



Regional General Permit 14

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

FORT CARSON ARMY GARRISON & PIÑON CANYON MANEUVER SITE EROSION CONTROL AND OTHER MINOR ACTIVITIES

Effective Date: October 2, 2014

Expiration Date: October 2, 2019

Purpose of this Regional General Permit: The purpose of this regional general permit (RGP) is to authorize discharges of dredged or fill material for erosion control and other minor activities in waters of the United States on the Fort Carson Army Garrison (Fort Carson) and the Piñon Canyon Maneuver Site (PCMS) that are substantially similar in nature and cause only minimal individual and cumulative environmental impacts. Activities that do not comply with the provisions of this RGP may require an individual permit. Some of the activities authorized by this RGP may be authorized by one or more nationwide permits. Such activities are included in this RGP to simplify the permitting process and improve the consistency of coordination between Fort Carson and the Corps.

Permittee: Department of the Army personnel under the command of Headquarters, Fort Carson, and their contractors or subcontractors.

Permit Area: This RGP is primarily intended for use outside of the Fort Carson Main Post (Cantonment) Area and for PCMS training lands. However, this RGP also authorizes certain activities within the Cantonment Area, as annotated in the Scope of Work section below. This RGP is applicable to all waters of the United States (WOUS), including wetlands, on federally owned lands and easements associated with or held by Fort Carson in El Paso, Pueblo, and Fremont Counties, and on PCMS located in Las Animas County, Colorado. Maps depicting the permit areas are attached.

Scope of Work: Activities authorized by this RGP are limited to erosion control activities within the permit area, as described below. Drawings showing typical activities are attached.

- 1. Erosion Control (EC) Basins.** This RGP authorizes the construction of small earthen dams with riprap, as needed, across intermittent or ephemeral streams to provide erosion and sediment control. This activity also includes maintenance or enhancement of existing erosion control dams. Construction may include excavating the impoundment area and the excavated material may be placed into the stream immediately below the dam to restore eroded areas to pre-erosion condition. Topsoil must be stripped and stockpiled at the site, and replaced as surface finish. The site must be seeded with the Fort Carson or PCMS, depending on location, critical-area seed mix, above the normal high water line; and erosion blankets and rock armoring may be used where necessary. Maintenance may include excavating accumulated sediment from the impoundment area and placing the excavated material onto the dam. Enhancement may include excavating additional material from the basin and enlarging the dam. The total filled area below the ordinary high water mark (OHWM) of the stream may not exceed 1/3 acre and total area of permanent impoundment may not exceed 1,000 linear feet for each structure as determined by the spill

elevation. Permanent impacts to wetlands are not authorized for this activity unless waived in writing by the District Engineer (DE). Pre-construction notification (PCN) is required for new EC dams with footprints that result in the permanent loss of more than 300 linear feet of WOUS. **This RGP does NOT authorize the construction of new EC watering impoundments within the Cantonment Area.**

- 2. Banksloping of Erosion Courses.** This RGP authorizes banksloping of deeply incised or heavily eroded channels with grade control, as needed, in order to maintain stability of the channel and enhance the use of training lands for off-road vehicles. Project reaches may be treated by cutting the vertical banks to a 6H:1V slope (not to exceed 4H:1V) and filling the over-deepened channel. Best management practices (BMPs) and engineering standards must be implemented to ensure stabilization of banksloped channels. Topsoil must be stripped and stockpiled at the site, and replaced as surface finish. Banksloped areas must be seeded with the Fort Carson or PCMS critical-area seed mix, depending on location, and erosion blankets and rock armoring may be used on over-steepened areas and nick-points. This RGP does not authorize banksloping projects that would result in the filling or excavating of greater than 1,000 continuous linear feet of erosion courses below the OHWM. PCN is required for banksloping of erosion courses that would involve grade control or result in permanent impacts to greater than 1/3 acres of WOUS. **This RGP does NOT authorize banksloping of erosion courses within the Cantonment Area.**
- 3. Check Dams.** This RGP authorizes the construction of check dams in intermittent and ephemeral stream where larger EC structures cannot be built. Check dams are usually constructed of rock, but other materials (discarded telephone poles, baled hay, or other similar clean material) may be appropriate in some cases provided that the materials are properly secured and strong enough to withstand expected high flows. Check dams authorized by this permit will be constructed by placing the material into an excavated trench with a weir formed along the crown. Rock riprap lining of the stream bed may be placed between the check dams for further erosion control. Heavy gage metal netting may be used to anchor the rock. Each check dam shall not exceed 25 cubic yards of material and the total area of disturbance below the OHWM of the stream reach for each project shall not exceed 1/3 acre. This RGP does not authorize the construction of check dams in perennial streams. Permanent impacts to wetlands are not authorized for this activity unless waived in writing by the DE. PCN is required for projects involving check dams with greater than 1/10 acre of permanent impacts to WOUS along a single stream reach. This RGP authorizes the construction of check dams within the Cantonment Area.
- 4. Rock Armor.** This RGP authorizes armoring of streams at grade along transportation routes where no other effective alternative can be used. Materials should be large (12-inch diameter or greater) granite rock or other suitable, clean material. Smaller, clean backfill or bedding material may be used. Total armoring within the stream for each project shall not exceed 1/3 acre or impact greater than 300 linear feet of stream bed below the OHWM within a single stream reach. PCN is required for rock armoring projects involving greater than 1/10 acre of permanent impacts to WOUS. This RGP authorizes rock armoring within the Cantonment Area.

- 5. Hardened Crossings.** This RGP authorizes the construction of hardened low-water crossings for wheeled and tracked military vehicles that maneuver off-road in order to prevent erosion of the stream bed and banks. Concrete crossings are typically used in areas of high use such as Main Supply Routes (MSR), while rock hardened crossings are used for secondary or other crossings. Hardened crossings are generally excavated approximately 4 feet deep below the stream bed with several aggregates and sizes of rock fill placed and compacted within the excavation. Excavated material must be spoiled at suitable adjacent areas or backfilled on the crossings as surface finish. The final grade of the crossing must match the natural grade of the stream bed and the crossing must be designed with properly-sized aggregate material in order to withstand expected high flows without restricting the capacity of the stream channel. The total filled area below the OHWM of the stream may not exceed 1/3 acre for each crossing unless waived in writing by the DE. This RGP authorizes the construction of hardened crossings within the Cantonment Area.
- 6. Culverts and Bridges.** This RGP authorizes the construction and maintenance of culverted crossings and bridges with armoring, as necessary, in order to prevent erosion of the stream bed and banks on perennial streams or where there is perennial or intermittent flooding of MSRs and other roads. Linear transportation crossings must be designed to withstand expected high flows without restricting the capacity of the stream channel. PCN is required for linear transportation crossings that result in greater than 1/3 acre of fill below the OHWM of the stream. This RGP authorizes the construction of linear transportation crossings within the Cantonment Area.
- 7. EC Terraces.** This RGP authorizes the construction of EC terraces in order to protect and maintain transportation routes. These structures are typically constructed on uplands. However, in some cases, it may be appropriate to build EC terraces across intermittent or ephemeral streams with armoring, as necessary. For these activities, the filled or excavated area below the OHWM of the stream shall not exceed 1/10 acre for each structure unless waived in writing by the DE. This RGP does not authorize the construction of EC terraces in perennial streams and wetlands. **This RGP does NOT authorize the construction of EC terraces within the Cantonment Area.**
- 8. Water Turnouts and Diversions.** This RGP authorizes the construction of water turnouts, diversions, or a variety of other structures designed to site-specific needs. These structures are typically constructed on uplands but may occasionally outfall into or cross intermittent or ephemeral streams. For these activities, the filled or excavated area below the OHWM of the stream shall not exceed 1/10 acre for each structure unless waived in writing by the DE. This RGP authorizes the construction of water turnouts and diversions within the Cantonment Area.
- 9. Maintenance of Ditches and Unpaved Roads.** In cases where drainage ditches may be jurisdictional (e.g., man-altered stream channels), this RGP authorizes routine maintenance, grading, and reshaping of drainage ditches and borrow ditches in order to restore their original conformation and capacity. Where unpaved roads cross such drainage features, this RGP also authorizes the repair and maintenance

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of the roads within jurisdictional areas. For these activities, the filled or excavated areas below the OHWM shall not exceed 1/3 acre unless waived in writing by the DE. This RGP authorizes the maintenance of ditches and unpaved roads within the Cantonment Area.

10. Utility Line Activities. This RGP authorizes activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities provided that the activities do not result in impacts to greater than 1/10 acre of waters of the United States for each single and complete project unless waived in writing by the DE. PCN is required for utility line activities involving permanent impacts to WOUS, including wetlands. This RGP authorizes the utility line activities within the Cantonment Area.

11. Oil, Wastewater (Sewage and Industrial) and Hazardous Substances. This RGP authorizes activities conducted in response to the spill of POL, sewage, industrial wastewater or hazardous substances that enter or threaten to enter a waterway or drainage. Spill response activities, including testing (water, soil, sediment), containment, and clean up of contaminant(s) will be conducted in a manner that results in restoration of the aquatic habitat and water quality conditions to pre-spill conditions. This RGP authorizes the cleanup of oil, wastewater and hazardous substances within the Cantonment Area.

12. Aquatic Habitat Restoration, Establishment and Enhancement Activities. This RGP authorizes activities in WOUS associated with the restoration, enhancement, and establishment of streams, wetlands, and riparian areas, including mechanized landclearing for the purpose of removing of invasive, exotic, or noxious vegetation, provided that the activities result in net increases in aquatic resource functions and services. This RGP does not authorize aquatic habitat restoration, establishment and enhancement projects that involve a fishery enhancement component in perennial streams. PCN is required for aquatic habitat restoration, establishment and enhancement activities authorized by this RGP. This RGP authorizes aquatic habitat restoration, establishment and enhancement activities within the Cantonment Area.

13. Other Activities. Other erosion control activities not specifically listed above may be authorized by this permit, including within the Cantonment Area, after case-by-case review by the Corps. PCN is required for these activities, and work may not proceed until the Corps provides Fort Carson with written verification that the activities would result in no more than minimal individual and cumulative environmental impacts to aquatic resources.

Pre-Construction Notification Procedures: For projects requiring PCN according to the activity-specific criteria above, Fort Carson must provide the Corps with the following information and receive written verification from the Corps prior to beginning work:

1. Location map including name of waterway, section, township and range, and coordinates in either latitude/longitude or UTM (NAD83);

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2. Pre-construction photos depicting the physical setting (to be compared to post-construction site conditions from the same photo points). Photos should contain figure labels with time, date, bearing, and a general description of the site;
3. Drawings or sketches on 8-1/2" x 11" paper showing the project location and plan, profile, and cross-section views of all work in wetlands and other waters of the U.S.;
4. A wetland delineation, if the project involves impacts to wetlands, based on the 1987 Corps of Engineers Wetlands Delineation Manual and the appropriate supplement for the area;
5. A complete description of the proposed work including composition, source, and volume in cubic yards of all material to be discharged; area of waterway to be excavated or filled; and a description of the waters of the United States including wetlands to be affected; and
6. Documentation that potential impacts to ESA and historic sites have been addressed according to the requirements of General Conditions (GC) 7 and 8 below.

Pre-Construction Notifications should be submitted to:

Southern Colorado Regulatory Office
Albuquerque District, US Army Corps of Engineers
200 South Santa Fe Avenue, Suite 301
Pueblo, CO 81003-4270
Phone: (719) 543-9459

The Corps will coordinate the notification with other federal and state agencies, as needed, to solicit their views on the environmental effects of the proposed work. After considering agency comments, the Corps may add special conditions to ensure that adverse environmental impacts are minimal, or may decide that an individual permit is required. Within 45 days of receiving a completed notification, the Corps will review the proposal and inform Fort Carson if the work may proceed under the authorization of this RGP. Work requiring PCN shall not proceed until the Corps has provided written approval.

General Conditions: All activities authorized under this RGP are subject to the following conditions:

1. The discharge of dredged or fill material shall not consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and must be free from toxic pollutants in toxic amounts. Fill must be from a source where threatened or endangered species and historic property impacts have been reviewed and no impacts will occur.
2. Measures must be taken to prevent spilled fuels, lubricants, wet concrete (other than that placed in forms), or other toxic materials from entering the stream.

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3. Topsoil must be stripped and stockpiled at the site, and replaced as surface finish on disturbed areas. The site must be seeded with the Fort Carson or PCMS critical-area seed mix, depending on location, above the normal high water line.
4. In order to control the introduction or spread of invasive species, all project-disturbed areas shall be treated for noxious weeds after construction is complete.
5. This RGP does not authorize activities that may impede fish passage.
6. Precautions shall be taken to avoid and minimize impacts and protect wetlands from damage during construction activities. Wetlands must be restored to pre-construction conditions for all impacts associated with temporary fill activities. Compensatory mitigation is required for all wetland losses that exceed 1/10 acre. For wetland losses of 1/10 acre or less, the Corps may determine on a case-by-case basis that compensatory mitigation is required. This permit does not authorize the loss of greater than 1/3 acre of wetlands.
7. Emergency activities required to protect the health and safety of military and civilian personnel using MSRs immediately following storm damage may be employed based on verbal authorization to proceed without a formal written PCN, contingent on assessment and planning for additional permanent repairs, as needed. Emergency activities authorized to proceed by verbal communication with the Corps must meet the activity-specific criteria and general conditions of this RGP. Should the impacts associated with permanent repairs exceed the limits of this RGP, as determined after completion of the emergency repairs, Fort Carson may be required to apply for a standard individual permit before implementing the permanent repairs.
8. All activities authorized by this RGP shall be maintained in good condition and in compliance with the terms and conditions of the permit. Fort Carson is not relieved of this requirement if constructed structures are abandoned. In the event that Fort Carson wishes to abandon or cease maintenance of an authorized structure, Fort Carson shall either remove the structure in its entirety and restore the site to pre-construction grade, including stabilization of all disturbed areas, or obtain a permit modification from the Corps.
9. Activities authorized by this permit shall not jeopardize the continued existence of a threatened or endangered species, or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which is likely to destroy or adversely modify the critical habitat of such species.

Fort Carson shall be responsible for all consultation with the U.S. Fish and Wildlife Service (USFWS) for projects that could impact threatened or endangered species, or species proposed for such designation, or critical habitat of such species.

Consultation between Fort Carson and the USFWS may conclude with the identification of conservation recommendations by the USFWS in non-jeopardy Biological Opinion (BO). At the Corps' discretion, these recommendations will be incorporated into the permit verification. If the USFWS renders a jeopardy BO and

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reasonable and prudent alternatives cannot be implemented to avoid the unacceptable impacts, the project will require an individual Department of the Army permit. Authorization of an activity under this permit does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a BO with "incidental take" provisions, etc.) from the USFWS, both lethal and non-lethal "takes" of protected species are in violation of the ESA.

10. Activities authorized by this permit shall not affect historic properties listed, or eligible for listing, in the National Register of Historic Places (Register) until Fort Carson has satisfied the requirements of the National Historic Preservation Act (NHPA) and the provisions of Title 33, CFR, Part 325, Appendix C.

Fort Carson shall be responsible for all consultation with the Colorado State Historic Preservation Officer (SHPO), and Native American Tribes and/or other consulting parties, if applicable, for projects that could affect any historic properties listed, determined to be eligible, or that Fort Carson has reason to believe may be eligible for listing on the Register. Information concerning the location and existence of historic resources shall be obtained from the Fort Carson Environmental Division, DPW.

For projects that may affect historic properties, Fort Carson shall notify the Corps that the required consultation has been completed before the project may proceed. If previously unknown historic or archeological materials are discovered while accomplishing the activity authorized by this permit, Fort Carson shall stop work immediately and notify the Corps. Fort Carson will initiate the internal provisions to deal with the Inadvertent Discovery of Archaeological, Cultural, or Paleontological Materials, as appropriate, and in coordination with the SHPO. The authorized activity shall not resume until the Fort Carson provides the Corps with a written verification that the requirements of the NHPA have been satisfied.

11. This permit does not authorize discharges of dredged or fill material associated with channelization, ditching, mechanized land clearing, cutting off meanders, blocking off channels, or otherwise realignment of stream channels, except for Scope of Work Activity No. 12 for Aquatic Habitat Restoration, Establishment and Enhancement Activities.
12. Quarterly reports shall be provided to the Corps (due 12/1, 3/1, 6/1, and 9/1). These reports will include a list of the actions authorized under the RGP, including those activities that required individual PCN and Corps verification during the prior quarter. The following information must be included for each activity:
 - a. Type of activity (as listed in the Scope of Work Section above);
 - b. Location information including the Installation, section, township and range, and project coordinates in either latitude/longitude or UTM (NAD83);
 - c. Name of waterway;

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- d. Estimated acres of impact below the OHWM of the waterway;
 - e. Date work was completed;
 - f. Assessment of site stability and any remedial work that may be required, if any;
 - g. Status of re-vegetation efforts, including the presence of noxious weeds and any treatments that may be required; and
 - h. And photos of the completed work.
13. Representatives from the Corps shall be allowed to inspect the authorized activities at any time deemed necessary in order to ensure that the activities are being, or have been accomplished, in accordance with the terms and conditions of the permit.

Best Management Practices:

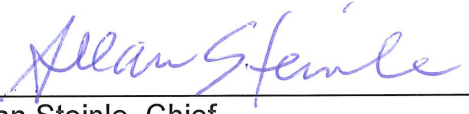
1. In order to prevent the spread of New Zealand Mud Snails and other aquatic hitchhikers, **the permittee is strongly encouraged** to clean heavy equipment prior to and after construction if the equipment was previously used in another stream, river, lake, pond or wetland within 10 days of initiating work. The following are recommended methods for preventing the spread of invasive aquatic organisms:
 - a. Remove all mud and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and keep the equipment dry for 10 days; or
 - b. Remove all mud and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment with either a 1:1 solution of Formula 409 Household Cleaner and water, or a solution of Sparquat 256 (5 ounces Sparquat per gallon of water). Treated equipment must be kept moist for at least 10 minutes; or
 - c. Remove all mud and debris from equipment (tracks, turrets, buckets, drags, teeth, etc.) and spray/soak equipment with water greater than 120 degrees F for at least 10 minutes.
2. When possible, work shall be conducted in a manner that will minimize turbidity of the water in the work area.
3. Whenever possible, operations shall be conducted during low flow periods.
4. No petroleum products, chemicals, or other deleterious materials should be allowed to enter or be disposed of in such a manner in which they could enter the waterway or adjacent wetlands. Accordingly, it is recommended that oil absorbent "booms" be installed downstream of the project site during construction activities.

Further Information:

1. Section 401 Water Quality Certification: On May 28, 2014, the Colorado Department of Public Health and Environment (CDPHE) issued Water Quality Certification (WQC) No. 4348 for the permit. To ensure that there are no adverse effects to water quality, activities authorized by this permit will be required to comply with the conditions specified in the attached WQC.
2. Colorado Law: Fort Carson is responsible for obtaining necessary authorizations under state water law or dam safety regulations.
3. Congressional Authorities: This RGP is authorized pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344).
4. Limits of this Authorization: This RGP does not obviate the need to obtain other federal, state, or local authorizations required by law; does not grant any property rights or exclusive privileges; does not authorize any injury to the property or rights of others; and does not authorize interference with any existing or proposed federal project.
5. Limits of Federal Liability: In issuing this RGP, the federal government does not assume any liability for the following: damages to the permitted projects or uses thereof as a result of other permitted or unpermitted activities or from natural causes; damages to the permitted projects or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest; damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activities authorized by this permit; design or construction deficiencies associated with the permitted work; or damage claims associated with any future modification, suspension, or revocation of this permit.
6. Reevaluation of Permit Decision: The Corps may reevaluate its decision on this RGP at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following: Fort Carson fails to comply with the terms and conditions of this permit; the information provided by Fort Carson in support of the permit application proves to have been false, incomplete, or inaccurate; significant new information surfaces which this office did not consider in reaching the original public interest decision. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring Fort Carson to comply with the terms and conditions of the RGP and for the initiation of legal action where appropriate. Fort Carson will be required to pay for any corrective measures ordered by this office, and if fails to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill Fort Carson for the cost.

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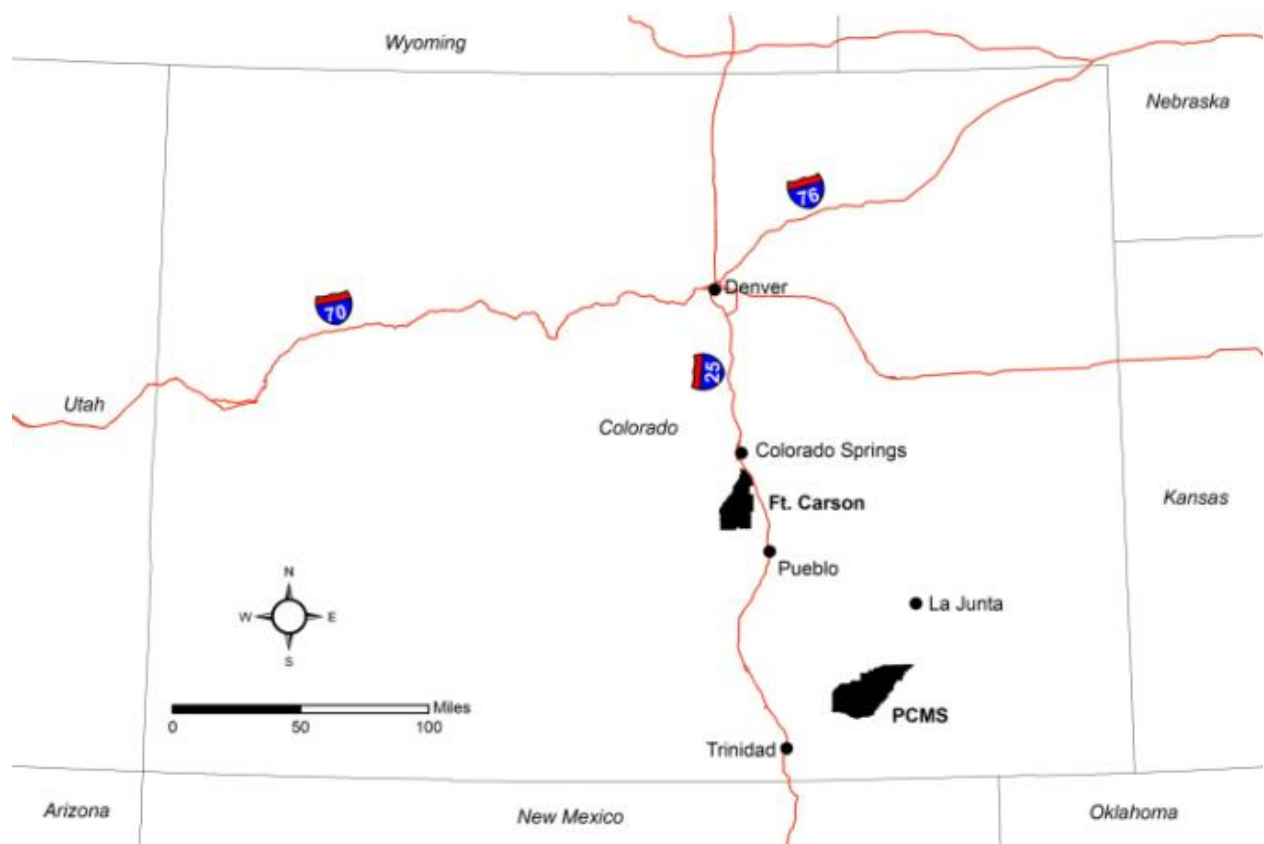
This permit becomes effective when the federal official designated to act for the Albuquerque District Engineer has signed below.



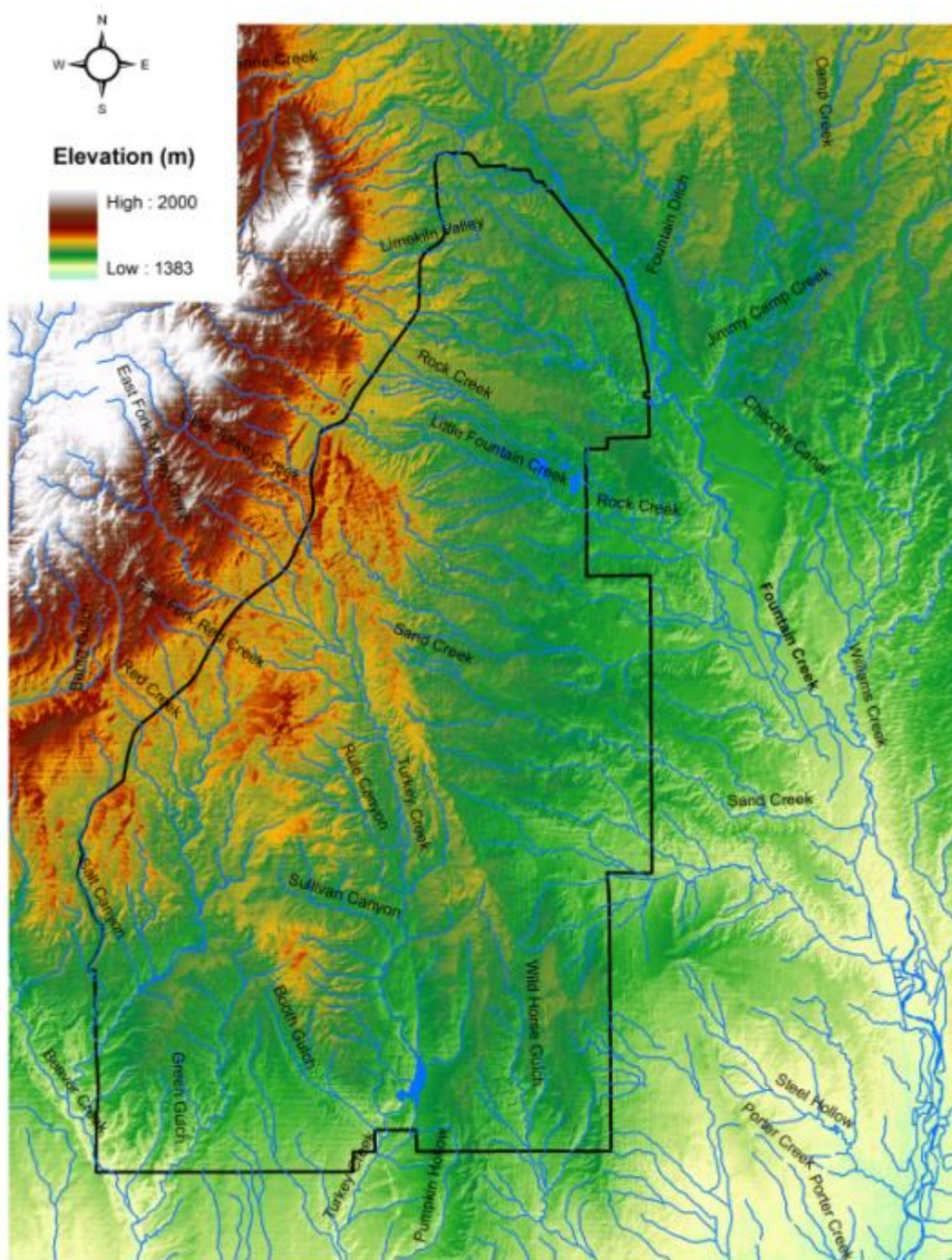
Allan Steinle, Chief
Albuquerque District Regulatory Division



Date



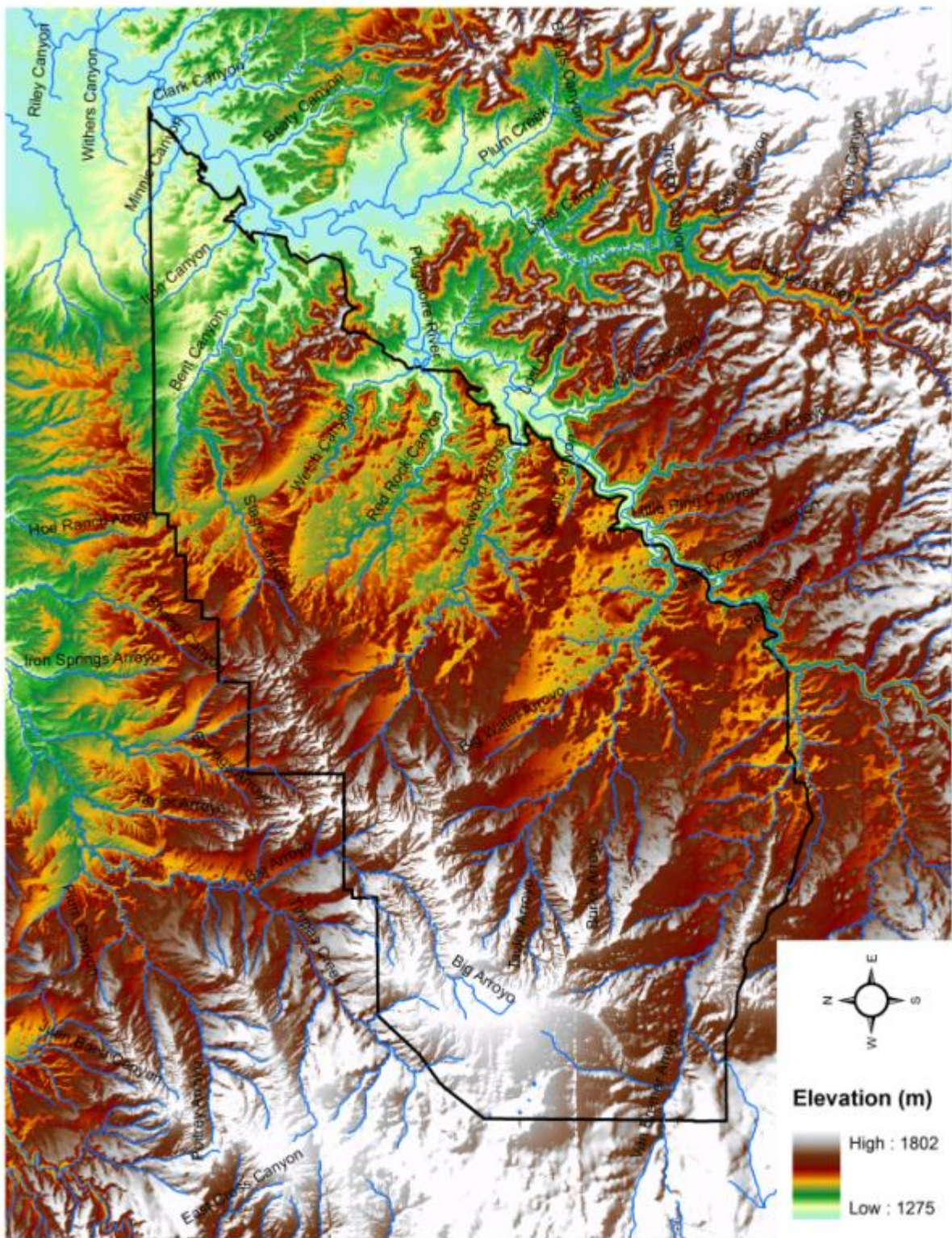
Map 1: General Location Map



Map 2: Fort Carson Hydrology Map



Map 3: Fort Carson Main Post (Cantonment) Area



Map 4: Piñon Canyon Maneuver Site Hydrology Map

FIGURE 1 - Erosion Control Dam Cross Section

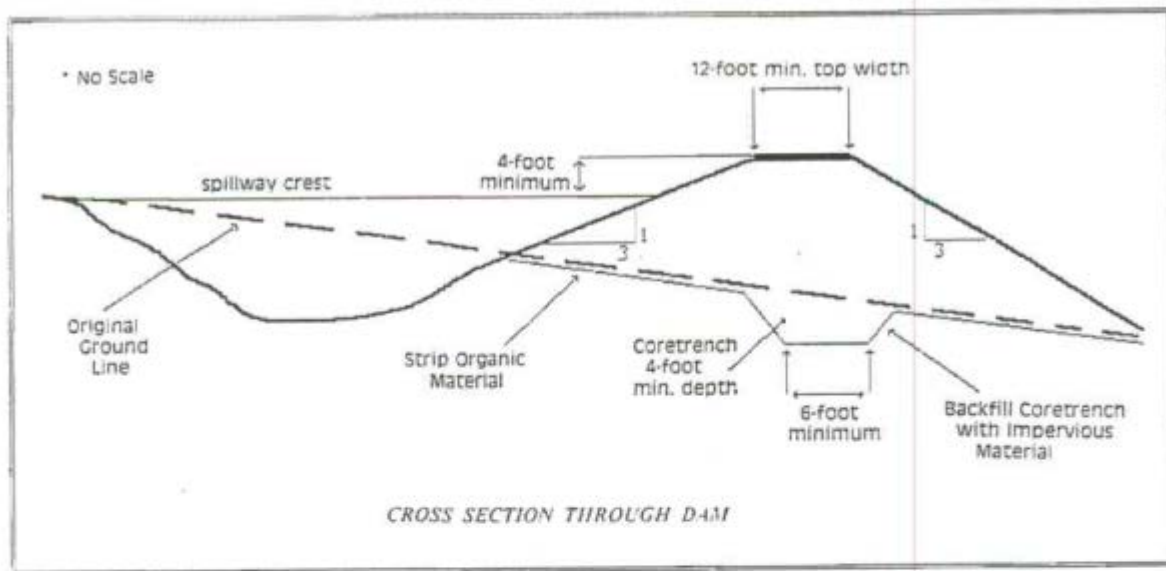


FIGURE 2 - Erosion Control Dam & Impoundment Area

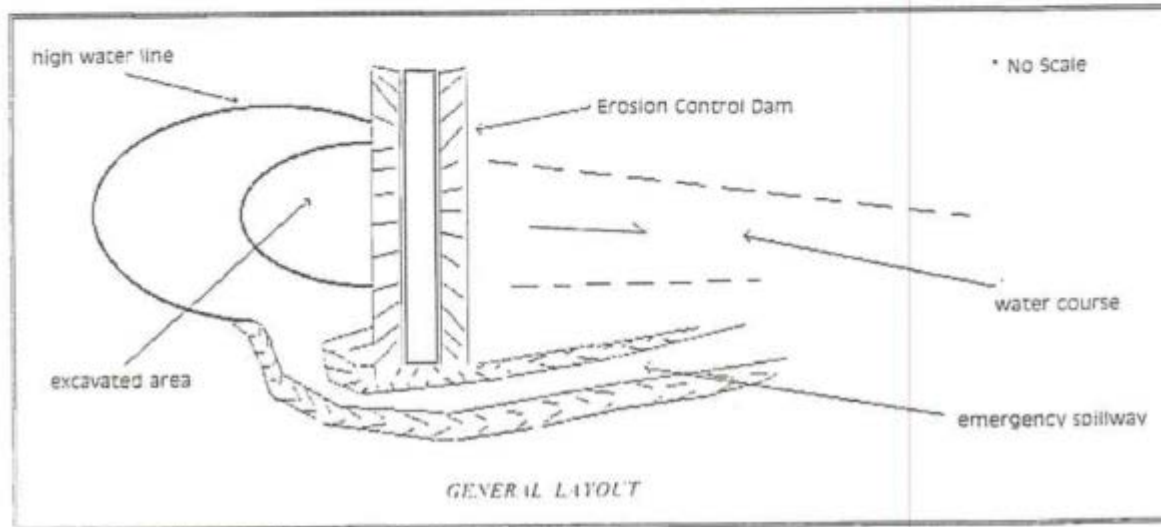


FIGURE 3 - Typical Bank Slope Construction - Cut & Fill Method

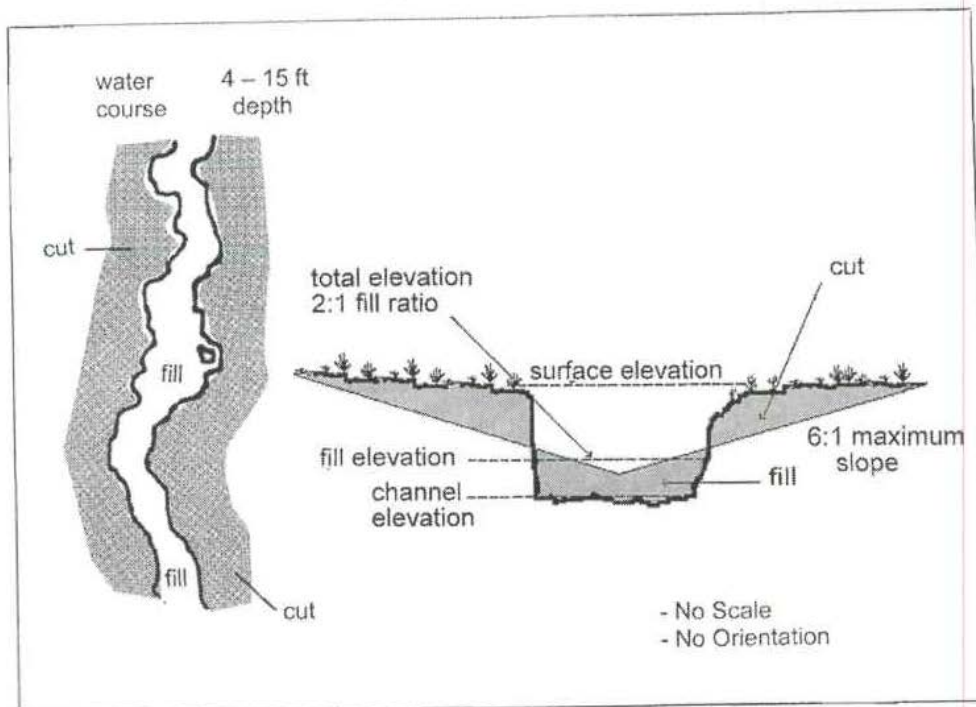


FIGURE 4 - Typical Erosion Control Check Dam Series

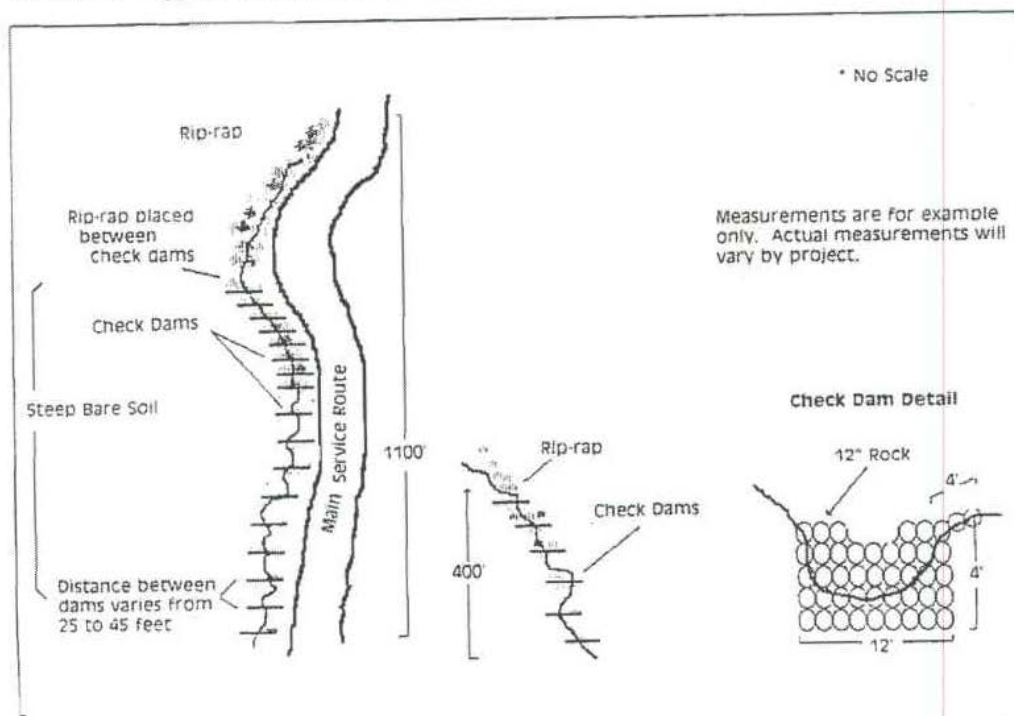


FIGURE 5 - Typical Rock Hardened Crossing

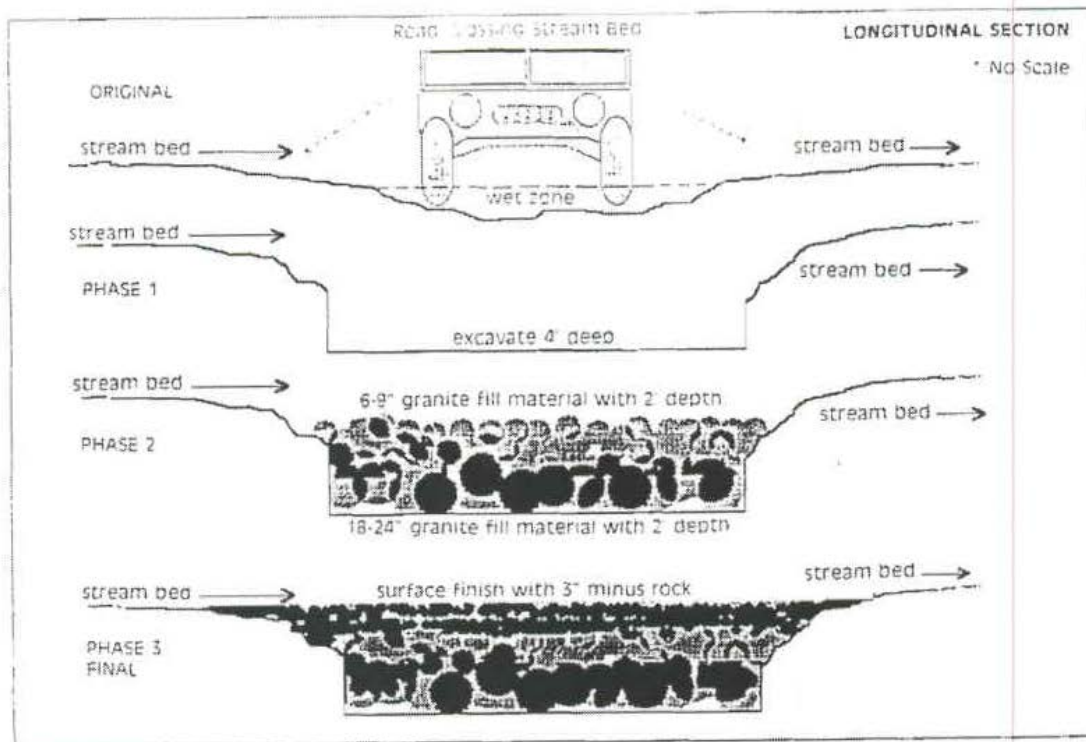


FIGURE 6 - Typical Culvert

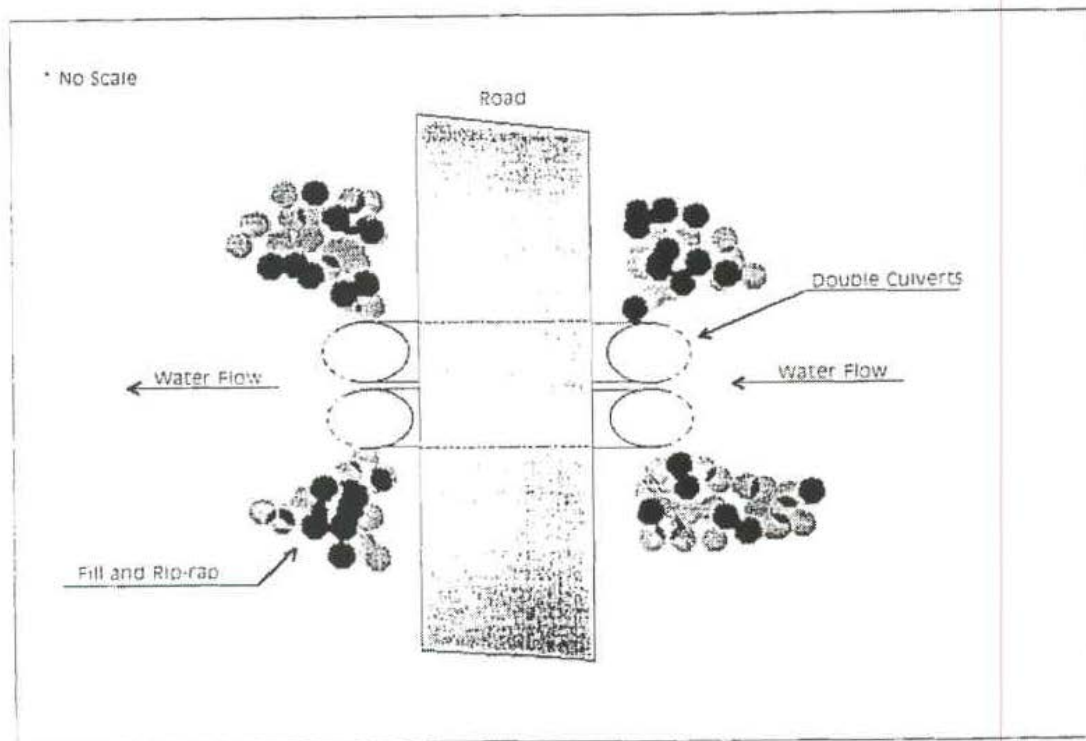


FIGURE 7 - Typical Erosion Control Terrace

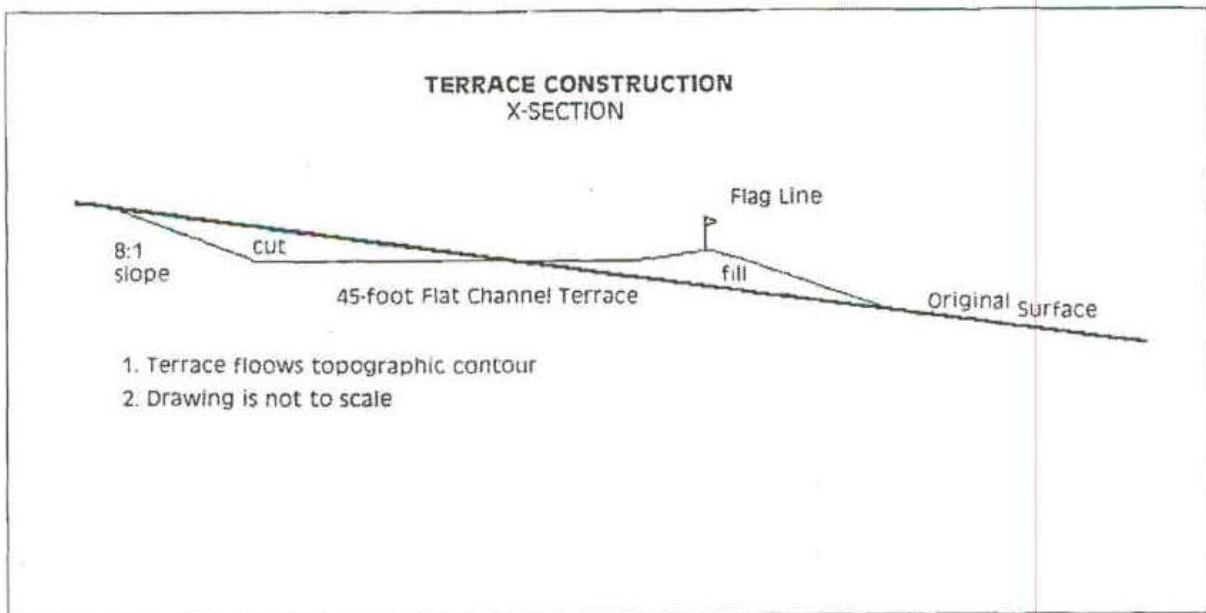


FIGURE 8 - Typical Water Turnout

