



# **COUNTY OF CALAVERAS**

## **DEPARTMENT OF PUBLIC WORKS**

**DRAFT**

### **GENERAL PERMIT CONDITIONS AND SPECIFICATIONS FOR**

### **STREET CUTS AND TRENCH RESURFACING**

**Board of Supervisors Workshop – May 2019**

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GENERAL

- 1.1 Authority to Enforce** – The authority to enforce this policy shall be granted to the Director of Public Works of the County of Calaveras, or his/her designee. For the purposes of these conditions and specifications, the Director of Public Works includes his/her designee who shall have authority to deviate from this policy and to specify alternate means and methods consistent with sound engineering principles in enforcing the objectives of this policy.
- 1.2 Permittee** – For purposes of this policy, Permittee shall mean the applicant and/or the owner of the facilities, or any and all successors in interest to the facilities, for which the permit was issued under the provisions of this policy.
- 13 Standards and Specifications** – All work within the public right of way shall be performed in accordance with the current applicable County of Calaveras and State of California standards and these Conditions and Specifications. Any deviation from these standards shall be approved in writing by the Director of Public Works.
- 14 Changes or Additions to Permit** – The Director of Public Works reserves the right to make any changes or additions to a permit after issuance if such changes or additions are determined to be necessary for the protection of the roads or for the health and safety of the public.
- 15 Relocation** – If any part of an installation interferes with the present use of roads by the general public or is in conflict with future or current County improvement projects, that part of the installation shall be removed or relocated as directed by the Director of Public Works at the expense of the Permittee or his successor in interest.
- 16 Utility Construction** – Permits for utility trenching, including utility service trenching, within County right-of-way, shall be issued to the respective utility purveyor or a California licensed contractor provided that the application meets all County requirements.
- 17 Licensed Contractor** – All excavation, repair and restoration in County road right-of-way shall be performed by a contractor with the appropriate license issued by the State of California Contractors License Board or by utility purveyor's regular employees.
- 18 Permit Possession** – Other than emergency repairs, there shall be no work performed in County road right-of-way until a utility encroachment permit is issued. A copy of this permit, a set of approved plans and permits required by any other legally constituted authority shall be on site at all times construction is in progress. Permits that require excavation shall be issued only after a Dig Alert/USA inquiry identification number is obtained.
- 19 Not Used** – Reserved for future use.
- 1.10 Permittee Responsibility** – In addition to all conditions herein and included in the encroachment permit, the Permittee is responsible for safety requirements within the limits of the project. The Permittee or his employees shall abide by all the regulations of any legally constituted authority.

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- 1.11 NPDES** – The Permittee is responsible for instituting Best Management Practices (BMP) to comply with National Pollutant Discharge Elimination System (NPDES) requirements when applicable.
- 1.12 SWPPP** – The Permittee is responsible for instituting Best Management Practices (BMP) to comply with Storm Water Pollution Prevention Plan (SWPPP) requirements when applicable. The Permittee is responsible for obtaining the State of California 2009-0009-DWQ Construction General Permit as applicable.
- 1.13 Hold Harmless** – The Permittee shall preserve and hold harmless the County and each officer and employee thereof, from any liability or responsibility for any accident, loss of damage to persons or property happening or occurring as a proximate result of Permittee’s negligence or the negligence of Permittee’s agents, servants, employees or contractors in the design or performance of any work undertaken under any permit granted to Permittee pursuant to the application.
- 1.14 Notification** – Permittee shall notify Public Works at 209-754-6402 a minimum of 48 hours (two full working days minimum), excluding weekends and holidays, prior to starting a project and prior to each subsequent phase of construction. In addition, the Permittee shall notify Dig Alert/USA at 800-227-2600 a minimum of 72 hours prior to any excavation. In emergencies, immediately contact the County Public Works Department and the assigned County Inspector at 209-754-6402.
- 1.15 Inspection** – All construction performed in relation to a Utility Encroachment Permit shall be inspected by the County prior to and during installation except as otherwise determined by the Director of Public Works. Construction performed without inspection may be subject to removal and replacement. The entire cost of removal and replacement shall be borne by the Permittee regardless of whether the installation removed was found to be defective.
- 1.16 Failure To Comply** – Should a Permittee fail to comply with the provisions of the street cut permit or the related requirements of any legally constituted authority, the Director of Public Works may order the Permittee to stop work, wholly or in part, until the discrepancies have been resolved to the satisfaction of the Director of Public Works. Upon satisfactory completion of corrections, written approval from the Director of Public Works shall be required before work resumes. Failure to comply may result in revocation of permits. The County may perform the work required to correct deficiencies or arrange for the work to be done, and the entire cost of the required work shall be borne by the Permittee.
- 1.17 Performing Work Without Permits** - Anyone failing to obtain all necessary permits of any legally constituted authority, the Director of Public Works will order the Permittee to stop work until the discrepancies have been resolved. The Director of Public Works reserves the right to pursue additional actions that may include (but are not limited to) revocation of any applicable County Business Licenses and a formal report issued to the California State License Board (CLSB). The Permittee shall be responsible for any additional expenses incurred by County Public Works staff as a result of their failure to obtain the necessary permits.
- 1.18 Encroachment Permit** – All work performed in the Public Right-of-Way (i.e. not on

private property) shall require an Encroachment Permit. The Encroachment Permit shall be obtained in advance of any work in the Public Right-of-Way. Application for the Encroachment Permit can be obtained from the Public Works offices located at 891 Mountain Ranch Road (Building D) in San Andreas. Encroachment permit applications are also available for download on the County's website at [www.calaverasgov.us](http://www.calaverasgov.us). Before work is started, the Permittee shall furnish names and telephone numbers of persons on-call if the County requires emergency work at the jobsite.

- 1.19 Encroachment Permit Conditions** – At a minimum, the Permittee shall comply with all general Encroachment Permit conditions and additional project specific conditions that may be added at the Director of Public Works discretion.
- 1.20 Warranty** – The Permittee shall warranty the trench repair for one year from the date of the County's acceptance of the work. Following the Permittee warranty period, the respective utility purveyor shall thereafter be responsible for the trench repair and maintenance.

## 1. PUBLIC CONVENIENCE AND SAFETY

- 21 Traffic and Access** – The Permittee's operation shall cause no unnecessary inconvenience to the public. The access rights of the public shall be maintained at all times and unless otherwise authorized, traffic shall be permitted to pass through the work area at all times. Safe and adequate bicycle, pedestrian and vehicular access shall be provided and maintained at all times unless otherwise approved by the County.
- 22 Traffic Control** – Traffic control shall conform to the current California Manual of Uniform Traffic Control Devices (MUTCD).
- 23 Working Hours** – Except for emergency repairs, no work shall be performed within County road right-of-way on weekends, County holidays, before 7 AM or after 6 PM unless authorized by the Director of Public Works.
- 24 Dewater Operations** – Release of, or the directing of water onto County roads shall be authorized only by the Director of Public Works and shall include traffic control, clean up, and erosion control and in accordance with these conditions and specifications. If erosion occurs, grading shall be as required to restore site conditions to a condition at or better than the original condition. Discharges shall comply with the National Pollutant Discharge Elimination System and with Federal law, State law and local ordinance.
- 25 Roadside Clearance** – No above ground utility facility will be allowed in a ditch line or within five feet of the road or road shoulder unless otherwise approved by the Director of Public Works.
- 26 Closing Roads** – No road shall be closed without authorization from the Director of Public Works except in the case of an emergency under the direction of an authorized agency. An authorized road closure will allow the detour of *through* traffic only. The Permittee shall provide a smooth dust controlled route that allows unimpeded access for emergency vehicles and residents at all times.

To apply for a road closure authorization, submit the following to the Department of Public Works

- Written request for the closure with the time schedule included.
- Justification for the road closure authorization.
- Detour route, sign type designation and sign locations.
- A minimum of ten (10) working days is required to process the application.

Road closures and other projects that have a significant impact on traffic may require additional public outreach and notification including (but not limited to)

- Deployment of Changeable Message Signs (CMS) at key locations to inform the public of the road closure at least one (1) calendar week prior to the start of work.
- Mailing or delivering of project information pamphlets or letters to residents affected by the road closure at least one (1) calendar week prior to the start of work.
- The issuance of a press release informing the public of the road closure at least one (1) calendar week prior to the start of work.

## **2. PRESERVATION OF PROPERTY**

- 31 Protection of Property** – The Permittee shall be responsible for the protection of public and private property adjacent to the work and shall exercise due caution to avoid damage to such property.

The Permittee shall repair or replace all existing improvements or landscaping damaged within the right-of-way that are not designated for removal on the approved plans. Such repairs and replacements shall match the original in finish and dimension. Trees, lawns and shrubbery that are not designated for removal on the plans shall be protected from damage or injury. If damaged or removed because of the Permittee operations, they shall be restored or replaced in as nearly the original condition and location as is reasonably possible as approved by Public Works personnel. The Permittee shall give seven (7) days' notice to occupants or owners of adjacent property to allow them to salvage or relocate plants, trees, fences, sprinklers and other improvements within the right-of-way that are designated for removal on the plans and would be destroyed because of the work. A copy of such notice to occupants of owners of adjacent property, or evidence of posting the work site shall be furnished to the Director of Public Works prior to issuance of a permit.

- 32 County Facilities** – Prior to construction, the Permittee shall assess the condition of County facilities within project limits and provide a written report to the Director of Public Works listing all damaged, defaced or missing pavement, sidewalk, curb, gutter, drainage facilities, shoulders, traffic signs, pavement markings, or hazardous conditions that may exist before work is started. Prior to final acceptance of the project, all County facilities shall be in the same or better condition as determined by the Director of Public Works.

- 33 Not Used** – Reserved for Future Use.
- 34 Survey Monuments** – The Permittee shall locate, protect or tie-out all survey monuments that may be disturbed or destroyed. Survey monuments shall be located, referenced and a Corner Record filed with the County Surveyor prior to the start of construction. Following completion of the work, the monuments shall be reset in the surface of the new construction, a suitable monument box placed thereon, or permanent witness monuments set as determined by the Director of Public Works and a Corner Record filed with the County Surveyor prior to final project notice of completion issued by the Department of Public Works. All work shall be performed under the direction of a licensed Land Surveyor or registered Civil Engineer authorized to practice Land Surveying at no expense to the County.

### 3. PROJECT SITE MAINTENANCE

Surplus soil, debris, rocks or building materials shall be contained during permit work and the site broomed regularly to reduce possibility of being carried by runoff into a storm drain, stream or natural drainage course or lake. At the completion of the permit work, the previous drainage patterns must be restored. Material shall not be placed in such a manner that might result in the blockage of any drainage structure at either the inlet or outlet. BMPs shall be used at all times in accordance with these conditions and specifications.

- 4.1 Clean up and Dust Control** – Throughout all phases of construction, including suspension of work, the Permittee shall keep the work site clean and free from rubbish and debris. The Permittee shall also abate dust nuisance by cleaning, sweeping, or other means as necessary. When power sweeping is required, a self-contained sweeper that picks up and contains the material shall be used. The use of water resulting in mud on roads or drainage facilities will not be allowed as a substitute for sweeping or other cleaning methods. All soil and construction material shall be removed prior to that portion of the road being made available to traffic.
- 4.2 Haul Routes** – When required by the Director of Public Works, haul route approval shall be obtained before beginning work. Approval will be issued within five (5) working days after filing of complete plans, fees and application to Public Works. Plans for haul routes shall specify the deposition site, and evidence shall be provided of all approvals for the deposition site. Care shall be exercised to prevent spillage on, or damage to County roads. Any such spillage or damage shall be removed or repaired immediately. If soil deposited in the public right of way is not cleaned immediately, the Director of Public Works may require immediate sweeping, the cost of which shall be borne by the Permittee. Dust control and traffic control shall be provided for all hauling operations.
- 4.3 Storage on County Roads** – There shall be no equipment or materials stored or stockpiled in road right-of-way except as approved by the Director of Public Works.
- 4.4 Snow Removal** – The County Public Works Division will remove snow on all County maintained roads that are safe for the snow removal operation. If conditions are such as to endanger personnel or equipment due to Permittee operation (sunken trenches, irregular paving, or other hazards) the County will cease snow removal operations.

The Permittee shall then be responsible for removal of snow and shall maintain any such portions of the roadway, including sanding operations, for a minimum width of 20- feet or as directed by the Director of Public Works.

**4.5 Emergency Response for Unsafe Jobsite Conditions** – The County, at its sole discretion, may elect to perform emergency work at the jobsite as necessary for the protection of the roads or for the health and safety of the public. The cost of all such emergency work at the jobsite shall be borne by the Permittee.

**4.6 Maintenance of Trenches** – Permittee shall perform continuous maintenance of all trenches, including periods of suspension of work, during the course of construction and shall maintain the trench for the life of the installation. The Permittee agrees to exercise reasonable care to periodically inspect and properly maintain this encroachment and immediately repair any damage to the roadway which occurs as a result of the work done under this Permit, including all damages which would not have occurred had this encroachment not been constructed. In addition, the Permittee agrees to conduct repairs upon the first day after receiving phone notification from the County.

#### **4. MATERIALS AND EQUIPMENT**

**51 Pavement Traffic Markings and Striping** – Pavement traffic markings and striping shall be painted with two (2) coats on the roadway surface with all-weather, oil- based paint, which conforms to the most current version of the Caltrans Standard Plans and Specifications unless otherwise approved by the Director of Public Works. All damaged or removed pavement markers shall be replaced in kind. Visual uniformity, as determined by the Director of Public Works, may require that adjacent markings and all markings within an intersection be repainted by the Permittee at no cost to the County.

**52 Asphalt Concrete** – Paving asphalt shall be ½ inch Type A, PG 64-16 unless otherwise approved by the Director of Public Works. Asphalt dike shall be Type A, 3/8-inch maximum.

**53 Base Material** – Base shall be Class II Aggregate Base or as approved by the Director of Public Works. Base material depth shall be a minimum of 4 inches or the depth of existing Aggregate Base, whichever is greater.

**54 Grading Equipment** – Grading of soil roads or soil shoulders may be accomplished by any means that will provide a smooth, compacted and uniform surface that varies less than 0.1-foot in 10-feet for line or grade up to 300-feet. Projects greater than 300-feet in length will require that grading be performed with approved motor grader equipment.



- 55 Track Equipment** – Track equipment and outriggers used on paved surfaces shall be equipped with street pads and be operated so as not to mar the surface or cause damage to any County facility. If pavement is marred, it shall be resurfaced over the entire width as required in Section 8, Trench Construction and Repair. If County facilities are damaged, they shall be replaced or repaired as specified in these conditions and specifications.
- 56 Paving Equipment** – Paving 6-feet wide or wider in a driving lane shall be accomplished by use of a paving machine. Shoulder paving and miscellaneous paving shall be installed as approved by the Public Works Inspector.

## 5. TRENCHING

- 61 Cal OSHA** – All excavations shall conform to the requirements of the State of California Division of Occupational Safety and Health as applicable. The applicant for a street-cut permit shall possess a permit to excavate from the Division of Industrial Safety, Department of Industrial Relations, State of California, and shall submit a copy of said permit with the street cut permit application as applicable.
- 62 New or Renovated Roads** – Trenching shall not be permitted in roads that have been paved within 5 years from the permit application date or for roads with a Pavement Condition Index (PCI) greater than 80 unless otherwise authorized by the Director of Public Works. If authorized, the trenching will be subject to additional requirements as specified by the Director of Public Works and these conditions and specifications. Jacking or directional boring may be required as determined by the Director of Public Works. Permittee shall determine alternate methods of making necessary repairs to avoid excavating in new or renovated roads. Exceptions to the above are as follows:
- Emergencies that endanger life or property.
  - Interruption of an essential utility service.
  - Work that is mandated by the County, State, or Federal legislation.
  - Service for buildings where no other reasonable means of providing service exists.
  - Boring is not feasible due to technical engineering reasons.

If an exception is granted, trenching and restoration efforts shall be governed by these conditions and specifications.

- 63 Depth of Installation** – Underground installations of wet utilities shall have a minimum cover below finished grade of 36” in accordance with Ordinance 2295 and as indicated by the attached drawings and applicable county standards.
- 64 Separation of Utilities** – Adequate separation shall be maintained between new or replaced underground main lines from existing sewer or water lines. The alignment of new main installations or replacement of existing mains shall be shown in the permit application. The Director of Public Works has final approval authority for all proposed alignments.

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Unless specifically authorized by the Director of Public Works:

- The minimum separation for new or replaced main lines running parallel shall be 3 feet from outside of pipe to outside of pipe.
- The minimum separation for new or replaced main line crossings shall be 1 foot clear from outside of pipe to outside of pipe.

- 65 Pavement Removal** – Paving shall be cut for removal and excavated in a manner that does not disturb the adjacent pavement. Paving shall be sawcut or cold planed for permanent repair as specified in these conditions and specifications. Remnant strips of paving less than 3 feet wide shall be removed and included in the replacement paving. Replacement paving along the edge of paving that does not have curb and gutter, AC dike or AC berm shall be a minimum of 2 feet wide. All efforts shall be taken to avoid pavement trenching within the wheel path.
- 66 Open Trench** – The maximum length of open trench (excavation or backfill not resurfaced) allowed during construction shall be the distance of construction that can be reasonably installed in a single day. Contractor’s personnel shall protect the traveling public from any open trenches at all times. Where pavement has been removed, a minimum of 2 inches of temporary paving or sufficient temporary paving to match the grade of the travel way (as applicable) shall be placed before that area is made available to traffic. Before leaving the project and at the end of each day, all areas of pavement removal, including sidewalk, drainage courses and driveway approaches, shall be backfilled, compacted and surfaced with temporary asphalt. Upon approval of the Director of Public Works, appropriate areas of the trench may be protected by plate bridging or protective fencing.
- 67 Trench Bridging** – Plate bridging in the traveled way shall be completed in accordance with Caltrans Standard Plans and Specifications and approved by the Director of Public Works prior to start of work.
- 68 Protective Fencing** – When protective fencing is used to secure an area, it shall be constructed of 6 foot high, pipe framed chain link panels or equal material, secured into position and placed in a manner that there are no gaps larger than 3 inches. Fencing shall be placed a minimum of 4 feet from the nearest driving lane and shall be protected by appropriate signing and barriers per Section 2.2, Traffic Control.
- 69 Trench Backfill** – Unless otherwise specified, the material obtained from the project excavations will be acceptable for use as fill or backfill, provided that all organic material and other material determined by the Director of Public Works to be unsuitable for fill is removed. Rocks, plain concrete rubble and pavement grindings obtained from the project will be permitted in the fill subject to the following limitations:
- In trenches up to 3 feet wide, the maximum dimension of any piece used shall be 6 inches; in trenches more than 3 feet wide, 1 foot is the maximum dimension.
  - Pieces larger than 4 inches shall not be placed within 1 foot of any structure.
  - Pieces larger than 3 inches shall not be placed within 1 foot of the sub-grade for paving.
  - Rocks or rubble included in the fill shall be mixed with approved material to

eliminate voids.

- The use of ¾" minus rock as backfill above the pipe blanket shall not be allowed due to the "conduit" effect and the tendency for water to collect in the trench.

Slurry Cement Backfill (two-sack per 2018 Caltrans Standard Specifications Section 19-3.02E) or greater is preferred for trenches located within an asphalt concrete surface and may be required in other road surfaces or on steep slopes as directed by the Director of Public Works. All trench backfill materials shall be compacted in accordance with these conditions and specifications.

- 6.10 Narrow Trench** – Unless otherwise authorized, trenches in paved areas which are one (1) foot or less in width shall be backfilled to pavement sub-grade with two-sack slurry or greater.
- 6.11 Boring (Jacking) Pits and Potholes** – When authorized by the Director of Public Works, boring (jacking) pits and potholes in paved areas may be backfilled to pavement sub- grade with two-sack slurry above the pipe blanket as a means of insuring proper sub- grade compaction.
- 6.12 Inclement Weather** – Other than emergency repairs or as directed by the Director of Public Works, there shall be no excavation within the traveled way of County roads during periods of inclement weather.
- 6.13 Manhole Construction** – Manholes shall remain below the grading plane until final paving has been completed and then set flush with the surface. In areas that require snow removal, the manhole frame shall be permanently set not less than 0.5 inches nor more than 0.75 inches below pavement surface. Backfill and testing shall be per Section 7, and shall be independent of the main line trench tests. In graded earth shoulders or earth flowline areas, manholes are to be protected in place.
- 6.14 Buried Cable Installation** – Direct burial of cables will not be permitted within paved road surfaces. Direct burial may be permitted within three feet of the travel way and shall not be allowed on the fill side of a mountainous roadway.

## 6. COMPACTION

- 7.1 Relative Compaction (RC)** – Soils and aggregates placed beneath paved surfaces and within 3 feet of the edge of pavement shall be compacted to achieve a minimum relative density of 95 percent of ASTM D1557 or Caltrans Test Methods CTM 216 and CTM 231. Soils and aggregates placed beyond 3 feet of the edge of pavement shall be compacted to achieve a minimum relative density of 90 percent of ASTM D1557 or Caltrans Test Methods CTM 216 and CTM 231.
- 7.2 Compaction Testing Frequency And Location** -- Trench backfill testing shall be at 250-foot maximum intervals. The Director of Public Works shall determine test locations. One test shall be performed for each 4 feet of depth or fraction thereof. Pavement sub-grade and pavement base material shall be tested at 500-foot intervals. Tests for backfill shall be taken at mid-depth of each 4 feet of backfill starting at the top of the installation. Twenty percent (20%) of laterals and one hundred (100%) of manholes shall be tested independently of the main line. Failure of a compaction test will result in the entire area represented by that test being uniformly reworked and

retested at a random location. The use of two-sack slurry in lieu of compacted materials shall be exempt from compaction testing requirements.

- 73 Test Reports** – Tests shall be certified by a registered California Civil or Geotechnical engineer or testing laboratory in accordance with the State of California test requirements. Test reports shall be listed individually for each trench or for each type and phase of construction. The test report shall include an accurate description of the test location. **Compaction reports shall be submitted to the County’s inspector and approved prior to permanent paving.** If an alternate compaction method has been approved in accordance to these conditions and specifications, alternate test reports specified at time of permit issuance shall be submitted.
- 74 Mechanical Compaction** – Backfill shall be placed in horizontal layers of thickness compatible to the material being placed and the type of equipment being used as specified by the Permittee’s soils engineer. Each layer shall be evenly spread then tamped or rolled until the specified relative compaction is attained.
- 75 Water Densification** – Currently not allowed.

## 7. TRENCH RESURFACING

- 8.1 Temporary Pavement** – Temporary asphalt compacted to 2 inches thick shall be placed and maintained in a smooth and compacted condition at all locations where paving has been removed before traffic is allowed to pass over such areas of pavement removal, in accordance with Section 6.6. Temporary asphalt shall be removed for permanent repair.
- 8.2 Pavement Repair - General** – Damaged paving adjacent to the trench edges shall be sawcut and removed in rectangular sections. Remnant strips of paving shall be removed and that area included in the paving repair per these conditions and specifications. Asphalt paving shall be placed in a minimum of two lifts and be in accordance with Caltrans Standards Section 39 and be a minimum of 95% RC. The repaired section shall be not less than 1 inch thicker than the existing paving but not less than 2 inches thick, except as approved by the Director of Public Works. Permanent paving shall be placed as soon as possible after compaction trench tests have been approved by the County and within sixty (60) days of completion of the subsurface installation. Deviation from this schedule shall receive prior approval by the Director of Public Works. In the event that the Director of Public Works determines that the finish paving should not be completed per the schedule above due to weather or other factors, the finish paving may be deferred up to six months. Prior to paving, areas to be joined with asphalt paving shall be cleaned of all soil and foreign material and tacked (100% coverage) with asphaltic emulsion or paint binder.
- 8.3 Permanent Pavement Repair** – Base paving shall be in compacted lifts a maximum of 3 inches thick. The use of ¾- inch maximum coarse (MC) PG 64-10 may be required at the discretion of the Director of Public Works. Finish course shall be a minimum of 1 inch and a maximum of 2 inches thick of ½- inch maximum medium (MM) PG 64-10 flush with the existing paving. Repair of trench sections over 6 feet in width shall be done utilizing a self-propelled vibrating screed paving machine (Barber-Greene or equivalent) and may be subject to additional requirements.

- 8.4 Cold Plane for T-Cut Trench** – If required by Public Works, trench edges shall be sawcut with straight lines and cold planed 1 ½ inches to a minimum of 1 foot beyond sawcut edge and shall be parallel and at right angles to the centerline of the road. For roads that have 2” of asphalt paving or less, alternate methods of t-cut trenching shall be discussed and approved by the Director of Public Works prior to construction.
- 8.5 Overlay Paving or Resurfacing** – When a trench is 300 feet or longer, pavement restoration shall be required in accordance with Table 8.5.1 below. The specific requirement will be determined before the issuance of an encroachment permit for the proposed work. Should work start prior to the issuance of an encroachment permit or without prior approval, the Permittee shall not be relieved from the responsibility of restoring the street.

In lieu of restoring the street, the County may require that the Permittee contribute cash for the cost of street restoration for the length of the trench and the width as specified hereinafter. This may occur when the County’s Capital Improvement Program (CIP) has identified the affected roadway for future paving or resurfacing. For additional information on roads scheduled for paving or resurfacing, please see the most recently adopted CIP. When trenching occurs in a road whose existing pavement/structural section has a PCI (Pavement Condition Index) of less than 45, the Director of Public Works shall only require restoration of the pavement within the trench in accordance with these conditions and specifications. The Permittee shall not be required to contribute cash for the cost of pavement restoration for roads with a  $PCI < 45$ .

When determining the cost of cash contributions, the Director of Public Works shall update unit costs for street overlay and resurfacing by utilizing cost data obtained from appropriate capital projects constructed within the county during the previous twelve months or from other sources as necessary to obtain representative costs for the quantities of work to be accomplished. The cash contribution from the Permittee will be used to defray the County’s cost of restoring the pavement in accordance with Table 8.5.1. Any damage to the roadway beyond the trench excavation as a result of negligence by the Permittee or his/her contractor shall be repaired to meet or exceed prior street conditions as determined by the Director of Public Works.

When trenching occurs on public roads, the trench negatively impacts the road structurally, resulting in an accelerated pavement and road degradation that would not occur otherwise. The trench also has aesthetic and rideability impacts that affect neighborhood quality of life and results in a public nuisance. The County expects the Permittee to restore the road to a condition at or better than the conditions prior to trenching activity and addresses **structural, aesthetic, and rideability conditions** as part of their restoration efforts. Table 8.5.1 addresses these concerns through various restoration techniques and alternatives. The Director of Public Works – at their discretion - will consider other options or alternatives that address these concerns. However, under no circumstance will the Director consider options that result in negative impacts to public roads and infrastructure for the sole benefit of the Permittee or their customers. Permittees are strongly encouraged to locate trenches in available shoulders or other unpaved areas whenever possible.

**Table 8.5.1 – Pavement Repair Options**

| Street Category | Options   |
|-----------------|---|
| A               | <b>Option 1</b> – Trenching prohibited. Directional boring or jacking may be permitted.<br><b>Option 2</b> - Grind and replace with 2” overlay over half road width.<br><b>Option 3</b> - 1 ½” overlay over entire road surface with shoulder backing as appropriate.   |
| B               | <b>Option 1</b> - Grind and replace with 2” overlay over half road width.<br><b>Option 2</b> – Type II or Type III Microsurface across entire road width.<br><b>Option 3</b> – Other approved resurfacing method to conform to current road conditions<br><b>Option 4</b> – Directional boring or jacking may be permitted. |
| C               | <b>Option 1</b> – Crack seal trench only. No additional pavement restoration required.  |
| D               | <b>Option 1</b> – Cash contribution in accordance with these conditions and specifications.   |

**STREET CATEGORIES**

**A**-Street newly constructed or repaved within 5 years of trench cut application date or PCI of 80 or greater.

**B**-Street in good or fair condition that have not been newly constructed or repaved within 5 years and PCI of less than 80 or greater than 45.

**C**-Street in poor condition, PCI 45 or less.

**D**-Street eligible for Permittee cash contribution in accordance with these conditions and specifications.

**8.6 Excessive Pavement Removal** – Removal of six or more separate areas of pavement or the removal of 15% of the total area of a lane and/or shoulder by a Permittee within a continuous 300-foot length of street, shall require permanent repair per Section 8.5.

**8.7 Cumulative Pavement Removal** – The Permittee shall not utilize measures to interrupt trenching activities in an effort to circumvent these conditions and specifications. When performing trenching work on various roads, the minimum 300-foot conditions is applicable as an aggregate total along any individual road segment. For example, if the Permittee trenches 200 feet at one location along Road A and then performs an additional 150 feet of trench work along another location along Road A, Section 8.5 of these conditions and specification shall apply unless otherwise approved by the Director of Public Works.

**8.8 Pavement Surfacing** – Where there are existing surface coats on the existing paving, open graded paving, chip seal or any type of surfacing that has been removed as a result of construction activity, such surfacing and paving shall be replaced in-kind.

**8.9 Driveway Approaches** – Driveway approaches constructed of asphalt concrete shall be repaired and shall also be overlaid 1-inch thick full width to the property line or resurfaced at the discretion of the Director of Public Works. The contractor shall be required to conform the driveway approach to the existing roadway at their expense if applicable. Gravel or other unpaved driveway surfaced shall be restored to a condition at or better than their prior condition in accordance with these conditions and specifications.

**8.10 Portland Cement Concrete** – Potholes or trenches in PCC shall be repaired by saw

cutting or grinding and removed in full panels at the score lines or as directed by the Director of Public Works. A minimum section of five feet by five feet shall be removed and replaced in the absence of panels.

- 8.11 Microsurface** – When directed by the Director of Public Works, Microsurface shall be a Type II polymer cationic micro-surfacing emulsion on top of the existing pavement surface in accordance with the current Caltrans Standard Specifications. The Director of Public Works may require a Type III Microsurface in lieu of a Type II when appropriate.
- 8.12 Trench Failure and Repair** – When the Director of Public Works notifies Permittee of a failure of the trench (settlement, excessive cracking or alligating, etc.) the Permittee shall coordinate the proposed trench repair method and schedule with the Director of Public Works.
- 8.13 Permittee Acknowledgment** – By acceptance of this Permit, the Permittee agrees that whenever future construction, reconstruction, or maintenance work upon the road may require relocation or removal of this encroachment, such relocation or removal upon request of the County shall commence within 30 days' notice and at the sole expense of the Permittee.

## **8. INSURANCE REQUIREMENTS**

- 91 Insurance Requirements** - Before issuing the encroachment permit, the qualified licensed contractor shall provide the County with evidence of General Liability Insurance in the amount of at least \$1 million and provide an endorsement naming the COUNTY OF CALAVERAS as additionally insured in accordance with the Encroachment Permit application requirements.

Standard Drawing  
Standard Utility Trench  
To Be Added at a Later Date



Standard Drawing  
Dry Utility Trench  
To Be Added at a Later Date