Study Area, 	Before any ground-disturbing activities	Qualified Biologist		

<p>then further mitigation measures will need to be developed as deemed satisfactory by the USFWS and CDFW.</p> <ul style="list-style-type: none"> ○ If NSO surveys determine that no active NSO nests are present adjacent to the Study Area, then the project may proceed through the breeding season. 				
<p>Mitigation Measure BIO-7: Streamside Management Areas</p> <p>To comply with measure BR-P6 of the Humboldt County General Plan, development within Streamside Management Areas shall only be permitted where mitigation measures (Standards BR-S8 – Required Mitigation Measures, BR-S9 – Erosion Control, and BR-S10 – Development Standards for Wetlands) have been provided to minimize any adverse environmental effects and shall be limited to uses as described in Standard BR-S7 – Development within Streamside Management Areas (Humboldt County 2017). Further information regarding these mitigation measures is available in Chapter 10 of the Humboldt County General Plan.</p>	During construction.	Construction Personnel; Project Proponent		
CULTURAL RESOURCES				
<p>Mitigation Measure CUL-1: of Archaeological Construction Monitoring</p> <p>Due to the presence of numerous prehistoric and historic-era cultural resources both within the APE and in the project vicinity, a qualified archaeologist shall be retained to conduct Cultural Resource Monitoring during ground-disturbing activities associated with the project (including but not limited to grubbing, grading, shearing, and excavation). The on-site archaeologist shall then be able to examine newly exposed soils for cultural remains and/or changes in colors in exposed soils that might indicate the presence of archaeological materials. This Cultural Resource Monitor shall have “stop work” authority in the event that they believe they have encountered cultural materials and shall take daily notes and photographs documenting the construction activities observed and any cultural resources that are encountered. At the conclusion of the project, the Cultural Resource Monitor shall also provide a final monitoring report that summarizes the construction activities observed and any cultural concerns that were noted during the construction effort.</p>	During construction; Immediately upon discovery	Qualified Archaeologist (Cultural Resource Monitor)		
<p>Mitigation Measure CUL-2: Tribal Construction Monitoring</p>	During initial ground-disturbing activities;	Native American		

Due to the presence of the NRHP-listed Karuk *Panamenik* Ceremonial District contributing elements within the APE, as well as the proximity of the APE's ten additional prehistoric sites within 0.5 mile of the APE, a Native American Monitor from the Karuk Tribe shall be retained to conduct tribal monitoring during initial ground-disturbing activities associated with the project (including but not limited to grubbing, grading, shearing, and excavation). This Native American Monitor shall then be able to examine newly exposed soils for cultural remains and or changes in colors in exposed soils that might indicate the presence of archaeological materials or other culturally sensitive materials. This Monitor shall have "stop work" authority in the event that they believe they have encountered cultural or otherwise sensitive materials and shall take daily notes and photographs documenting the construction activities observed and any cultural resources that are encountered. At the conclusion of the project, this Monitor shall also provide a final monitoring report that summarizes the construction activities observed and any cultural concerns that were noted during the construction effort.

Mitigation Measure CUL-3: Inadvertent Archaeological Discovery

The following Point of Contact (POC) shall be notified immediately upon the inadvertent discovery of a potentially significant archaeological find:

- Lead or On-Site Contractor(s) whose activities led to inadvertent discovery, or whose on-going work may impact significant finds. Tribal Monitor has authority to immediately halt ground disturbing activities if potentially significant finds are discovered.
- Alex R. Watts-Tobin, Ph.D., Tribal Historic Preservation Officer, Karuk Tribe at (530) 627-3446.

1. Ground disturbing activities shall be immediately stopped if potentially significant prehistoric (Native American) archaeological artifacts or constituents are discovered. Examples include, but are not limited to, prehistoric artifacts (chipped stone or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash-stained midden soils, concentrations of fire-cracked rock and/or burned or charred organic materials. Ground-disturbing project activities may continue in other areas that are outside of the discovery locals.
2. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a

Immediately upon discovery	Monitor from the Karuk Tribe		
Immediately upon discovery	Point of Contact; Lead or On-Site Contractor; Tribal Monitor; Consulting Professional Archaeologist; THPO; County		

<p>reasonable buffer zone by the monitor.</p> <p>3. The discovery locale shall be secured (e.g., 24-hour surveillance) in consultation with the THPO if considered prudent to avoid further disturbances or maintain order if sensitive remains are exposed</p> <p>4. The monitor shall be responsible for immediately contacting by telephone the designated POCs to report the find and initiate the consultation process for its treatment and disposition:</p> <ul style="list-style-type: none"> • Alex R. Watts-Tobin, Ph.D., Tribal Historic Preservation Officer, Karuk Tribe at (530) 627-3446. <p>And in cases where a known or suspected Native American burial or skeletal remains are uncovered, the following contacts shall also be notified:</p> <ul style="list-style-type: none"> • Siskiyou County Corner – Phone (530) 842-8300 • Humbolt County Corner – Phone (707) 445-7242 • Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082 			
<p>5. Ground disturbing project work at the find locality shall be suspended temporarily while the landowner's Consulting Professional Archaeologist¹ conducts a field assessment and consults with the THPO, Lead Agency, or his/her designated representative and if applicable, State Office of Historic Preservation (OHP) staff, to determine appropriate treatment and disposition of the find. Ideally, a Treatment Plan may be decided within three working days of discovery notification. Where a project can be modified to avoid disturbing the find (e.g. through project redesign), this shall be the preferred option. Should human remains be encountered, the provisions of State laws shall apply (see below). The Treatment Plan shall reference appropriate laws and include provisions of analyses, reporting, and final disposition of data recovery documentation and any collected artifacts or other archaeological constituents. Ideally, the field phase of the Treatment Plan may be accomplished within five (5) business days after its approval; however, circumstances may require longer periods for data recovery.</p>			

¹ Qualified Professional Archaeologist: means an individual that meets the Secretary of the Interior's Professional Standards for an Archaeologist Principal Investigator and/or are listed as Registered Professional Archaeologists (see website at www.rpanet.org).

6. The landowner, its employees and agents including Contractors, shall be obligated to protect significant cultural resource discoveries and may be subject to prosecution if applicable State or Federal laws are violated. In no event shall unauthorized persons collect artifacts.
7. Any and all inadvertent discoveries shall be considered strictly confidential, with information about their location and nature being disclosed only to those with a need to know.

Mitigation Measure CUI-4: Inadvertent Discovery of Native American Remains and Grave Goods

The following policies and procedures for treatment and disposition of inadvertently discovered Native American remains shall apply.

1. If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern of affiliated Native Americans. Information about such a discovery shall be held in confidence by all project personnel on a need-to-know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
2. Violators of Section 7050.5 of the California Health and Safety Code may be subject to prosecution to the full extent of applicable law (felony offense). In the event that known or suspected Native American remains are encountered, the above procedures of SOP Part A for Inadvertent Archaeological Discovery (General) shall be followed (including notifications to those identified in A-4(a-e)), in addition to the provisions of California law (Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code), as follows.
3. The Coroner has two (2) working days to examine the remains after being notified of the discovery. If the remains are Native American, the Coroner has 24 hours (2 days) to notify the NAHC.
4. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) of the deceased Native American. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
5. Within 24 hours (2 days) of their notification by the NAHC, the MLD will be permitted by the property owner of the discovery locale to inspect the discovery site if they so

Immediately upon discovery

County Coroner;
NAHC; MLD;
Property Owner

- choose.
6. Within 24 hours (2 days) of their notification by the NAHC, the MLD may recommend to the property owner or his/her designated agent, as applicable, the means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those treatments recommended by the MLD may be considered and carried out (i.e., no photographs, analyses, etc. without MLD agreement).
 7. If the landowner does not accept the descendant's recommendations, the owner or descendant may request mediation by the NAHC.
 8. Discuss and confer means the meaningful and timely discussion with careful consideration of the views of each party's cultural values and, where feasible, seeking agreement.
 9. Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the property owner rejects the recommendation of the MLD and mediation between the parties by NAHC fails to provide measures acceptable to the property owner, then the property owner shall cause the re-burial of the human remains and associated grave offerings with appropriate dignity on the property in a location not subject to further subsurface disturbance.

GEOLOGY AND SOILS

Mitigation Measure GEO-1: Identification of Paleontological Resource During Project Construction

In the event a paleontological or other geologically sensitive resources (such as fossils or fossil formations) are identified during any phase of project construction, all excavations within 100-feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the appropriate representative at Humboldt County who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the County shall implement those measures which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code Section 21083.2

Immediately upon discovery

Qualified Paleontologist; County

NOISE

Mitigation Measure NOI-1: Construction Related Noise

The following shall be implemented during construction activities:

- The operation of tools or equipment used in construction, drilling, repair, alternation, or demolition shall occur between the hours of 8 a.m. and 5 p.m. Monday through Friday, and between 9 a.m. and 5 p.m. on Saturdays.
- No heavy equipment related to construction activities shall be allowed on Sundays or holidays.
- All stationery and construction equipment shall be maintained in good working order and fitted with factor approved muffler systems.

TRIBAL CULTURAL RESOURCES**Mitigation Measure TCR-1: Inadvertent Archaeological Discovery**

The following Point of Contact (POC) shall be notified immediately upon the inadvertent discovery of a potentially significant archaeological find:

- Lead or On-Site Contractor(s) whose activities led to inadvertent discovery, or whose on-going work may impact significant finds. Tribal Monitor has authority to immediately halt ground disturbing activities if potentially significant finds are discovered.
- Alex R. Watts-Tobin, Ph.D., Tribal Historic Preservation Officer, Karuk Tribe at (530) 627-3446.

1. Ground disturbing activities shall be immediately stopped if potentially significant prehistoric (Native American) archaeological artifacts or constitutes are discovered. **Examples include, but are not limited to, prehistoric artifacts (chipped stone or obsidian, arrow points, ground stone mortars and pestles), culturally altered ash-stained midden soils, concentrations of fire-cracked rock and/or burned or charred organic materials.** Ground-disturbing project activities may continue in other areas that are outside of the discovery locals.
2. An "exclusion zone" where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a

During construction activities

Construction personnel

Immediately upon discovery

Point of Contact; Lead or On-Site Contractor; Tribal Monitor; Consulting Professional Archaeologist; THPO; County

<p>reasonable buffer zone by the monitor.</p> <p>3. The discovery locale shall be secured (e.g., 24-hour surveillance) in consultation with the THPO if considered prudent to avoid further disturbances or maintain order if sensitive remains are exposed</p> <p>4. The monitor shall be responsible for immediately contacting by telephone the designated POCs to report the find and initiate the consultation process for its treatment and disposition:</p> <ul style="list-style-type: none"> • Alex R. Watts-Tobin, Ph.D., Tribal Historic Preservation Officer, Karuk Tribe at (530) 627-3446. <p>And in cases where a known or suspected Native American burial or skeletal remains are uncovered, the following contacts shall also be notified:</p> <ul style="list-style-type: none"> • Siskiyou County Corner – Phone (530) 842-8300 • Humbolt County Corner – Phone (707) 445-7242 • Native American Heritage Commission (NAHC) in Sacramento (916) 653-4082 				
<p>5. Ground disturbing project work at the find locality shall be suspended temporarily while the landowner's Consulting Professional Archaeologist² conducts a field assessment and consults with the THPO, Lead Agency, or his/her designated representative and if applicable, State Office of Historic Preservation (OHP) staff, to determine appropriate treatment and disposition of the find. Ideally, a Treatment Plan may be decided within three working days of discovery notification. Where a project can be modified to avoid disturbing the find (e.g. through project redesign), this shall be the preferred option. Should human remains be encountered, the provisions of State laws shall apply (see below). The Treatment Plan shall reference appropriate laws and include provisions of analyses, reporting, and final disposition of data recovery documentation and any collected artifacts or other archaeological constituents. Ideally, the field phase of the Treatment Plan may be accomplished within five (5) business days after its approval; however, circumstances may require longer periods for data recovery.</p>				

² Qualified Professional Archaeologist: means an individual that meets the Secretary of the Interior's Professional Standards for an Archaeologist Principal Investigator and/or are listed as Registered Professional Archaeologists (see website at www.rpanet.org).

6. The landowner, its employees and agents including Contractors, shall be obligated to protect significant cultural resource discoveries and may be subject to prosecution if applicable State or Federal laws are violated. In no event shall unauthorized persons collect artifacts.				
7. Any and all inadvertent discoveries shall be considered strictly confidential, with information about their location and nature being disclosed only to those with a need to know.				

Mitigation Measure TCR-2: Inadvertent Discovery of Native American Remains and Grave Goods

The following policies and procedures for treatment and disposition of inadvertently discovered Native American remains shall apply.

1. If human remains are encountered, they shall be treated with dignity and respect as due to them. Discovery of Native American remains is a very sensitive issue and serious concern of affiliated Native Americans. Information about such a discovery shall be held in confidence by all project personnel on a need-to-know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.	Immediately upon discovery	County Coroner; NAHC; MLD; Property Owner		
2. Violators of Section 7050.5 of the California Health and Safety Code may be subject to prosecution to the full extent of applicable law (felony offense). In the event that known or suspected Native American remains are encountered, the above procedures of SOP Part A for Inadvertent Archaeological Discovery (General) shall be followed (including notifications to those identified in A-4(a-e)), in addition to the provisions of California law (Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code), as follows.				
3. The Coroner has two (2) working days to examine the remains after being notified of the discovery. If the remains are Native American, the Coroner has 24 hours (2 days) to notify the NAHC.				
4. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) of the deceased Native American. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)				
5. Within 24 hours (2 days) of their notification by the NAHC, the MLD will be permitted by the property owner of the discovery locale to inspect the discovery site if they so				

<p>choose.</p> <p>6. Within 24 hours (2 days) of their notification by the NAHC, the MLD may recommend to the property owner or his/her designated agent, as applicable, the means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those treatments recommended by the MLD may be considered and carried out (i.e., no photographs, analyses, etc. without MLD agreement).</p> <p>7. If the landowner does not accept the descendant's recommendations, the owner or descendant may request mediation by the NAHC.</p> <p>8. Discuss and confer means the meaningful and timely discussion with careful consideration of the views of each party's cultural values and, where feasible, seeking agreement.</p> <p>9. Whenever the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the property owner rejects the recommendation of the MLD and mediation between the parties by NAHC fails to provide measures acceptable to the property owner, then the property owner shall cause the re-burial of the human remains and associated grave offerings with appropriate dignity on the property in a location not subject to further subsurface disturbance.</p>				
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Notes for Figure 6H-6—Typical Application 6 Shoulder Work with Minor Encroachment

Guidance:

1. All lanes *should* be a minimum of 10 feet in width as measured to the near face of the channelizing devices.
2. The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.

Option:

3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 feet may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely spaced channelizing devices, provided that the minimum lane width of 10 feet is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high intensity rotating, flashing, oscillating, or strobe lights.

Standard:

11. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
12. Shadow and work vehicles shall display high intensity rotating, flashing, oscillating, or strobe lights.
13. Vehicle hazard warning signals shall not be used instead of the vehicle's high intensity rotating, flashing, oscillating, or strobe lights.

Guidance:

14. All advance warning signs should be placed so that the path of travel for bicycles is not blocked, while maintaining visibility for road users.
15. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 6G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, the Bicycle Warning (W11-1) sign and the SHARE THE ROAD (W16-1P) plaque should be used to advise motorists of the presence of bicyclists in the travel way lanes.
16. Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, speed reduction countermeasures should be used to reduce traffic speeds in the TTC zone. Refer to Sections 6C.01 and 6D.03.
17. Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, before narrowing the outside lane other measures such as widening the outside shoulder to allow bicyclists and motor vehicles to travel side by side through the TTC zone should be considered.
18. If traffic volumes make it feasible, the two left lanes should be merged into one lane to avoid using the shoulder as a traveled way lane and allowing continued use for emergency purposes and bicycle travel.
19. When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 6G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, a separate path should be considered for bicyclists.

Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)

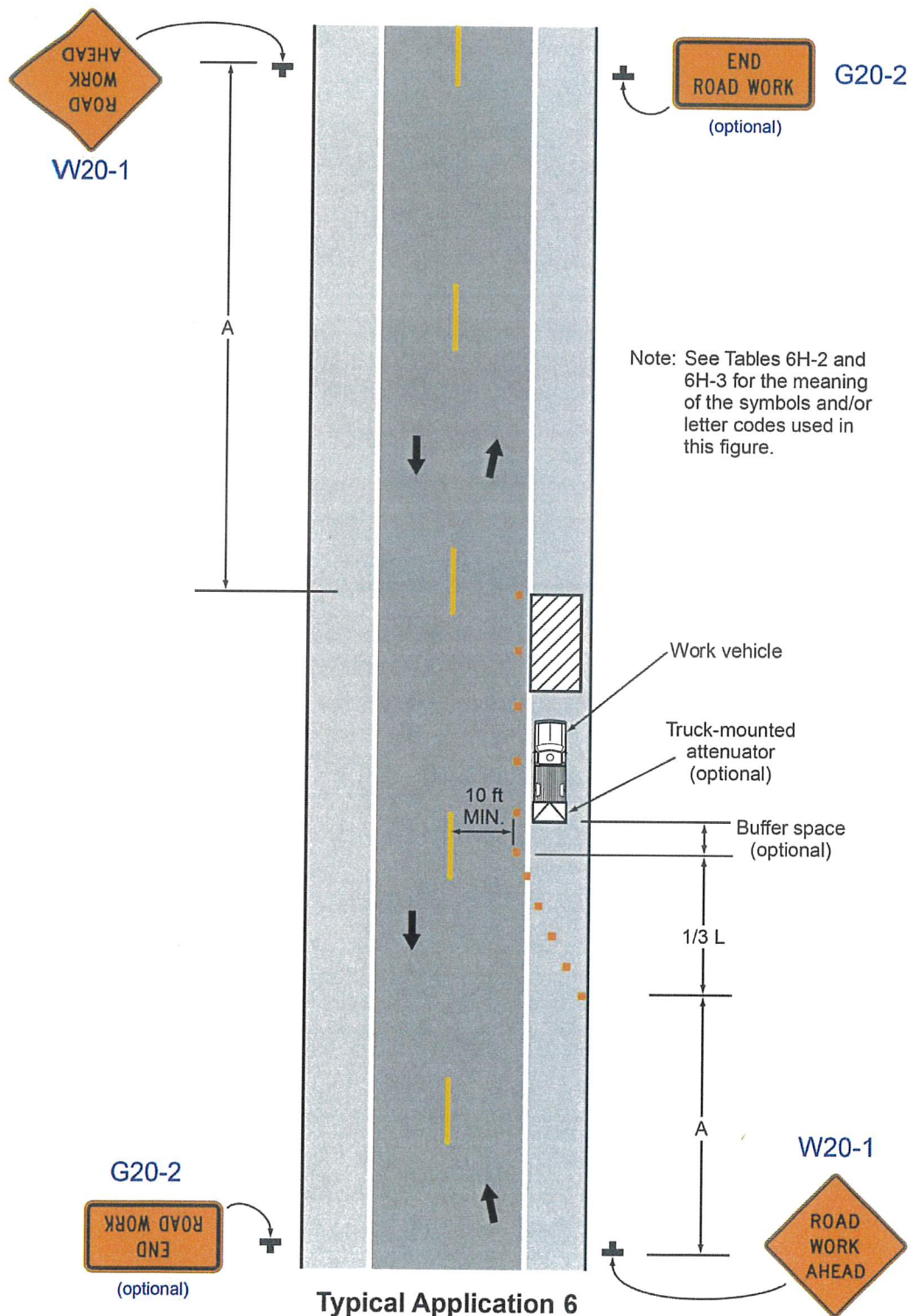


Table 6H-1(CA). Index to Typical Applications

Typical Application Description	Typical Application Number
Work affecting Pedestrian and Bicycle Facilities (see Section 6G.05)	
Shoulder Closure on Urban (Low Speed) Locations to Accommodate Bicyclists	TA-101(CA)
Lane Closure on Freeway, Expressway, Rural and Urban (High Speed) Locations to Accommodate Bicyclists	TA-102(CA)
Detour for Bike Lane on Roads with Closure of One Travel Direction	TA-103(CA)
Right Lane and Bike Lane Closure on Far Side of Intersection	TA-104(CA)
Work Within the Traveled Way of a Two-Lane Highway (see Section 6G.10)	
Lane Shift on Road with Low Traffic Volumes	TA-105(CA)
Work Within the Traveled Way of a Roundabout (see Section 6G.13)	
Partial Closure in a Single-Lane Roundabout	TA-106(CA)
Inside Lane Closure on a Multi-Lane Roundabout	TA-107(CA)

Table 6H-2. Meaning of Symbols on Typical Application Diagrams


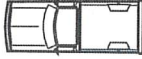





















	Arrow board		Shadow vehicle
	Arrow board support or trailer (shown facing down)		Sign (shown facing left)
	Changeable message sign or support trailer		Surveyor
	Channelizing device		Temporary barrier
	Crash cushion		Temporary barrier with warning light
	Direction of temporary traffic detour		Traffic or pedestrian signal
	Direction of traffic		Truck-mounted attenuator
	Flagger		Type 3 barricade
	High-level warning device (Flag tree)		Warning light
	Longitudinal channelizing device		Work space
	Luminaire		Work vehicle
	Pavement markings that should be removed for a long-term project		

Table 6H-3. Recommended Advance Warning Sign ~~Minimum~~ Spacing

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed) - 25 mph or less***	100 feet	100 feet	100 feet
Urban - more than 25 mph to 40 mph***	250 feet	250 feet	250 feet
Urban (high speed) - more than 40 mph***	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* ~~Speed category to be determined by the highway agency.~~

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

*** Posted speed limit, off-peak 85th-percentile speed prior to work starting, or other anticipated operating speed in mph.

Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

**Table 6H-4(CA). Taper Length Criteria for Temporary Traffic Control Zones
(for 12 feet Offset Width)**

Speed [*] S (mph)	Minimum Taper Length ^{**} for Width of Offset 12 feet (W)			
	Merging L (feet)	Shifting L/2 (feet)	Shoulder L/3 (feet)	Down Stream (feet) ^{***}
20	80	40	27	50
25	125	63	42	50
30	180	90	60	50
35	245	123	82	50
40	320	160	107	50
45	540	270	180	50
50	600	300	200	50
55	660	330	220	50
60	720	360	240	50
65	780	390	260	50
70	840	420	280	50
75	900	450	300	50

* - Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph.

** - For other offsets use the following merging taper length formula for L:

For speeds of 40 mph or less, $L = WS^2/60$

For speeds of 45 mph or more, $L = WS$

Where:

L = taper length in feet

W = width of offset in feet

S = posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

*** - Maximum downstream taper length is 100 feet. See Section 6C.08.

01st	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	NO. SHEETS
REGISTERED CIVIL ENGINEER				
September 20, 2024				
DATE OF EXPIRATION				
REGISTERED CIVIL ENGINEER				
NO. 33306				
EXP. 09-20-26				
THE STATE OF CALIFORNIA HAS ITS OFFICES				
AT SACRAMENTO, CALIFORNIA				
COPIES OF THIS PLAN SHEET				
COPIES OF THIS PLAN SHEET				



TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING									
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)					MAXIMUM CHANNELIZING DEVICE SPACING			
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	TAPER	X	Y	Z	**
mph	ft	ft	ft	ft	ft	ft	ft	ft	
20	160	80	40	27	20	40	40	10	
25	250	125	63	42	25	50	50	12	
30	360	180	90	60	30	60	60	15	
35	490	245	123	82	35	70	70	17	
40	640	320	160	107	40	80	80	20	
45	1080	540	270	180	45	90	90	22	
50	1200	600	300	200	50	100	100	25	
55	1320	660	330	220	50	100	100	25	
60	1440	720	360	240	50	100	100	25	
65	1560	780	390	260	50	100	100	25	
70	1680	840	420	280	50	100	100	25	
75	1800	900	450	300	50	100	100	25	

* - For other offsets, use the following merging taper length formula for L:
For speed of 40 mph or less, $L = WS^2/60$
For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet

W = Width of offset in feet

S = Posted speed limit, off-peak 85th-percentile

speed prior to work starting, or the anticipated

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891
75	820	866	927	1003

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Longitudinal buffer space or flagger station spacing

*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	280
URBAN - MORE THAN 40 mph	500	500	500
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer of field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL SYSTEM TABLES
FOR LANE AND RAMP CLOSURES

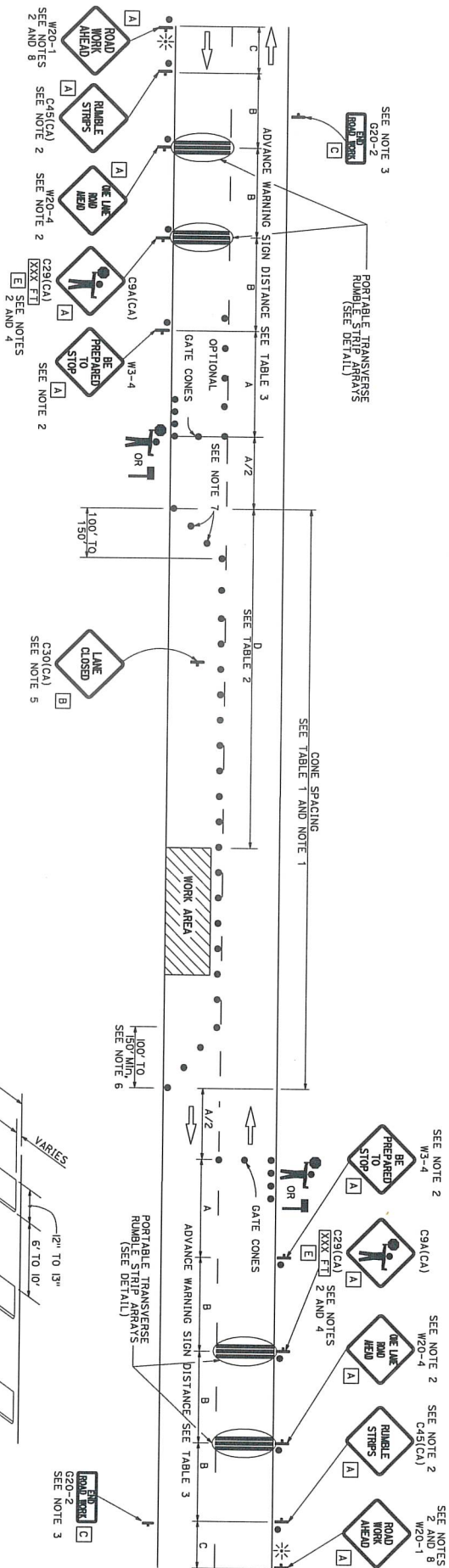
T9

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.

SIGN PANEL SIZE (MIN)

- A 48" x 48"
B 30" x 30"
C 36" x 18"
D 36" x 42"
E 20" x 7"



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. Sign must be equipped with at least two flags for daytime closures. Flags must be orange in color and of least 16 inches by 16 inches in size. Place flashing beacons as shown for closures during hours of darkness.
3. A G20-2 "END ROAD WORK" sign 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. An optional C29(CA) sign may be placed below the C9A(CA) sign.
5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area. They are optional if the work area is visible from the flagger station.
6. Length may be reduced by the Engineer to address site conditions.
7. Either traffic cones or barricades shall be placed on the taper.
8. If C45(CA) is not used, measure distance C from W20-4.

LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ✱ PORTABLE FLASHING BEACON
- FLAGGER
- AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

TRAFFIC CONTROL SYSTEM
WITH REVERSIBLE CONTROL ON
TWO LANE CONVENTIONAL HIGHWAYS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

NO SCALE

T13

01st	COUNTY	ROUTE	TOTAL PROJECT	SHEET TOTAL
REGISTERED CIVIL ENGINEER				
September 20, 2024				
PLANS APPROVAL DATE				
THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION				
PLANS ENGINEER				
REGISTERED PROFESSIONAL ENGINEER				
JAMES V. BORDO				
NO. 100000				
DATE EXPIRATION				
THESE PLANS ARE NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ENGINEER				