

AGREEMENT FOR SERVICES  
between the  
NORTHWEST CALIFORNIA RESOURCE CONSERVATION & DEVELOPMENT COUNCIL and  
XXX CONTRACTOR XXX

Relative to: Browns Creek Private Road Sediment Implementation Project near Deerlick Springs  
– BRN70 S6, 18/55, 31, 32, 3, 41, 53, & 52

This agreement, by and between the Northwest California Resource Conservation & Development Council, herein called "Council"; and XXX Contractor XXX, herein called "Contractor", shall be effective as of July X, 2016 until September 23, 2016.

- I. The Council's 5C Program desires to retain a qualified construction firm to assist the Council in the construction of the Browns Creek near Deerlick Springs Private Road Sediment Implementation Project.
  
- II. Contractor agrees to:
  - A. Perform construction work consisting of: replacing four to six existing stream crossing culverts with new culverts: three to four 48 in diameter by 20 ft long pipes and one or two 72 in diameter by 30 ft long pipes; installing two 18" diameter road drainage culverts, 20 ft and 50 ft long; applying approximately 1,070 ft<sup>2</sup> of geotextile fabric to all but one upgraded crossing; installing ten rolling dips and six to seven critical dips; rocking road with approximately 440 tons of road base; applying approximately 155 yd<sup>3</sup> of 12" rip rap and 150 yd<sup>3</sup> of 6" rip rap armoring; end-hauling spoils to designated areas; and implementing erosion and sediment control measures; management and removal of excess spoils and materials to designated areas; and restoration of the road(s) surface. Although the work will generally adhere to the specifications shown in Exhibit A, these treatments are subject to discussion and modification between Council staff, Council's consulting engineer and/or engineering hydrologist, and the private landowners of the subject roads. The work shall be done according to the instructions provided by Council's engineering hydrologist, Council's Contract Representative (CR), and/or Council's other qualified specialists.
  - B. Implement the Best Management Practices according to the specifications described in Exhibit B. Contractor shall keep a copy of the Best Management Practices on-site at the project location for the entire duration of the construction.
  - C. Comply with the terms of all permits and environmental documents prepared for the project. Contractor shall keep a copy of all permits and environmental documents on-site at the project location for the entire duration of the construction.
  - D. This work will be done and costs incurred on the basis of Time and Materials, as outlined in Exhibit C, and not according to a defined task list. As such, Contractor

agrees to provide all equipment and materials requested by CR and/or Council's consulting engineering hydrologist.

III. Contractor is not required to furnish a performance bond under this agreement. In lieu of a performance bond, guaranteeing the faithful performance of work thereof, Council and Contractor agree to the provisions specified in Exhibit D.

IV. Council agrees to pay Contractor for actual labor and services performed up to a maximum of \$X as specified in the Project Budget provided in Exhibit C. The following provisions apply:

- A. Invoices shall be consistent with the Budget Line Items provided in Exhibit C. Invoices shall document time spent, work done, and eligible expenses incurred. Invoices must be accompanied by itemized receipts as described in Exhibit C. This includes, but is not limited to, receipts for any materials that are paid based on volume, weight, or length. Council shall retain 10 percent of each payment, which shall be due upon completion or termination of this agreement.
- B. Contractor agrees to compensate its employees for work done under this agreement according to State general prevailing wage rates determined by the Director of Industrial Relations. It is further expressly agreed by and between Contractor and Council that should there be any conflict between the terms of this agreement and Contractor's bid or proposal, then this agreement shall control and prevail.
- C. Invoices shall be sent to the Council by the last day of each month to the Council address listed in Contact Information below.
- D. Council agrees to pay Contractor within 45 days of receipt of Invoice. Notwithstanding any other provision herein, payment may be delayed, without penalty for any period in which the State or Federal or Local Government has delayed distribution of funds that are intended to be used by the Council for funding payment to contractor.

V. Contact Information:

Payments and correspondence shall be sent to Contractor using the following contact information:

XXX Contractor XXX  
Attn: XXX Contractor XXX  
Address  
City, CA Zip  
Phone number  
email

XXX Contractor XXX

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Correspondence shall be sent to Council using the following contact information:

Northwest CA Resource Conservation & Development Council  
Attn: Sandra Pérez, 5C Program  
P.O. Box 2571  
Weaverville, CA 96093  
sperez@5counties.org

VI. Insurance:

Contractor shall maintain a minimum of \$1,000,000.00 of commercial general liability insurance or its equivalent on which the Council is named as an Additionally Insured.

Where the services to be provided under this agreement involve or require the use of any type of vehicle by Contractor in order to perform said services, Contractor shall also provide comprehensive business or commercial automobile liability coverage including non-owned and hired automobile liability in the amount of \$300,000.

Said policies shall remain in force through the life of this Contract. Contractors shall provide 30 day advance notice to Council of any termination or reduction in coverage.

The Certificate Holder and Additional Insured should read as follows:

Northwest California Resource Conservation & Development Council  
P O Box 2183  
Weaverville, CA 96093-2183

The insurer shall supply both Certificates of Insurance and endorsements signed by the insurer evidencing such insurance to Council.

Contractor shall also maintain Worker's Compensation Insurance or a State-approved self-insurance program that meets all applicable requirements of Section 3700 of the Labor Code of the State of California. This includes Employer's Liability with a minimum of \$250,000 limits, covering all persons providing services on behalf of Contractor and all risks to such persons under this Agreement.

VII. Contractor shall provide Council with a completed W-9 Request for Taxpayer Identification Number and Certification.

VIII. It is mutually agreed that:

A. This agreement will be effective until September 23, 2016.

- B. Either party may terminate this agreement by providing a 30-day written notice to the other party.
- C. This agreement may be amended or modified in writing, by the mutual consent of Council and Contractor.
- D. The Council, its officers, agents, and employees, shall not be liable or responsible for any injury or damage to persons or property resulting from the operations or activities of the Contractor or its employees while engaged in complying with any of the terms of this agreement. Contractor agrees to indemnify and hold harmless the Council and its officers, agents, and employees, from and against all claims and liability for damage or injury to persons or property resulting from the activities of the Contractor and their employees.
- E. No waiver of a breach of any provision of this Agreement shall constitute a waiver of any other breach, or of such provision. Failure of Contractor or the Council to enforce at any time, or from time to time, any provision of this Agreement shall not be construed as a waiver thereof. The remedies herein reserved shall be cumulative and additional to any other remedies in law or equity.
- F. The invalidity in whole or in part of any provisions of this Agreement shall not void or affect the validity of any other provision.
- G. This Agreement shall be governed by the laws of the State of California and constitutes the entire agreement between the parties and supersedes all prior negotiations, discussions and preliminary understanding. Furthermore, the parties acknowledge and agree that this agreement was entered into and in Trinity County. The parties agree that the venue for any action or claim brought by any party to this agreement will be the Superior Court of California, County of Trinity, unless otherwise agreed to by all parties. Each party hereby waives any law, statute (including but not limited to Code of Civil Procedure section 394), or rule of court that would allow them to request or demand a change of venue. If any third party brings an action or claim concerning this Contract, the parties hereto agree to use their best efforts to obtain a change of venue to the Superior Court of California, County of Trinity unless otherwise agreed to by all parties.
- H. Attorney Fees and Costs: If any legal action is instituted to enforce any of the parties' rights hereunder, each of the parties shall bear its own costs and attorneys' fees, regardless of who is the prevailing party. This paragraph shall not apply to those costs and attorneys' fees directly arising from a third-party legal action against a party hereto.
- I. Jury Trial Waiver. The parties hereby waive their respective rights to trial by jury and agree to accept trial by judge alone for any cause of action, claim, counterclaim, or cross-complaint in any action, proceeding, and/or hearing brought by either of the parties against the other on any matter arising out of, or in any way connected with, this Agreement, the relationship of the parties or any claim of injury or damage, or the

enforcement of any remedy under any law, statute, or regulation, emergency or otherwise, now or hereafter in effect.

IX. Certifications:

Contractor shall comply with and provide signed originals of the following certifications. The signed, original certifications shall, altogether, constitute Exhibit E:

- A. Equal Employment Opportunity Certification
- B. Public Contract Code Section 10285.1 Statement
- C. Public Contract Code Section 10162 Questionnaire
- D. Public Contract Code Section 10232 Statement
- E. Noncollusion Affidavit
- F. Debarment & Suspension Certification

X. The Northwest California RC&D Council prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. To file a complaint of discrimination write to Northwest California RC&D Council, P. O. Box 2183, Weaverville, CA 96093-2183.

XI. Attest:

XXX Contractor XXX	Date
Northwest CA Resource Conservation & Development Council	Date

## EXHIBIT "A"

### SPECIFICATIONS FOR WORK

Contractor agrees to adhere to the guidelines found in the Low Impact to Hydrology (LITH) Road Standards, attached here as Exhibit A (this page and the following 9 pages). However, if Council's consulting engineering hydrologist and/or CR instructs otherwise, Contractor shall comply with those instructions. The LITH guidelines were written for use on county roads. However, the design standards are applicable to other road ownership types, including private roads like the ones being treated in this project. Therefore, in the LITH, where "county road" is referenced, it is understood that the provisions apply to the private roads being treated as part of this project. The LITH guidelines are also available online at [http://www.5counties.org/docs/lith\\_standards.pdf](http://www.5counties.org/docs/lith_standards.pdf).

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## EXHIBIT "B"

### BEST MANAGEMENT PRACTICES

#### **Best Management Practices (BMPs) from the “Water Quality and Stream Habitat Protection Manual for County Road Maintenance in Northwestern California Watersheds” (Roads Manual)**

<http://5counties.org/Projects/FinalGeneralProjectPages/RoadsManual800.htm>

Select BMP sections from the Roads Manual are provided here for reference. Where “county road” is referenced, it is understood that the provisions apply to the private roads being treated as part of this project.

#### Culverts & General

- 4.A. 2. During any in-water work, minimize sediment impacts [see: B-9].
- 4.B. 8. Minimize disturbance of riparian vegetation during culvert improvement and repair operations and replace lost plants if needed to provide critical shade cover.
- 4.D. 6. Only install replacement culverts in a dewatered site, with a sediment and flow routing plan. [See: 4-F Temporary Stream Diversions]
- 4.D. 7. Store excavated spoils and equipment in a location that will prevent sediment delivery to watercourses. [See: Chapter 5 - Spoil Disposal]
- 4.D. 8. Maintain equipment to prevent leaks that may reach streams and clean before use near watercourses. Keep all fuel storage and staging materials out of the riparian area.
- 4.D. 9. Place spill contingency resources to contain a small to moderate spill (1-10 gallons) at each job site where equipment is used. Install oil absorbent materials downstream of in-water work sites to trap accidental spills or leaks into streams from equipment. Keep a Notification Checklist for hazardous spills on site and use if spill into stream occurs. [See: 8-C Accident Clean-up.]
- 4.D. 10. Fully restore disturbed sites within the riparian area with a mix of native, riparian plant species where disturbance of the shade canopy was significant due to the replacement project. If bare dirt sites result, apply erosion control measures. [See: Appendix B-4]
- 4.D. 12. Align culverts and other structures with the stream, with no abrupt changes in flow direction upstream or downstream of the crossing. This can often be accommodated by changes in road alignment or slight elongation of the culvert.
- 4.D. 13. Place bottomless arches and embedded culverts at or near the same gradient as the natural streambed and wider than the active stream channel. The active channel is considered to be the wetted channel up to the ordinary high water marks. Minimize the possibility that the new culvert will not cause any existing downstream channel enlargement to migrate upstream.
- 4.D. 14. At stream crossings, place embedded culverts at least one foot deeper than the streambed grade, or embedded at least 20% of its height; whichever is greater. If the culvert is



placed too low, the inlet can easily plug and overflow. If the culvert is placed too high in the fill, flow could potentially undercut the inlet, and erode the streambed and fill at the outlet.

4.D. 15. Protect both the inlet and the outlet *[of the culvert]* with armor to protect from scour, if feasible.

4.D. 16. Avoid installing shotgun culverts.

4.E. 6. Direct ditch culvert outlets past the end of the road fill and onto erosion-resistant areas, or onto outlet protection such as rock rip rap. Never direct outflow water onto unprotected loose erodible fill.

4.E. 7. Retain water in the drainage of origin whenever possible. When choosing the location for ditch relief culverts, minimize the transfer of water by ditches to other drainages, where feasible, practical and consistent with downstream ownership or use.

4.E. 8. Seat ditch relief culverts on the natural slope like stream-crossing culverts, if possible. Make sure that bedding and fill material are free of rocks and debris that could puncture the pipe.

- a. Compact backfill materials from the bed in accordance with County standards. Extend the outlet beyond the base of the road fill (or a flume downspout if used) and empty onto an apron of rock, gravel, brush or logs.
- b. Install at a 30-degree angle to the ditch to lessen the chance for inlet erosion and plugging. Use a slope of 2-4 percent more than the ditch grade, or at least 5 inches every 10 feet to ensure sufficient water velocities to carry sediment through the pipe. [See: Appendix B-3.6 for a standard design]

4.F. 7. For each job site where equipment is used:

- a) Install oil absorbent materials downstream of in-water work sites to trap accidental spills or leaks into streams from equipment. Store excavated spoils and equipment to prevent sediment delivery to watercourses [see: Chapter 5 – Spoil Disposal].
- b) Ensure spill contingency resources to contain a small to moderate spill (1-10 gallons) are in place.

### Temporary Stream Diversions

Description: Temporary diversions are often required during in-stream projects designed to maintain fish passage and/or water quality. Culvert replacements commonly need temporary or short duration stream channel diversions. A stream reach may be temporarily dewatered after the fish are removed and relocated upstream of the work area, and then excluded from the site until the project is completed. Fish exclusion of listed species is done only under the supervision of an agency, or other qualified, fishery biologist with an “incidental taking permit” from NMFS and DFW.

#### Environmental Concerns:

- Discharge of sediment and debris into a stream or storm water drainage system.
- Stranding and loss of juvenile or adult fish, and affecting instream habitat.
- Loss of riparian vegetation due to temporary lack of water.

#### Pertinent Best Management Practices:

4.F. 1. Make sure the temporary diversion channel is capable of carrying the anticipated streamflows during the construction period.

4.F. 2. Where anadromous fish are present, work closely with a qualified agency or consulting fishery biologist who has the needed permits. For listed species, the incidental and direct take permits will require reasonable and prudent measures (RPMs) to be used. Follow these permit requirements under the supervision of the fishery biologist.

4.F. 3. Have the supervising biologist remove all fish out of the affected area before dewatering any stream section. If fish are still found stranded in the dewatered channel, immediately transport them to the active channel following the directions of the biologist (usually by netting, electrofishing and/or pumping the fish with an approved fish-friendly method).

4.F. 4. Complete the diversion before or after typical upstream fish migration periods (see Table 1-2 and ask local DFW fishery biologist for local timing). If this is not possible, install a diversion pipe capable of passing fish or other method approved by DFW. [See: Appendix B-3.4 for baffle designs]

4.F. 5. Maintain fish passage in the new channel at all times and make sure that the water pumping hose/culvert has an adequate screen to avoid fish entrainment, unless otherwise approved by NMFS and DFW. [See: 3-B-3 Water Drafting for temporary screening practices.]

4.F. 6. Isolate the diversion channel from the natural channel during excavation.

4.F. 7. For each job site where equipment is used:

- a) Install oil absorbent materials downstream of in-water work sites to trap accidental spills or leaks into streams from equipment. Store excavated spoils and equipment to prevent sediment delivery to watercourses. [See: Chapter 5 – Spoil Disposal]
- b) Ensure spill contingency resources to contain a small to moderate spill (1-10 gallons) are in place.

4.F. 8. Line diversion channel with filter fabric, visqueen or a similar material and anchor with rock or sandbags to hold it in place. The purpose is to prevent the bed and banks of the diversion channel from eroding at expected flows.

4.F. 9. When diverting the flow into the temporary channel, first remove the downstream plug of the temporary channel, followed by the upstream plug. Next, close the upstream end of the natural channel and then close the downstream end.

4.F. 10. If a tributary enters the former channel within the diversion area, connect the tributary to the new dewatering channel. If any channel change is done to intercept a tributary, move the channel back to its original shape and location at the completion of the temporary diversion.

4.F. 11. To restore flow to the natural channel, first remove the downstream and then the upstream plug of the natural channel. Next, close the upstream end and then the downstream end of the diversion channel.

4.F. 12. After removing any man-made material, backfill the diversion channel and stabilize the stream banks. Revegetate disturbed riparian areas with naturally occurring plants and grasses.

4.F. 13. An alternative to a temporary stream diversion channel is to impound the flow and transport the flow around the site via pumps and piping. This practice requires screening of the

stream at the pumps and removal of any fish from the dewatered site after installing fish blocking screens above and below the site.

Spoil Disposal:

5.A. 2. Follow these acceptable site characteristics in the site election & design process:

- a) Seek a stable site where sediment cannot reach the stream during any high water event.
- b) Avoid adjacent riparian corridors or any area within the 100-year floodplain.
- c) Avoid all wetland sites as these sites are protected from disposal activities and permits will be required and may not be granted.
- d) Avoid placing spoil on unstable slopes, where the added weight could trigger a land movement. Excessive loading of clay or silt soils could also trigger a failure.
- e) Use wide, stable locations such as rock pits, ridges, and benches as places to dispose of fill. Avoid locations where ground water emerges or a thick organic layer is present.
- f) Avoid sites with endangered or threatened plant species. *Search the California Natural Diversity Database [//www.DFW.ca.gov/whdab/html/cnddb.html] for any known listed plant sites in the area. Seek site evaluations by qualified botanists during the appropriate season before selecting a new site. [Italicized section here to be performed by Council.]*

5.A.2. 1. Avoid placing excess spoils into stream courses and adjacent riparian zones where it could potentially result in sediment delivery to streams.

5.A.2. 2. Drain spoil piles to prevent the concentration of flow and to prevent rill and gully erosion.

5.A.2. 3. Spread material not to be re-used in compacted layers and generally conforming to the local topography.

5.A.2. 4. Separate organic material (e.g., roots, stumps) from the dirt fill and store separately. Place this material in long-term, upland storage sites, as it cannot be used for fill. Leave all organic material that can safely remain in adjacent riparian zones. Make stored woody debris available to others as large wood for placement in streams for habitat improvement.

5.A.2. 5. Store “clean” material in a short-term disposal site (stockpile) if it will likely be re-used for fill or shoulder widening projects. Verify if material can be used for shoulder widening. [See:

5.A.3. 1. Do not add excess unusable material to permanently closed sites.

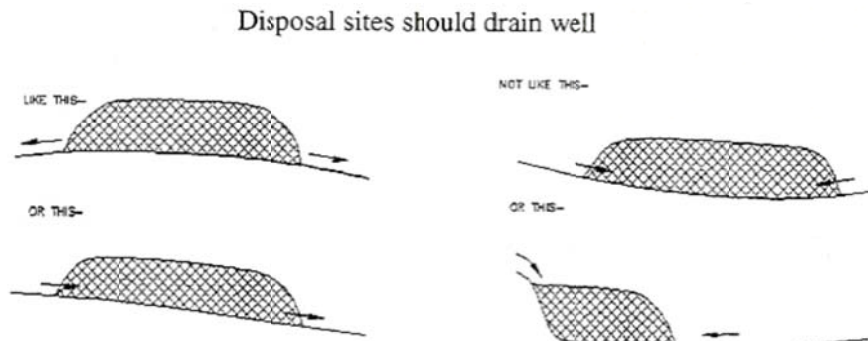
- a) Spread material not to be re-used in compacted layers, generally conforming to the local topography.
- b) Design the final disposal site reclamation topography to minimize the discharge of concentrated surface water and sediment off the site and into nearby watercourses.
- c) Cover the compacted surfaces with a 6-inch layer of organic or fine-grained soil, if feasible.
- d) After placement of the soil layer, track-walk the slopes perpendicular to the contour to stabilize the soil until vegetation is established. Track walking creates indentations that trap seed and decrease erosion of the reclaimed surfaces.
- e) Revegetate the disposal site with a mix of native plant species. Cover the seeded and planted areas with straw compost, mulched with straw at a rate of 1 to 1 ½ tons per acre. Apply jute netting or similar erosion control fabric on slopes greater than 2:1 if site is erosive.

### 5-B-1

Keep temporary disposal sites out of wetlands, adjacent riparian corridors, and ordinary high water areas as well as high risk zones, such as 100-year floodplain and unstable slopes.

Anticipate sufficient storage area with no risk for sediment delivery for piles that may slump. Stress cracks indicate that the pile is at risk of slumping. See figure below.

Follow BMPs in 6-D-4 (Outdoor Storage of Raw Materials), where possible. Reuse and recycle concrete, asphalt, and other construction waste when possible.



*Choctawhatchee, Pea & Yellow Rivers Watershed Management Authority (2000)*

Source:

#### 1. 8-c-4 For spills on roadways:

- a) Contain spill so it does not enter flowing waters of the stream system, including the storm drain system along the roads;
- b) Ensure that each county road project site contains spill clean-up/ emergency response kits with sufficient materials to contain at least a small to moderate spill (1-50 gallons);
- c) Minimize further tracking of spilled material.

Selected BMPs and standard designs from the:

**Best Management Practices (BMPs) from the “Water Quality and Stream Habitat Protection Manual for County Road Maintenance in Northwestern California Watersheds” (Roads Manual)**

- Ditch Relief Culvert (B-3.6)
- Mulching (B-4.4)
- Planting (B-4.5)
- Plastic Covering (B-4.6)
- Seeding (B-4.8)
- Slope Treatments (B-4.10-11)
- Straw log or Roll (B-4.12)
- Dewatering (B-8.3)
- Diversion Channel (B-8.5)
- SANDBAG B-8.7
- Stream Bypass (B-8.10)
- Silt Fence (B-9.6)
- Straw Bale Barrier (B-9.8)

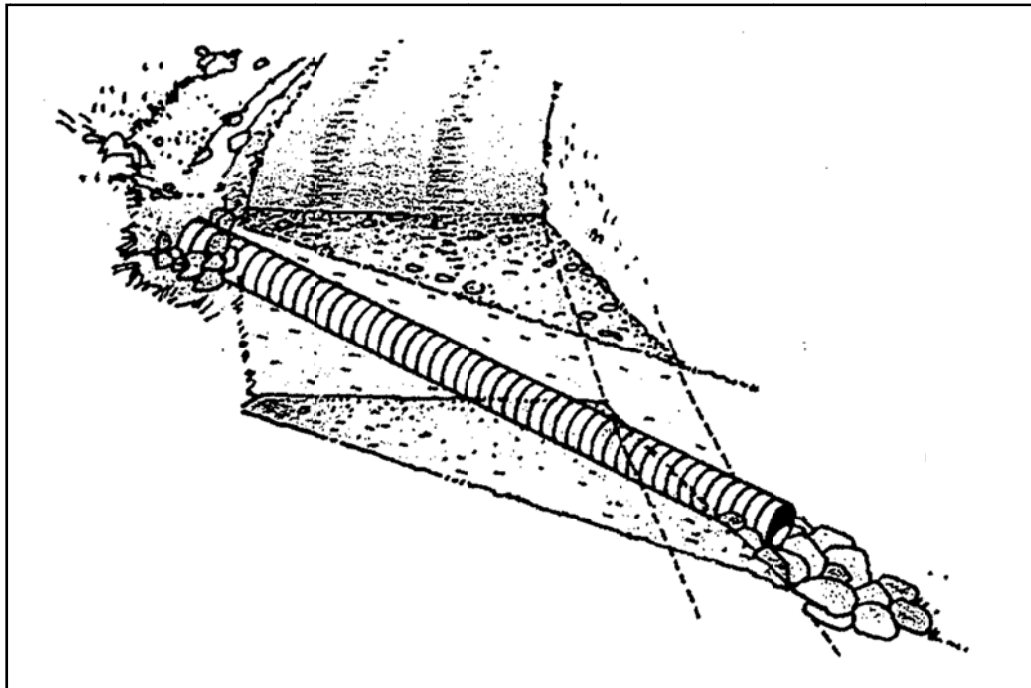


Figure 1. Like stream crossing culverts, ditch relief culverts should be installed at the base of the road fill, with armoring at the inlet and some type of energy dissipation at the outfall. If the culvert is placed higher in the fill, a downspout should be used to carry flow from the outlet downslope past the base of the fill.

Source: Weaver, W.E. and D.K. Hagans. 1994. Handbook for Forest and Ranch Roads.  
Mendocino County Resource Conservation District, Ukiah CA.

# MULCHING

## B-4.4

**Description:** Mulching is the application of straw, wood chips, or other suitable materials on the soil surface applied manually or by machine. Plant-made materials will eventually decompose (biodegrade).

**Purpose:**

- Helping as a temporary, short-term practice
- Reducing erosion by protecting the soil surface from raindrop impact
- Decreasing surface water or wind velocity impacts
- Fostering the growth of vegetation by increasing available moisture and providing insulation against extreme heat and cold.

**How to Use:**

- Apply over areas already seeded or planted to provide soil protection and insulation.
- Cover soil sufficiently to allow seeds to germinate but thicker where seeding germination is not an issue.
- Nets and matting may be used in combination with mulch, and can help keep mulch from blowing away.
- Various types and sizes of mulch are available.
- Apply additional mulch where erosion or scouring occurs.
- Repair if a tear in the cover netting or matting occurs.
- Inspect weekly during construction or immediately after rainstorms.

**When NOT to Use:**

- On slopes steeper than 2 horizontal to 1 vertical
- In watercourses and streams
- In ditches where water flow is continuous.

**Source:** King County. 2000. Regional Road Maintenance Endangered Species Act Program Guidelines. Seattle WA. p. 2.103.

# PLANTING

## B-4.5

**Description:** This practice includes the planting of appropriate species of trees or shrubs on bare slopes (such as the road cut or fill slope), along a ditch or channel, or adjacent to streams.

### **Purpose:**

- Helping provide long-term stabilization of slopes through the plants' roots and leaf litter
- Providing shade and riparian cover near streams to provide better aquatic habitat. Trees may eventually contribute large woody debris (LWD) to the stream for instream benefits.

### **What to Do:**

- Correct choice of plant species and proper planting technique are critical to good plant survival.
- Obtain container-grown or bare-root stock of native species found in the vicinity of the planting site from a nursery in the region. Large quantities (>100 plants of 1 species) may need to be special ordered (grown under contract) with the nursery at least 6-12 months in advance.
- For moist areas, an option is to collect willow sprigs from a grove of willows near the area when dormant: sprigs should be at least ½ inch in diameter and 18 inches long, with 2-3 inches diameter and 3-4 feet long being the best.
- Handle seedlings carefully and ensure they are kept sufficiently watered (soil mixture is damp, not dry or soggy) and shaded until site is ready to plant. In cool, damp weather, seedlings are vulnerable to mold. Plant willow sprigs same day as cut.
- Clear away loose organic material, such as leaves and grasses, from the planting spot to expose mineral soil.
- Dig hole with shovel or hoedad to be deep and wide enough for the roots to be fully extended. Fill hole, being sure soil falls around roots, and tamp soil firmly around base of plant with heel. Willow sprigs need to be 75-80% buried into the soil.
- Add slow-release fertilizer tablet into hole, especially on poor soils.
- Water site - if possible – immediately after planting and weekly during dry periods of the first year. An attachment from a water truck can be used to hand irrigate near roads.

### **What NOT to Do:**

- Plant in the summer months and where watering is not available.
- Plant trees within the Safety clear zone areas that could become hazards.
- Plant willow sprigs upside down (avoid this by making sure buds are pointing up)

**Sources:** King County. 2000. Regional Road Maintenance Endangered Species Act Program Guidelines. Seattle WA. ; CDFW. 1998. California Salmonid Stream Habitat Restoration Manual.



# PLASTIC COVERING

B-4.6

## **Purpose:**

- Covering exposed areas needing immediate temporary protection from soil erosion that cannot be covered by mulching
- Helping protect bare soil areas during winter months before grass seed can germinate
- Covering steep slopes, construction sites, and on stockpiles where surface runoff can be controlled from the plastic covered area.

## **How to Use:**

- Secure plastic by staking or using weight (e.g., Sandbag or tires) to prevent movement. Rebar must not be used as a staking mechanism
- Key plastic covering in at the top of the slope.
- Apply additional BMPs, such as a berm or sediment control, to control surface water runoff from plastic.
- Inspect weekly and make any needed repairs or replacements.
- Remove plastic when area has stabilized or there is no longer the potential for sediment runoff from the site.

Source: King County. 2000. Regional Road Maintenance Endangered Species Act Program Guidelines. Seattle, WA.

# SEEDING

## B-4.8

**Description:** This practice spreads grass and forb seeds on disturbed or bare soil by the dry method (e.g., hand broadcasting, a hand -seeding device, blower) or hydraulic method (slurry mix of seed, fertilizer, water and mulch applied under pressure).

**Purpose:** To establish vegetative cover on exposed soil areas that will help decrease soil erosion. Seeding can be done for temporary or permanent purposes.

### What to Do:

- Prepare site by removing weeds and debris, then loosening and roughening seedbed with a rake to 2-4" deep, if possible. Follow by raking smooth to a depth of ½ inch.
- Select seed mix carefully. Species or variety selection should be based on:
  - Performance (high survival rate) under local climate conditions
  - Protection of native grass communities
  - No tendency to spread (be "non-invasive") or become a weed if an exotic
  - Need for annual (short-term) and/ or perennial (long-term) mix of species
  - Commercial availability of seed (see Chapter 12-D Supplies).
  - Examples of Effective Native Seed Mixes: (a) Blue wildrye, California Brome, Idaho fescue, Squirreltail – for hot, dry sites; (b) Slender hairgrass, tufted hairgrass, red fescue, and California meadow barley – for moist sites
- Spread seed at appropriate time of year (Sept. 1- Oct. 15 best) and application rates (ranging from 15-80 lbs/acre). A hand-seeding device can apply more uniformly than hand broadcasting. Hydromulch may be better for applying to steeper slopes.
- Apply a slow-release fertilizer (such as ammonium phosphate 16-20-0) at recommended rate (e.g., 100 lb/acre). Re-apply in the second growing season to get full establishment.
- Rake lightly after seeding to cover seeds with a ½ to 1 inch layer of soil.
- Cover with certified weed-free (see County Agriculture Commissioner) straw (rye, barley, rice) mulch as needed to protect the surface during germination. [Note: "Organic" straw mulch is not the SAme thing and may contain many weed seeds.] Application rate varies at 2,000 -3,000 lbs/acre. See B-4.4 Mulching
- Only use tackifiers on very steep slopes, if needed to hold down mulch. Be sure the type selected is non-toxic (e.g., not the asphalt-type).
- Irrigate if rainfall is insufficient to keep soil moist during seed germination and establishment.
- Re-seed if established grass cover is inadequate after one growing season.

### What NOT to Do:

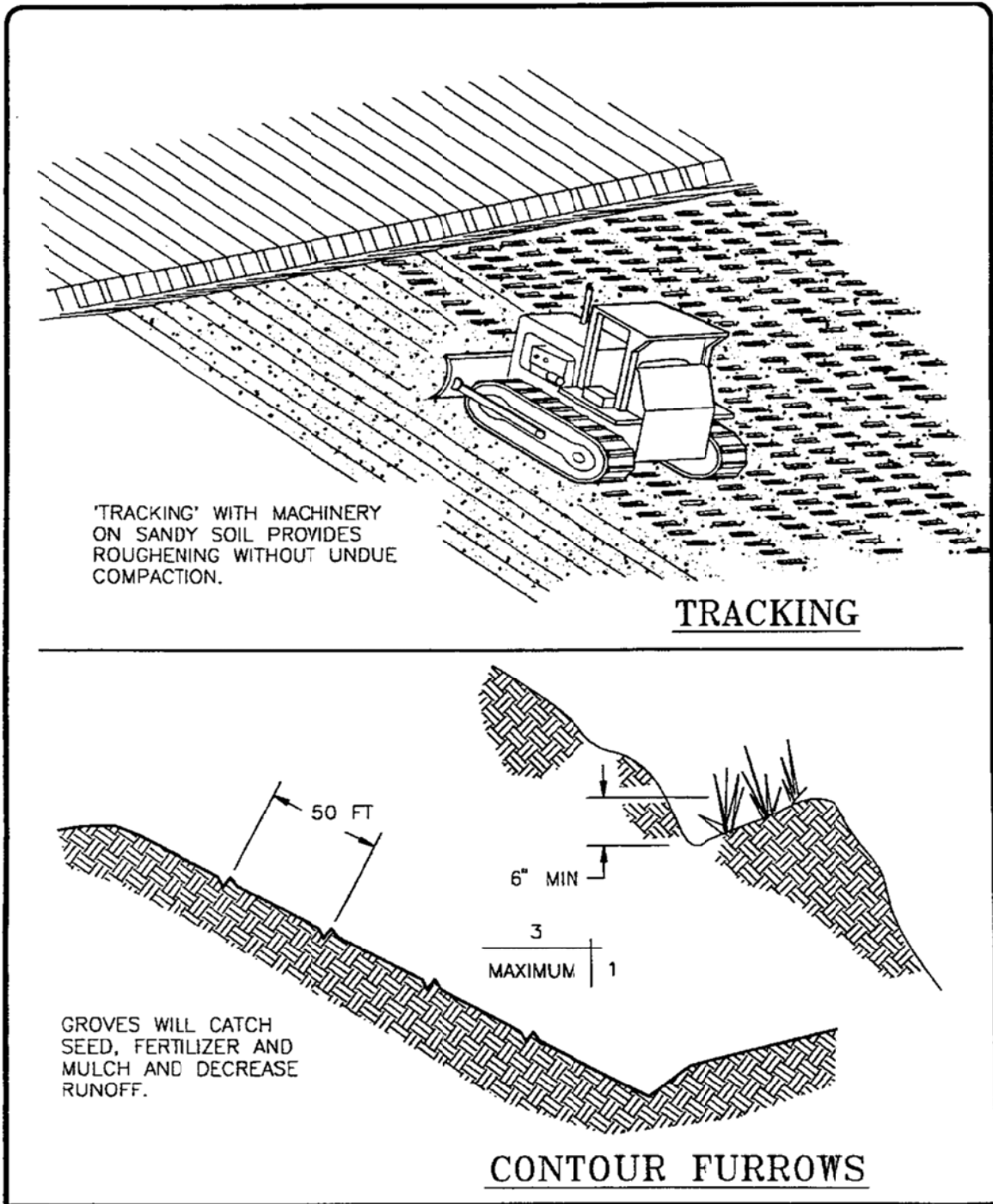
- Do not cause more harm than good by introducing new invasive weeds into an area that can compete with the native grasses.
- Do not skimp on the amount of mulch during the first year of seed establishment.

Sources: Eel County RCD, Native Grass mixes; McCullah, J. 1992. Erosion and Sediment Control Standards Design Manual – County of Shasta.; King County. 2000. Regional Road Maintenance Endangered Species Act Program Guidelines. Seattle, WA.;; Klamath National Forest, Seeding Specifications

# SLOPE TREATMENTS:

B-4.10

## SURFACE ROUGHENING & TRACKING

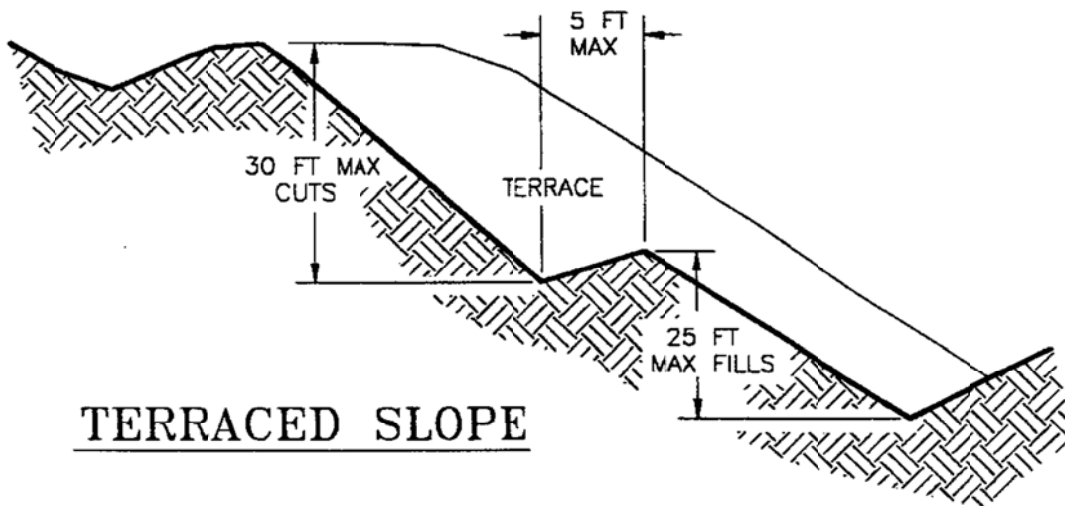
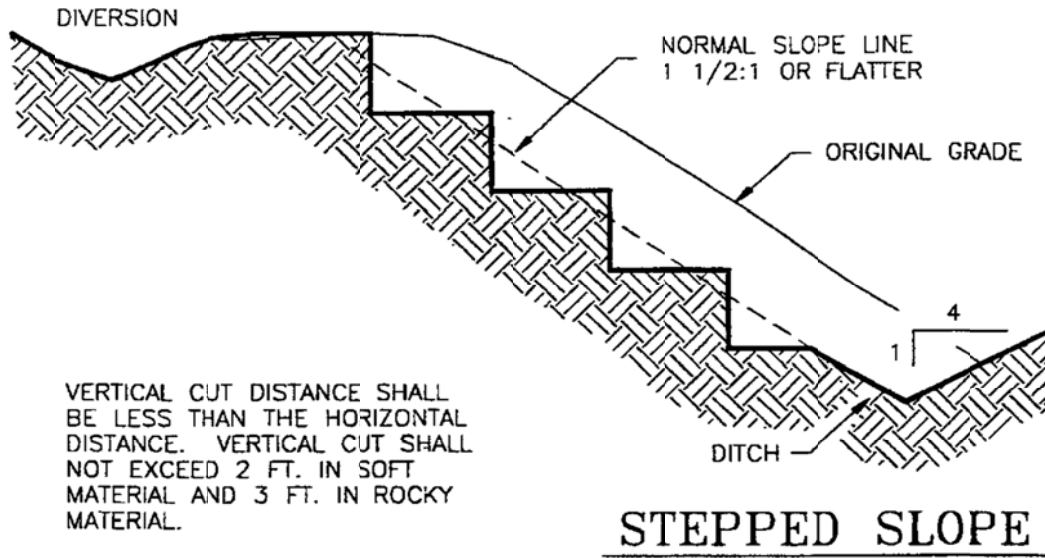


Source: McCullah, J. 1992. Erosion and Sediment Control Standards

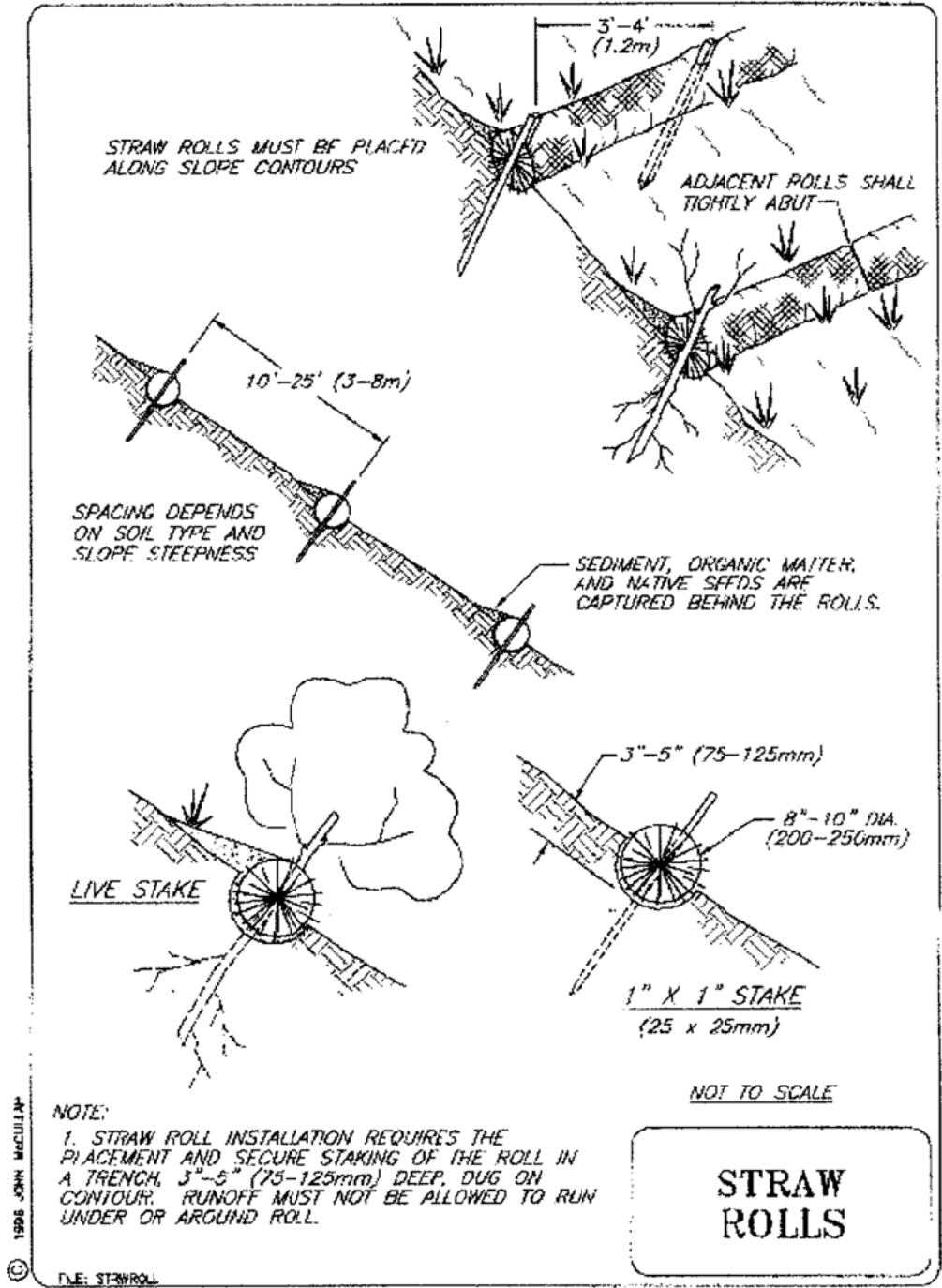
Design Manual – County of Shasta. Western Shasta RCD.

# SLOPE TREATMENTS: STEPPED OR TERRACED SLOPE

B-4.11



Source: McCullah, J. 1992. Erosion and Sediment Control Standards  
Design Manual – County of Shasta. Western Shasta RCD.



Sources: John McCullah copyright. Found at: //www.strawwattle.com Or //www.earth-SAvers.com

# DEWATERING

## B-8.3

**Description:** Dewatering can be used to keep water from a work area by using any or all of the following: pump, barrier, vactor, or bypass culvert.

**Purpose:**

- Allowing work to be performed in dry conditions
- Reducing the transport of soil particles by flowing water
- Reducing the liquefaction of soils.
- Used in ditches, watercourses, streams, channels, swales, and excavations.

**What to Do:**

- Determine if the project will require continuous dewatering.
- Schedule pumping, monitoring, and maintenance activities accordingly.
- Dewatering must be used in accordance with applicable design and permit conditions.
- Refer to “Fish Exclusion” procedures in B-5.
- Install dewatering devices.
- Install site-specific barrier before dewatering to prevent exterior water from entering construction area.
- Ensure water discharged from the site is not allowed to cause erosion.
- Dewatered water must be discharged to:
  - A containment device
  - A sanitary sewage system
  - Other BMPs to remove sediment before reintroducing to watercourse.
- Inspect daily and make any required repairs immediately.
- Check for erosion at discharge and repair or move as necessary.
- Provide adequate fuel supply and backup pumps in the event of a mechanical failure.

**What NOT to Do:**

- Do not use where flows are greater than pump capacity.

Source: King County. 2000. Regional Road Maintenance Endangered Species Act Program Guidelines. Seattle, WA.

# DIVERSION CHANNEL

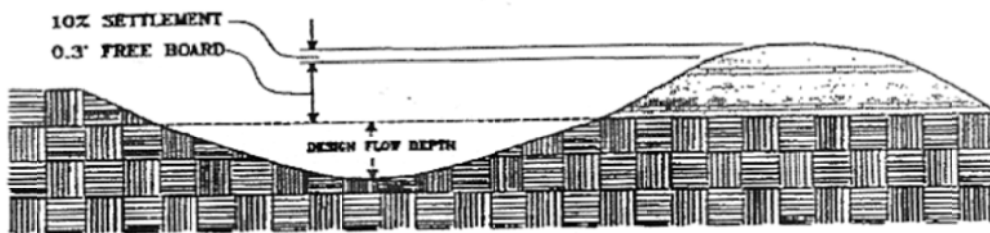
B-8.5

## Purpose:

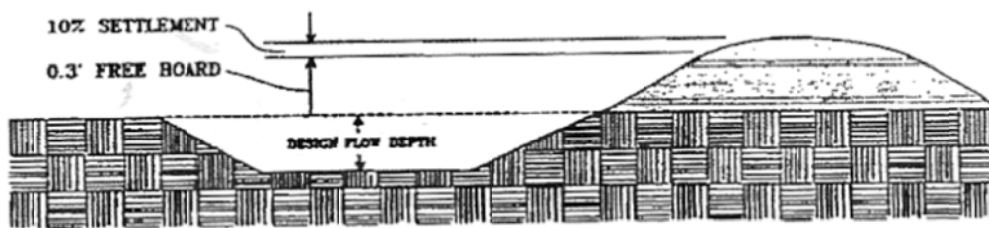
- Reducing slope length
- Intercepting and diverting stormwater runoff to stabilized outlets at non-erosive velocities
- Intercepting sheet flow
- Decreasing down slope sheet flow velocity

## What Not to Do:

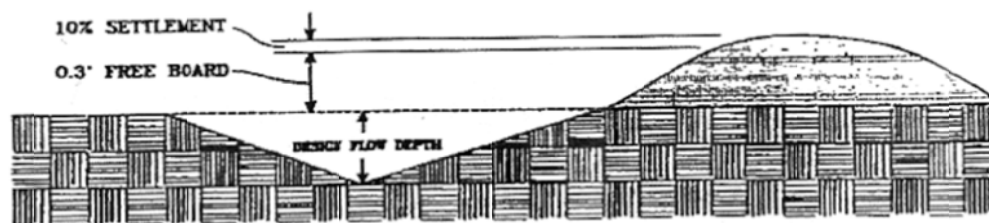
- Do not use if the downslope is greater than 2 horizontal to 1 vertical.
- Do not use if water flow is likely to erode the channel.



TYPICAL PARABOLIC DIVERSION



TYPICAL TRAPEZOIDAL DIVERSION



TYPICAL VEE-SHAPED DIVERSION

Source: King County. 2000. Regional Road Maintenance Endangered Species Act Program Guidelines. Seattle, WA.

XXX Contractor XXX

BRN70: Browns Creek Sediment Implementation Project near Deerlick Springs

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# SANDBAG

## B-8.7

**Description:** A sandbag is a pre-manufactured cloth or plastic bag (polypropylene) filled with sand or gravel. Sandbags can be used to keep water from the work area, for settling and reduction in water velocity and erosive forces.

**Purpose:**

- Serving as a cofferdam
- Providing filtering for sediment (when used with clean pea gravel)
- Decreasing water velocity, such as in a ditch
- Protecting areas from flooding

**What to Do:**

- Apply in accordance with permit requirements
- Refer to Fish Exclusion procedures in B-5
- If sandbag filling is used as streambed gravel, it must be washed before filling bags and appropriately sized according to design or permit conditions. Wash rock off-site (at a location where washed water can not enter watercourses, streams or wetlands) until water runs clear.
- Secure ends of sandbags to ensure material does not scatter.
- When used as a barrier, stack bags tightly together and in alternating, brick-layer fashion.
- Inspect daily during workweek and replace any damaged sandbags.
- Remove sediment when deposits reach ½ the height of the bags.
- Release contents of gravel-filled bags on site, in streams, when so stated in the specific permit conditions. Remove bags from job site.

**What NOT to Do:**

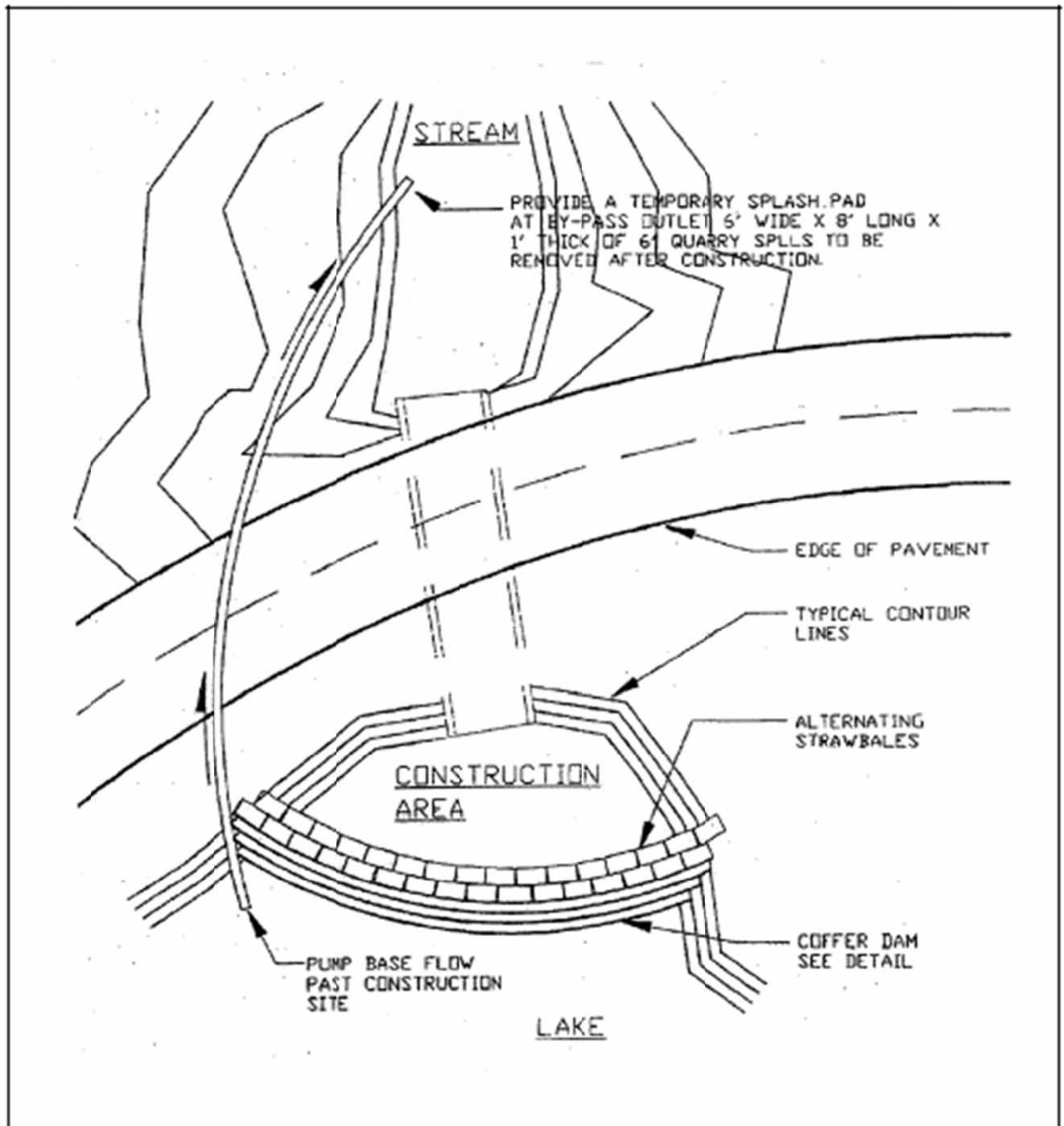
- Do not use when permit conditions state not to.

Source: King County. 2000. Regional Road Maintenance Endangered Species Act Program Guidelines. Seattle, WA.



# STREAM BYPASS

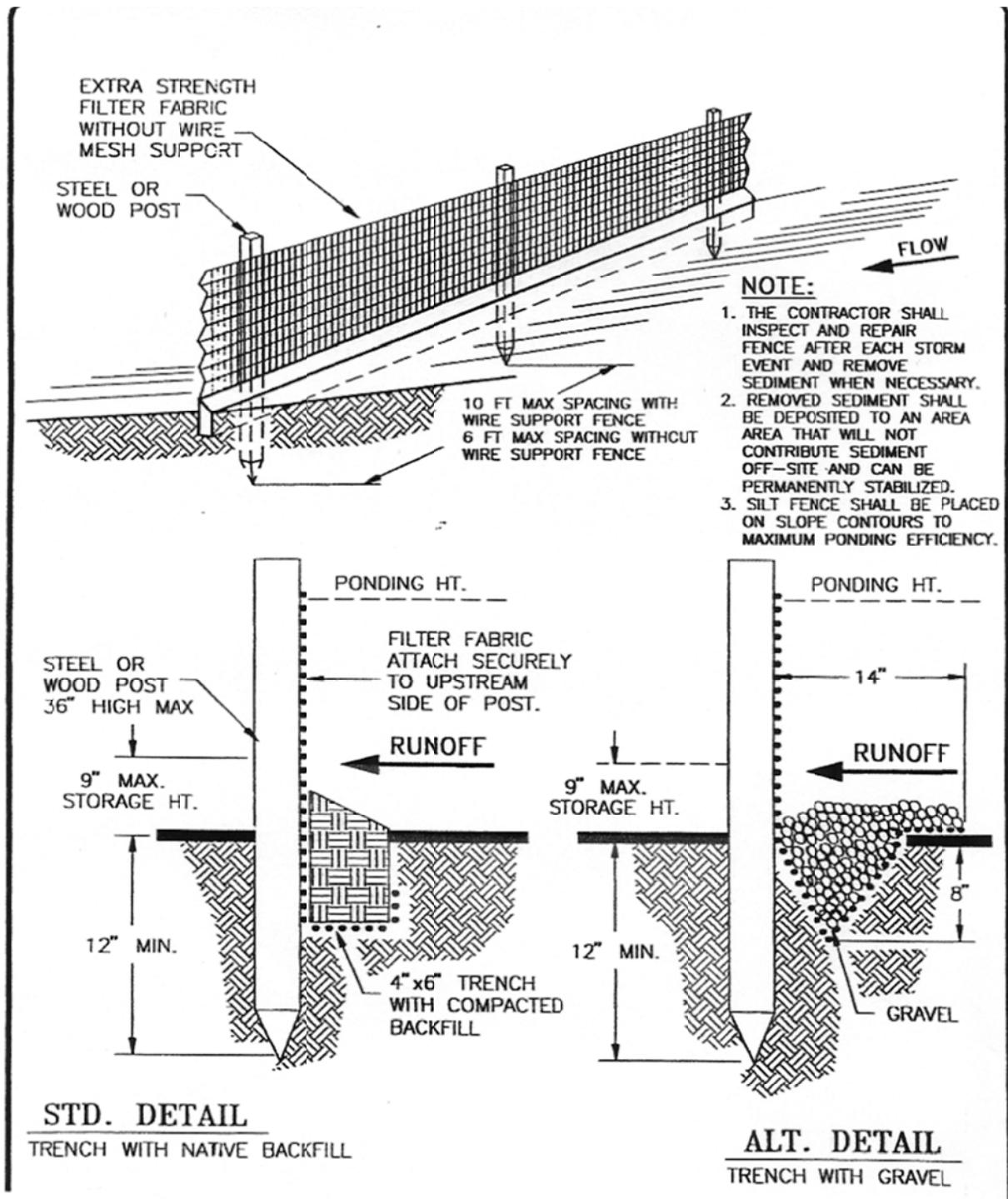
B-8.10



Source: King County, 2000. Regional Road Maintenance Endangered Species Act Program Guidelines

# SILT FENCE

B-9.6



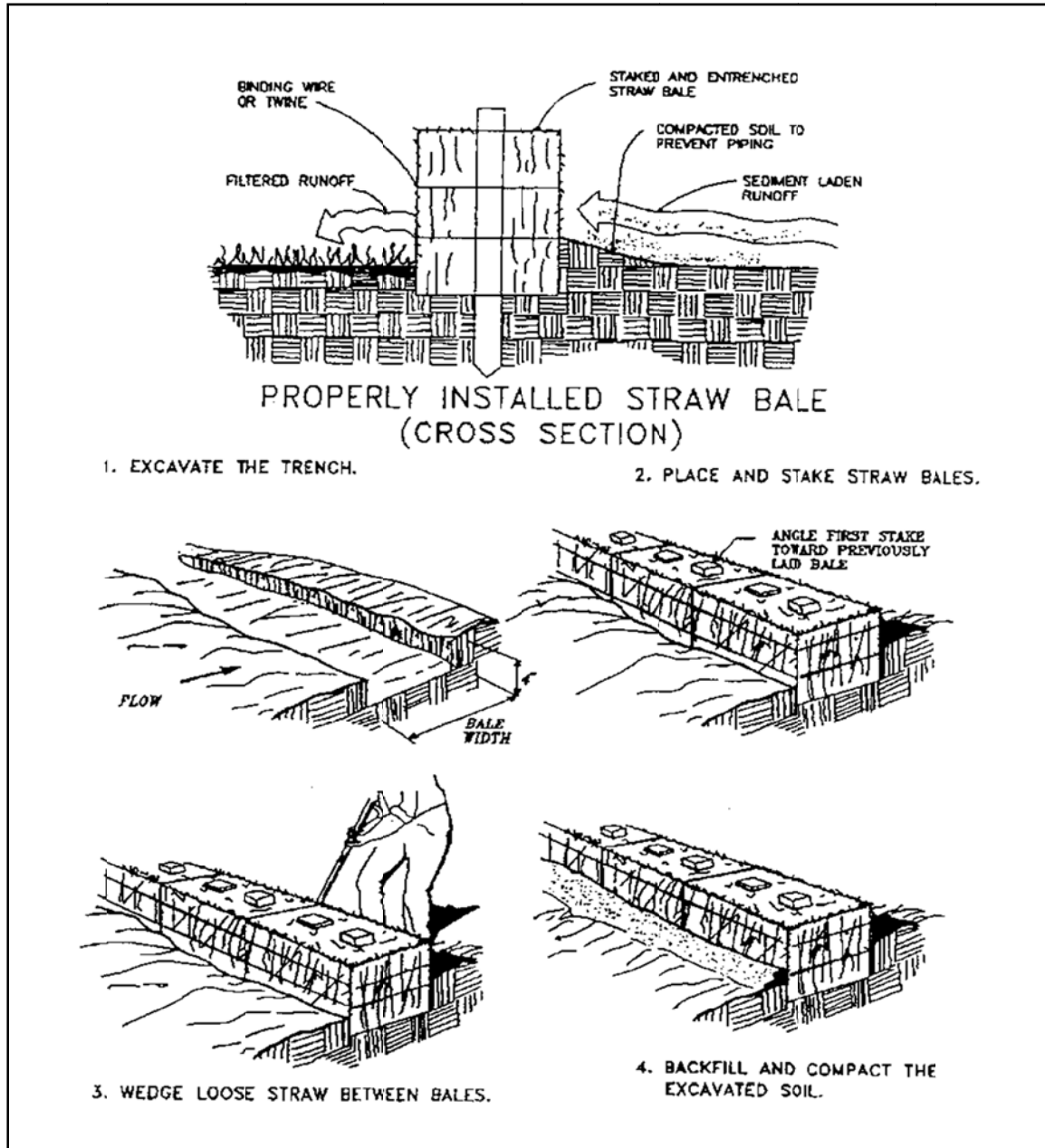
Source: McCullah, J. 1992. Erosion and Sediment Control Standards Design Manual

- County of Shasta. Prepared for the Western Shasta RCD. Redding CA. 187 p

# STRAW BALE BARRIER

B-9.8

Figure 1. Properly installed straw bale and construction of straw bale barrier.

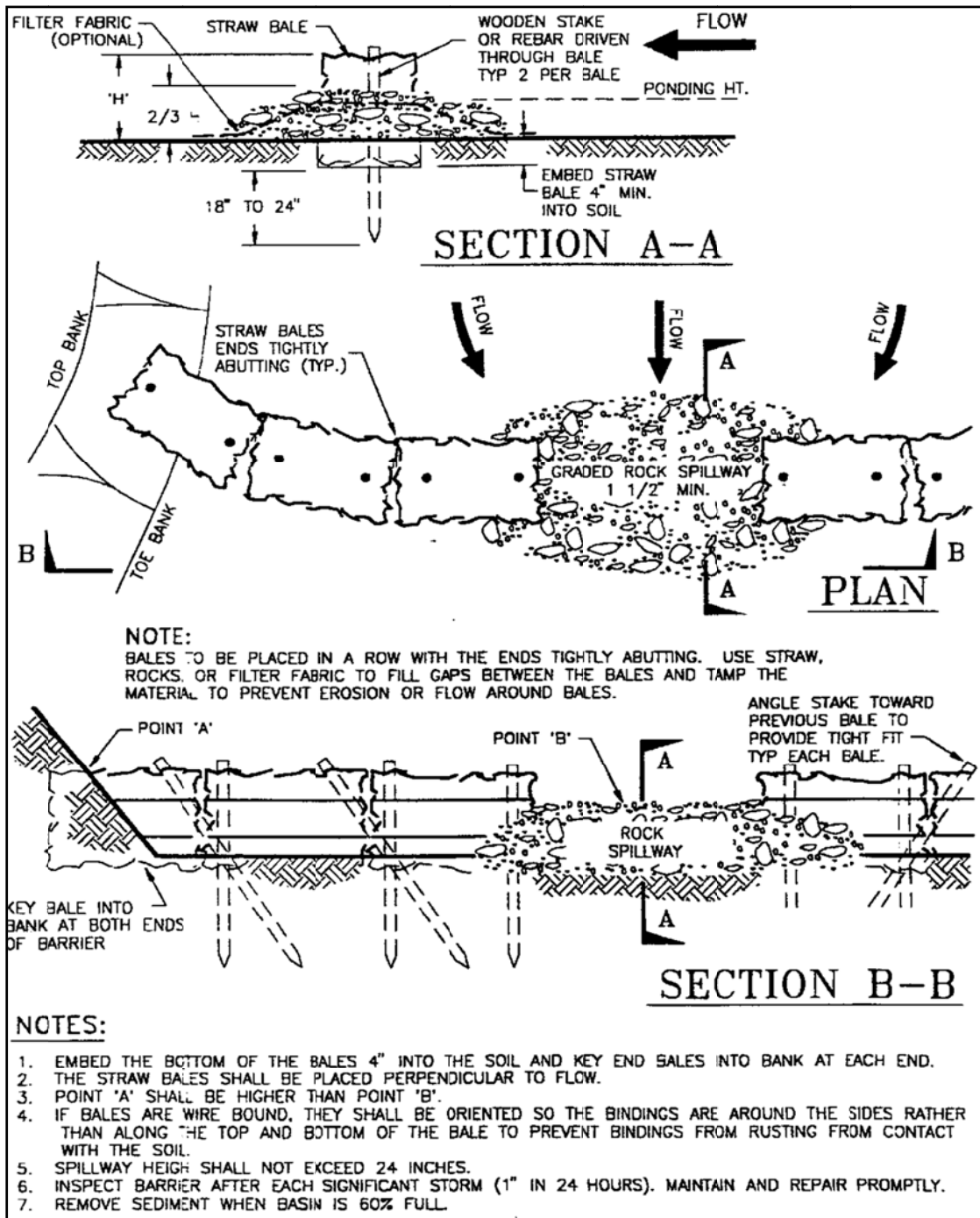


Source: King County. 2000. Regional Road Maintenance Endangered Species Act Program Guidelines.

# STRAW BALE BARRIER

B-9.8

Figure 2. Semi-pervious straw bale sediment barrier, with SAND and gravel spillway.



Source: McCullah, J. 1992. Erosion and Sediment Control Standards Design Manual – County of Shasta. Prepared for the Western Shasta RCD. Redding CA. 187 p.

EXHIBIT "C"

COMPENSATION OR FEES TO BE PAID TO CONTRACTOR

The total amount of this Agreement will not exceed \$X. The Contractor will be reimbursed at the following rates for all work completed under this Agreement. Rates will remain in effect for the term of the Agreement unless modified by Amendment. Contractor may not substitute personnel listed here or utilize the services of independent contractors, subcontractors, and subcontractors to complete Project work without advance written approval from Council's Contract Representative. If such subcontractors are approved, they shall be subject to the terms of this agreement including, but not limited to, insurance requirements.

<b>Contractor Personnel:</b>	<b>Hourly Rate:</b>
XXX Contractor XXX *	\$XX.00 (Overtime is 1.5x this rate) for manual labor
XXX Contractor XXX *	\$XX.00 (Overtime is 1.5x this rate) for operating rented equipment
XXX Contractor XXX *	\$XX.00 (Overtime is 1.5x this rate) for manual labor

\*Administrative and Overhead Expense is calculated into hourly rates for individuals listed above.

<b>Contractor Equipment:</b>	<b>Rate (with operator)**:</b>
XXX equipment name XXX	\$XX.00/hour

\*\*Administrative and Overhead Expense is calculated into hourly rates for all Contractor Equipment listed above.

CR and/or Council's consulting engineering hydrologist will direct Contractor on which equipment is needed and/or preferred to perform the work treatments of this project.

**Equipment Rental Expenses:** Contractor must rent any equipment that is required to complete the tasks and products under this agreement that are not shown in the list above as requested by Council and be pre-approved in writing. Such pre-approved expenses shall be compensated based on itemized receipts. Costs must be reasonable and customary for the items rented.

**Materials & Supplies:**

Council will purchase the rock and pipe needed to complete the work. Contractor must purchase any additional materials and/or supplies required to complete the tasks and products under this agreement. Itemized receipts for such purchases must be submitted with invoices for reimbursement. Costs must be reasonable and customary for the items purchased.

## EXHIBIT "D"

### PERFORMANCE REQUIREMENTS

In lieu of a performance bond, Council and Contractor agree to the following provisions:

- A. If Contractor fails to perform any portion of the work within this Agreement in a timely manner and/or consistent with the requirements set forth in this Agreement, the Council's Contract Representative, herein "CR", may temporarily issue a Work Deficiency Report and Stop Work Order. CR will provide Contractor with a written Work Deficiency Report with recommended actions needed to complete tasks a minimum of 3 days in advance of issuance of a Stop Work Order, unless CR determines that an emergency condition warrants an immediate stop work action to protect safety, the environment, or to prevent the concealment of a material, mechanical, or construction defect. All Stopped Work, which is that work referenced in a Stop Work Order, done after the issuance of the Stop Work Order shall not be reimbursable to Contractor until corrective actions are agreed upon. If Contractor fails to meet corrective actions of the Stop Work Order within the specified timeline, CR may issue a Letter of Suspension to Contractor. If a Letter of Suspension is issued, the Council will assume responsibility to, and may contract another operator to, complete work under the suspended work task.
- B. Partial work, which is part of the suspended work task, done prior to the issuance of a Letter of Suspension will not be paid until all work is completed under that suspended task. The payment amount for that partial work will not exceed the amount authorized under the suspended work task less any payment(s) made to another operator(s) contracted to complete the work after the Letter of Suspension was issued. A Stop Work Order for one work task shall not result in delay of payment for work done under other tasks.
- C. Contractor may appeal the CR's decision to suspend work to an Appeals Committee designated by the Council. The Appeals Committee shall include members of the Council Board. The Appeals Committee shall:
  - i. Hold an internet "web conference" meeting to hear and determine the facts of the suspension and appeal within three working days of the Appeal submittal.
  - ii. Council Staff, Contractor, and any other interested parties may be present and provide information to the Appeals Committee to render its decision.
  - iii. The Appeals Committee decision shall be the final administrative remedy to the parties. The Appeals Committee shall document its decision in minutes to the meeting, which shall be ratified via an email vote of the Council Board members of the Committee. Minutes from the meeting shall be prepared within three working days of the meeting.

EXHIBIT "E"

CERTIFICATIONS

Contractor shall comply with and provide signed originals of the following certifications. The signed, original certifications shall, altogether, constitute Exhibit E:

- A. Equal Employment Opportunity Certification
- B. Public Contract Code Section 10285.1 Statement
- C. Public Contract Code Section 10162 Questionnaire
- D. Public Contract Code Section 10232 Statement
- E. Noncollusion Affidavit
- F. Debarment & Suspension Certification

SAMPLE

## EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

XXX Contractor XXX, hereby certifies that he has \_\_\_\_\_, has not \_\_\_\_\_, participated in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that, where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

**Note:** The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b) (1)), and must be submitted by bidders and proposed Contractors only in connection with contracts and sub-contracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and Contractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.



**PUBLIC CONTRACT CODE**

**Public Contract Code Section 10285.1 Statement**

In accordance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the Contractor hereby declares under penalty of perjury under the laws of the State of California that the Contractor has \_\_\_\_, has not \_\_\_\_been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "Contractor" is understood to have the same definition as "bidder" here and is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

\_\_\_\_\_  
SIGNATURE

**Public Contract Code Section 10162 Questionnaire**

In accordance with Public Contract Code Section 10162, the Contractor shall complete, under penalty of perjury, the following questionnaire:

Has the Contractor, any officer of the Contractor, or any employee of the Contractor who has a proprietary interest in the Contractor, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes \_\_\_\_\_ No \_\_\_\_\_

If the answer is yes, explain the circumstances in the following space:

### **Public Contract Code 10232 Statement**

In accordance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Contractors are cautioned that making a false certification may subject the certifier to criminal prosecution.

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**Noncollusion Affidavit**  
(Title 23 United States Code Section 112 and  
Public Contract Code Section 7106)

TO THE COUNCIL

In accordance with Title 23 United States Code Section 112 and Public Contract Code 7106 the Contractor declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the Contractor has not directly or indirectly induced or solicited any other Contractor to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Contractor or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the Contractor has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the Contractor or any other Contractor, or to fix any overhead, profit, or cost element of the bid price, or of that of any other Contractor, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the Contractor has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Noncollusion Affidavit is part of the Proposal.  
Contractors are cautioned that making a false certification may subject  
the certifier to criminal prosecution.

---

SIGNATURE

**DEBARMENT AND SUSPENSION CERTIFICATION**

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The Contractor, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3-years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3-years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining Contractor responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

The above certification is part of the Proposal.

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SIGNATURE