

2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 17 SEP 99	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. <i>(If applicable)</i>
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6. ISSUED BY US ARMY ENGINEER DISTRICT, FORT WORTH ATTN: CESWF-CT (RM 2A19) PO BOX 17300 FORT WORTH, TX 76102-0300	7. ADMINISTERED BY <i>(If other than Item 6)</i> CODE
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8. NAME AND ADDRESS OF CONTRACTOR <i>(No., street, county, State and ZIP Code)</i>	(✓)	9A. AMENDMENT OF SOLICITATION NO. DACA63-99-B-0060
	(X)	9B. DATED <i>(SEE ITEM 11)</i> 13 AUGUST 1999
		10A. MODIFICATION OF CONTRACTS/ORDER NO.
		10B. DATED <i>(SEE ITEM 13)</i>

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers tended. is extended, is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
 (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

- | | |
|-----|--|
| (✓) | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: <i>(Specify authority)</i> THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. |
| | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES <i>(such as changes in paying office, appropriation date, etc.)</i> SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
| | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: |
| | D. OTHER <i>(Specify type of modification and authority)</i> |

E. IMPORTANT: Contractor is not, is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*
The Solicitation for ASMP TACTICAL VEHICLE OVERPASS, FORT BLISS, TEXAS, is amended as follows:

See Continuation Sheet.

NOTE: The Bid Opening date remains "September 13, 1999 at 2:00 pm., as previously announced.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>	16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>
15B. CONTRACTOR/OFFEROR _____ <i>(Signature of person authorized to sign)</i>	15C. DATE SIGNED
	16B. UNITED STATES OF AMERICA BY _____ <i>(Signature of Contracting Officer)</i>
	16C. DATE SIGNED

Item 14. Cont'd

CHANGES TO Section 00100, INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS

1. Index, page 00100-ii, add the following after paragraph 35:

"36 SUBCONTRACTING PLAN SUBMISSION"

2. Section 00100, page 00100-11, add after paragraph 35:

"For large businesses ONLY: In an effort to expedite award, large business firms shall submit the subcontracting plan required by 52.219-9 I (Section 00700) at time of bid opening . Failure to submit the plan at time of bid opening may be cause for the bidder to be determine non-responsive."

CHANGES TO Section 00700 CONTRACT CLAUSES

3. Section 00700-vi, add the following after paragraph 119:

"120 52.211-18 VARIATION IN ESTIMATED QUANTITY"

4. Section 00700, page 00700-108, add the following after paragraph 119:

"120 52.211-18 Variation in Estimated Quantity (Apr 1984)

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified.

(End of clause) "

END OF SECTION 00700

CHANGES TO SPECIFICATIONS

5. Replace the following section including attachments with the attached new section and attachments of the same number and title, bearing the notation "ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-99-B-0060".

SECTION 01420 BASIC STORM WATER POLLUTION PREVENTION PLAN

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-99-B-0060

SECTION **01420** **B**ASIC **S**TORM **W**ATER **P**OLLUTION **P**REVENTION **P**LAN

**Fort Bliss Tactical Vehicle Overpass
Department of The Army HQ. U.S. Air Defense Center
and Fort Bliss
Fort Bliss, Texas 79916-6816**

Prepared for:

**U.S. Army Corps of Engineers - Fort Worth District
P.O. Box 17300
Fort Worth, Texas 76102-0300**

Date

August 1999

Prepared by:



Consultants in Planning, Engineering, Architecture,
Construction Management, and Related Services

3880 Hulen
Fort Worth, Texas 76107
817-735-6000

C&B No. 961470048

EXECUTIVE SUMMARY

PROJECT:

**Fort Bliss Tactical Vehicle Overpass
Department of the Army HQ. U.S. Army Air Defense Center
And Fort Bliss
Fort Bliss, Texas 79916-6816**

The United States Environmental Protection Agency (USEPA) promulgated storm water regulations pursuant to the National Pollutant Discharge Elimination System (NPDES) Program. This Storm Water Pollution Prevention Plan (SWPPP) has been developed in accordance with the conditions of the General Permit for Storm Water Discharges from Construction Activity authorized pursuant to the USEPA NPDES Program. Texas is a NPDES-delegated state, although EPA administers the storm water program at this time. Fort Bliss follows all EPA Region 6 guidance/regulations/permits.

The purpose of the SWPPP is to minimize the potential release of pollutants directly or indirectly into the storm water collection system or waters of the United States. To achieve this objective, the permittee(s) will be required to implement the USEPA NPDES policies and procedures presented in this SWPPP including, but not limited to, the following:

- File a Notice of Intent (NOI) with the US EPA at least 48 hours prior to the beginning the construction activities (a copy of the NOI is located in **Appendix 1**). Upon receipt, place a copy of the Permit Coverage Notice from USEPA in **Appendix 2**.
- Prominently post in a place for public viewing at the construction site (such as along side a building permit) a copy of the following: the NPDES permit number for the project or a copy of the NOI if a permit number has not yet been assigned; the name and telephone number of a local contact person; a brief Project description the location of the SWPPP if the site is inactive or does not have an on-site location to store the plan.
- Implement and properly maintain all erosion and sediment controls presented in this SWPPP.
- Maintain a record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the Project site, and when final stabilization measures are implemented (a copy of the Record of Temporary/ Permanent Ceasing of Construction Activities sheet is provided in **Appendix 3**).
- Conduct regular inspections of the erosion and sediment controls. These inspections must occur at least once every fourteen (14) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater (a copy of the Inspection Report sheet is provided in **Appendix 4**). Each inspection report will be submitted to Emil Madura.
- Based on the outcome of the inspections, implement any needed repairs or modifications to the control(s) within seven calendar days following the inspection. Modifications specific to construction projects must be approved by the U.S. Army Corps of Engineers - Fort Worth District prior to implementation by the Contractor and/or subcontractors.
- This SWPPP must be updated within seven calendar days each time a significant modification to the construction activities or pollutant control practices occur. These modifications shall be recorded on the Record of Revision sheet located in **Appendix 5** and in additional appendix material, if required.

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- All contractors/subcontractors and operators are required to complete the appropriate Certification sheet supplied in **Appendix 6**.
- This SWPPP must be compliance certified by the appropriate authorized representative of the U.S. Army Corps of Engineers - Fort Worth District on the Compliance Certification sheet and Authorized Signatory sheet located in **Appendix 7**.
- Maintain a copy of this SWPPP on the Project Site throughout the duration of construction activities.
- Upon completion of the construction activities and final stabilization, submit a Notice of Termination (NOT) to the US EPA (a copy of the NOT is located in **Appendix 8**).
- This SWPPP along with supporting documentation must be retained for a period of three (3) years after the completion of the Project. It is recommended that each of the operator(s) maintain a copy of the SWPPP for the three-year period.
- Fort Bliss has prepared an Environmental Assessment (EA) for this project. The EA addresses issues regarding threatened and endangered species, the impacts of the construction operations associated with this project on critical habitat wetlands and cultural resources. A Finding of No Significant Impact (FONSI) was determined based on the EA. The Fort Bliss point of contact (POC) for NEPA Compliance information is Emil Madura at (915) 568-1385. This project is in compliance with all relevant local and state laws.

The SWPPP has been developed for the construction activities to occur at the above-referenced Project. The SWPPP allows flexibility in complying with the provisions of the USEPA NPDES General Permit for Storm Water Discharges Associated With Construction Activity.

Emil Madura is responsible for ensuring that the Contractor and all other participating subcontractors are in compliance with the provisions of the SWPPP. It is the policy of U.S. Army Corps of Engineers - Fort Worth District that all construction activities performed by the contractor and/or a subcontractor are in compliance with all federal, state, and local environmental laws and regulations.

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- APPENDIX 1 -- Notice of Intent (NOI)
- APPENDIX 2 -- Permit Coverage Notice from EPA
- APPENDIX 3 -- Record of Temporary/Permanent Ceasing of Construction Activities
- APPENDIX 4 -- Inspection Report
- APPENDIX 5 -- Record of Revisions
- APPENDIX 6 -- Contractor and Subcontractor Certification
- APPENDIX 7 -- Compliance Certifications
- APPENDIX 8 -- Notice of Termination (NOT)
- APPENDIX 9 -- Maps
- APPENDIX 10 -- Soil Stabilization Specifications/Details
- APPENDIX 11 -- Structural Control Specifications/Details
- APPENDIX 12 -- Specifications/Details
- APPENDIX 13 -- Non-Storm Water Discharges Inspection Report
- APPENDIX 14 -- Region VI General Construction Permit Language **(Not Used)**

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1.0 SITE DESCRIPTION

1.1 Site Name

The area scheduled for construction is known as the Fort Bliss Tactical Vehicle Overpass (hereinafter referred to as the "Project").

1.2 Project Location

The project is located in the northeastern portion of the Fort Bliss military base in El Paso, Texas. The Tactical Vehicle Overpass will cross a railway spur line, Fred Wilson Road, and Earl H. Bruns Road. The location of the construction activities is at a latitude of 31°49'30" and a longitude of 106°24'30".

1.3 Owner's Information

Name: U.S. Army Corps of Engineers - Fort Worth District
Address: 819 Taylor Street, Fort Worth, Texas 76102
Representative: Noah Booker
Title: Project Manager
Telephone: (817) 978-2763
Facsimile: (817) 978-3348

1.4 Operator's Information

Name: Fort Bliss Military Reservation
Address: Fort Bliss, Texas 79916-6816
Representative: Emil Madura
Title: Team Leader
Telephone: (915) 568-0794
Facsimile: (915) 568-1333

1.5 Contractor's Information

1.5.1 General Contractor

Name:
Address:
Representative:
Title:
Telephone/ FAX:

1.5.2 Subcontractors

The following subcontractor(s) have read and signed the Subcontractor Certification statement, understand their role in preventing storm water pollution, and are approved for working at the Project site. New subcontractors should be certified and entered in the SWPPP document before beginning their respective jobs.

Name:
Address:

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Representative:
Title:
Telephone/FAX:

1.6 Notice of Intent

All parties defined as owners or operators must submit a Notice of Intent (NOI) at least 48 hours prior to commencement of on site construction activities. Submittal of late NOI's is not prohibited, however, authorization under the construction general permit is only for discharges that occur after permit coverage is granted. Unpermitted discharges may be subject to enforcement actions by the EPA. For the purposes of this permit, an operator is defined as any party meeting either of the following requirements:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications.
- The party has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a storm water pollution prevention plan for the site or other permit conditions.

A copy of the NOI should be submitted to the City of El Paso engineering department.

Copies of all NOI's associated with this construction operation are included in **Appendix 1** of this SWPPP.

1.7 Project Description/Nature of Construction Activity

The project consists of construction of a two lane overpass structure to provide access from Fort Bliss to Biggs Army Airfield. The bridge will span Fred Wilson Road, and a railway spur. The bridge will be a total of 156 meters and clear the six lane thoroughfare and associated right-of-ways. Approaches at either end of the structure will consist of imported fill material. Earl H. Bruns Road will be extended from its existing dead end to join the southern overpass approach.

A copy of this Project description is provided in **Appendix 1** for posting at the construction site.

1.8 Sequence of Construction Activities

The anticipated sequence of construction activities which will disturb significant amounts of soil are provided below. Construction is anticipated to begin in November 1999 and be completed in August 2000. The contractor shall identify any phases to be implemented during completion of this project.

- Clear area for sediment traps and silt fence
- Construct sediment traps and silt fence
- Demolition of existing concrete structures
- Utility removal
- Site excavating, backfilling and grading activities

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- Drilling for concrete pier foundations
- Concrete/asphalt paving
- Final soil stabilization

1.9 Estimate of Total Construction Site Area and Disturbed Area

Fort Bliss is approximately 1,140,000 acres of which 8 acres will be disturbed by construction activities. Construction activities are intended to disturb as little area beyond the limits of grading as possible in order to minimize the impacts on any existing vegetation.

1.10 Estimate of Runoff Coefficient

The runoff coefficient is an estimate of the fraction of total rainfall that will appear as runoff. The project site represents an undeveloped parcel of land in El Paso. The site currently has very little site vegetation with some existing asphalt pavement, an abandoned concrete footing on the south side of Fred Wilson that is in the alignment of the bridge, and some abandoned trailer park concrete pads. The structure of the bridge will span the railway spur line and Fred Wilson Road. The existing runoff coefficient is estimated to be between 0.70 and 0.90 (indicating that between 70 and 90% of rain will end up as runoff). Completion of this overpass will include demolition and removal of many of the existing concrete structures. The runoff coefficient for the site is not expected to change following completion of the project. (Source: *Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices*, EPA Document No. EPA 832-R--92-005, Typical "C" Value runoff-coefficients)

1.11 Soil Types, Topography and Climate

1.11.1 Soils

Soils in the project area consist of clayey sands and clayey sands with gravel, silty sands, sandy gravel, and low to high plasticity clays. These soils extend to a depth of 2 - 3 meters below the surface. These soils are initially red-brown, but become white and light brown, gravelly, and caliched with increasing depth. These soils are susceptible to both wind and hydraulic erosion.

(Source: *Fort Bliss Tactical Vehicle Overpass Foundation and Pavement Design Analysis prepared by U.S. Army Corps of Engineers Fort Worth District Military Design Branch Structural Section CESWF-EC-DS, May 1999*)

1.11.2 Topography

Fort Bliss is located in the Hueco Basin near El Paso Texas. West of this basin are the fault block Franklin Mountains, east are the Hueco Mountains, north is the low divide that separates this basin from the Tularosa Basin, and south is the Rio Grande. The general slope of the project site is from north to south at a very slight grade.

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(Source: *Fort Bliss Tactical Vehicle Overpass Foundation and Pavement Design Analysis prepared by U.S. Army Corps of Engineers Fort Worth District Military Design Branch Structural Section CESWF-EC-DS, May 1999, USGS El Paso Quadrangle map, 1994*)

1.11.3 Climate

The climate in El Paso is generally mild with summers ranging from the mid-nineties to the mid-sixties and winters ranging from low to high thirties. The high average daily temperature is 96.5°F which occurs in June; the low average daily temperature is 29.4°F which occurs in January. Rainfall tends to peak in the summer months and decline in the winter months. The maximum average monthly rainfall is 1.7" in September and the minimum average monthly rainfall is 0.2" in April.

(Source: http://www.excite.com/weather_almanac/, June 1999)

1.12 Facility and Project Area Maps

The following erosion and sediment control plans are located in **Appendix 9**:

- Site Vicinity Map
- C3.03 Erosion Control Plan
- C L1.01 Landscaping Plan Area 1
- C L1.02 Landscaping Plan Area 2

1.13 Construction and Waste Materials to be Stored On-Site

The following construction materials will be staged or stored on site at various points during development of the site:

- structural fill
- construction fill storage and staging areas
- road base
- precast concrete and structural steel beams and girders
- grouting sand
- structural steel
- wooden cement forms
- plastic drainage pipe
- concrete drainage pipe
- groundcover bricks, rock, and stones
- rock rip rap
- material storage sheds

The following waste materials will be stored temporarily on site prior to appropriate disposal:

- excess structural steel
- excess / waste plastic drainage pipe
- broken / waste precast concrete
- packaging material
- litter

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C utility poles and transformers

1.14 Receiving Waters

Surface runoff from the project site will be routed to urban drainage systems and, ultimately, the Rio Grande River.

1.15 Endangered and Threatened Species

A threatened and endangered species assessment was conducted as part of the Environmental Assessment prepared for this site. This document, titled Environmental Assessment For Army Strategic Mobility Program Facilities At Fort Bliss, Texas, prepared in November 1998 was reviewed and analyzed to prepare a Finding of No Significant Impact (FONSI).

1.16 Notice of Termination

Compliance of the site with the General Construction Permit remains the responsibility of the contractor and the US Army Corps of Engineers until such time as they have submitted a Notice of Termination (NOT). The permittee's authorization to discharge under the General Construction Permit terminates at midnight of the day the NOT is signed.

All permittees must submit an NOT within thirty (30) days after one or more of the following conditions have been met:

- Final stabilization has been achieved on all portions of the site for which the permittee was responsible.
- Another operator/permittee has assumed control over all areas of the site that have not been finally stabilized.

2.0 MEASURES AND CONTROLS

2.1 Erosion and Sediment Controls

Erosion and sediment control practices can be divided into three broad categories: (1) soil stabilization, (2) structural controls, and (3) management practices. Each of these categories have temporary and permanent control measures to be considered. Soil stabilization and structural practices should be selected and designed in accordance with the EPA's *Best Management Practices and Erosion Control Manual for Construction Activities* (BMP Manual). Not all of the structural controls discussed in the BMP Manual will necessarily apply to this project. Management practices are construction management techniques which, if properly utilized, can minimize the need for physical controls and possibly reduce costs.

2.1.1 Soil Stabilization

Final soil stabilization of the site will be completed as detailed in the Landscape plans. Copies of these plan sheets, L1.01 and L1.02, are included in **Appendix 9**. The construction plan set should be reviewed and will take precedence over the plan included in **Appendix 9**.

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The USEPA NPDES Storm Water General Permit requires all disturbed ground that will remain dormant for longer than 21 days to be seeded with temporary seed and/or protected with mulch. The seeding and/or mulching must take place within 14 days after construction ceases. Erosion and sediment control plans must contain provisions for permanent stabilization of disturbed areas. Permanent stabilization must take place within 14 days after construction activity has ceased. In arid areas (areas with an average annual rainfall of 0-10 inches) and semi-arid areas (areas with an average annual rainfall of 10-20 inches), where the initiation of stabilization measures by the 14th day after construction activity has a temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Permanent vegetation will include trailing rosemary and gray santolina. This vegetation shall be established in accordance with the supplier's planting directions.

2.1.2 Structural Controls

Erosion and sediment controls have been selected, designed and constructed according to the standards in the *North Central Texas Council of Governments BMP Manual* and the construction drawings. A copy of the erosion control plan is provided in Appendix 9. This plan shall be superceded by those plans included in the Construction plan set. Listed below are the structural controls to be used at the Project site and a copy of construction specifications and details for these controls are provided in **Appendix 11**.

- Silt Fence
- Rock Check Dam

2.1.3 Management Practices

The following are some management considerations which should be employed in conjunction with the erosion and sediment controls described above:

- Sequence construction so that no area remains exposed for unnecessarily long periods of time.
- Anticipate the site conditions that will exist as the construction progresses toward the final product.
- Have the materials on-hand to complete the work without delay.
- Apply temporary stabilization immediately after grading.
- Stage the construction, if possible, so that one area can be stabilized before another is disturbed.
- Consider the time of year; be prepared for sudden thunderstorms.
- Install erosion and sediment controls immediately.
- Physically mark off limits of disturbance on the site with tape, signs or other methods, so that workers can see areas to be protected.
- Carry out a regular maintenance schedule for erosion and sediment control practices.

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- Designate one individual responsible for implementing the erosion and sediment control plan. Make sure that all workers understand the provisions of the erosion and sediment control plan. Establish reporting procedures for problems identified by workers.

2.2 Storm Water Management Controls

During the construction activities, storm water will be managed through the erosion and sediment controls discussed in this SWPPP. Permanent storm water management controls are presented in the construction drawings and the erosion control plan in **Appendix 9**.

2.3 Other Controls

This section refers to additional controls related to construction activity at the Project. Additional details for these other controls are provided in **Appendix 12**.

2.3.1 Solid Waste Disposal

No solid material, including building materials, is permitted to be discharged to surface waters or buried on site. All solid waste materials, including disposable materials incidental to the construction activity, must be collected in containers or closed dumpsters. The collection containers must be emptied periodically and the collected material hauled to a landfill permitted by the State and/or appropriate local municipality to accept the waste for disposal.

A foreman or supervisor should be designated in writing to oversee, enforce and instruct construction workers on proper solid waste procedures.

2.3.2 Hazardous Waste

Whenever possible, minimize the use of hazardous materials and generation of hazardous wastes. All hazardous waste materials will be disposed in the manner specified by federal, state, or local regulations or by the manufacturer.

Use contaminant berms in fueling and maintenance areas and where potential for spills is high.

Treated utility poles and conductors containing regulated dielectric cooling fluids are scheduled for removal from the site. Utility poles are typically hazardous due to their pressure treatment process that includes application of creosote or arsenic. Conductors are considered hazardous because they typically contain regulated dielectric fluids such as TCB or DEPH. The utility poles and transformers shall be stored in a covered area until such time as they are disposed of in accordance with all applicable Federal, State, local regulations, and project specifications section 02220 Demolition paragraph 3.4.1.

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A foreman or supervisor, trained as a hazardous waste manager shall be designated in writing to oversee, enforce and instruct construction workers on proper hazardous waste procedures.

2.3.3 Dust Control/Off-Site Vehicle Tracking

During construction, water trucks shall be used, as needed, by each contractor or subcontractor to reduce dust. After construction, the site will be stabilized to reduce dust. Specific dust control specifications and procedures are provided in **Appendix 12**.

2.3.4 Sanitary/Septic

Contractors and subcontractors must comply with all state and local sanitary sewer, portable toilet or septic system regulations. Sanitary facilities shall be provided at the site by each contractor or subcontractor throughout construction activities. The sanitary facilities shall be utilized by all construction personnel and be serviced regularly. All expenses associated with providing sanitary facilities are the responsibility of the contractors and subcontractors.

2.3.5 Water Source

Water used to establish and maintain grass, to control dust, and for other construction purposes must originate from a public water supply or private well approved by the State or local health department.

2.3.6 Equipment Fueling and Storage Areas

At a minimum, during construction the contractor and subcontractors shall employ the following practices:

- Equipment fueling, minor / preventative maintenance and cleaning must be performed in protected areas (i.e., bermed area). Leaking equipment and maintenance fluids will be collected and not allowed to discharge onto soil where they may be washed away during a rain event.
- Equipment wash down (except for wheel washes) shall take place within an area surrounded by a berm. The use of detergents is prohibited.
- No major maintenance of equipment will be permitted. Leaking equipment will be immediately repaired or removed from the facility.

2.3.7 Hazardous Material Storage

Chemicals, paints, solvents, fertilizers and other toxic or hazardous materials shall be stored in their original containers (if original container is not resealable, store the products in clearly labeled, waterproof containers). Except during application, the containers shall be kept in trucks or in bermed areas within covered storage facilities. Runoff containing such materials shall be collected, removed from the site and disposed of in accordance with the federal, state and local regulations.

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The Contractor shall have the Material Safety Data Sheets (MSDS) of all chemicals brought on-site available at the Contractor's field office file for reference.

As may be required by federal, state or local regulations, the Contractor shall have a Hazardous Materials Management Plan and/or Hazardous Materials Spill and Prevention Program in place. A foreman or supervisor, trained as a hazardous materials / waste manager, shall be designated in writing to oversee, enforce and instruct construction workers on proper hazardous materials storage and handling procedures.

3.0 APPROVED STATE OR LOCAL PLANS

The following local regulations and/or guidelines shall be followed during the construction activities:

- EPA's *Best Management Practice and Erosion Control Manual for Construction Sites*
- City Of El Paso Ordinance No. 013177 Chapter 15.20 Storm water Management

4.0 INSPECTION AND MAINTENANCE

The following items are to be integrated into the inspection and maintenance program:

4.1 Inspection Schedule/Reporting

All impacted areas, as well as all erosion and sediment control devices, will be inspected every fourteen (14) calendar days and within 24 hours after a rainfall of 0.5 inches or greater. EPA also recommends that "walk throughs" be conducted prior to anticipated storm events. Where sites have been finally or temporarily stabilized, runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists), or during seasonal arid periods in arid regions (areas with an average annual rainfall of 0 to 10 inches) and semi-arid regions (areas with an average annual rainfall of 10 to 20 inches) such inspections shall be conducted at least once every month.

Inspections shall be conducted, and a written report prepared, by a designated and qualified person familiar with the USEPA NPDES Storm Water General Permit, this SWPPP, and the Project. U.S. Army Corps of Engineers - Fort Worth District personnel, contractors and subcontractors will conduct the inspections and write up the findings. Inspection reports are not required for "walk throughs" in anticipation of storm events.

Inspection reports shall be completed including scope of the inspection, name(s) and qualifications of personnel making the inspection, the date of the inspection, observations relating to the implementation of the SWPPP, and any actions taken as a result of incidents of non compliance noted during the inspection. The inspection report shall state whether the site was in compliance or identify any incidents of non-compliance. The report shall be signed in accordance with the signatory requirements in Part VI. Standard Permit Conditions section of the

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-99-B-0060

Construction General Permit and filed in this SWPPP. The contractor will submit the inspection reports to Emil Madura at Fort Bliss. A sample Inspection Report is included in **Appendix 4**. Inspection reports shall be kept in this SWPPP for at least three years from the date the site achieves stabilization.

4.2 Material Storage Inspections

Inspectors must evaluate areas used for storage of materials that are exposed to precipitation. The purpose is to ensure that materials are protected and/or impounded so that pollutants cannot discharge from storage areas. Off-site material storage areas used solely by the subject project are considered to be part of the project by the EPA and must be included in the site inspection report.

4.3 Soil Stabilization Inspections

Seeded areas will be inspected to confirm that a healthy stand of revegetated native species is maintained. The site has achieved final stabilization once all areas are covered with pavement, or have a stand of vegetation with at least 70% of the native background density. The density of 70% or greater must be maintained to be considered as stabilized. The contractors/subcontractors will water, fertilize and reseed disturbed areas as needed to achieve this goal.

4.4 Erosion and Sediment Control Inspections

All controls shall be inspected at least once every fourteen (14) calendar days (every day for sandbag berms) and within 24 hours following any storm event of 0.5 inches or greater. It is also recommended that "walk throughs" be conducted prior to storm events. The following is a list of inspection/maintenance practices that will be used for specific controls:

- Rock Berm: When silt reaches a depth equal to one-third of the height of the berm or one foot, whichever is less, the silt shall be removed and disposed of properly.
- Silt Fence: Removal of built up sediment will occur when the sediment reaches one-third the height of the fence.
- Stabilized Construction Entrance: Periodic regrading and top dressing with additional stones.
- Good Housekeeping: Litter, construction debris, and construction chemicals exposed to storm water shall be prevented from becoming a pollutant source for storm water discharges through screening of outfalls and daily pickup of litter.

In the event that sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize adverse impacts. An example of this may be the situation where sediment has washed into the street and could be carried into the storm sewers by the next rainfall and/or pose a safety hazard to users of base access routes.

4.5 Modifications/Revisions to SWPPP

Based on inspection results, any necessary modification to this SWPPP shall be implemented within seven (7) calendar days of the inspection. A modification is necessary if a control measure or operational procedure does not provide

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adequate pollutant control. All revisions shall be recorded on the Record of Revisions (**Appendix 5**) within 7 calendar days of the inspection.

It is the responsibility of each contractor or subcontractor to maintain effective pollutant discharge controls. Physical site conditions or contractor/subcontractor practices could make it necessary to install more controls than were originally planned. For example, localized concentrations of surface runoff or unusually steep areas could require additional silt barrier, or other structural controls. Assessing the need for, and installing additional controls will be a continuing contractor/ subcontractor responsibility until final stabilization is achieved. Contractors and subcontractors implementing this SWPPP must remain alert to the need to periodically refine and update this SWPPP in order to accomplish the intended goals.

5.0 NON-STORM WATER DISCHARGES

The following non-storm water discharges are allowed as documented in this SWPPP:

- Discharges from fire fighting activities
- Vehicle washwater if detergents are not used
- Dust control runoff in accordance with permit conditions
- Fire hydrant flushings
- Potable water sources including water line flushings
- Uncontaminated ground water resulting from dewatering activities
- Irrigation drainage
- Routine external building wash down which does not use detergents
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used
- Air conditioning condensate
- Spring water
- Uncontaminated ground water
- Foundation or footer drain water where flows are not contaminated with process materials such as solvents.

A copy of the Non-Storm Water Discharge Inspection Report is available in **Appendix 13**.

6.0 PROCEDURAL REQUIREMENTS

During construction, the U.S. Army Corps of Engineers - Fort Worth District, contractors and subcontractors must comply with the following requirements of the USEPA NPDES Storm Water General Permit:

- The Contractor shall review this basic SWPPP and prepare a project specific SWPPP.
- This SWPPP must be compliance certified for the Project prior to submission of the Notice of Intent (NOI).
- The NOI (EPA Form 3510-6 (8/98)) must be completed, signed and postmarked at least 2 days or 48 hours prior to beginning of the Project construction. Each entity

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meeting either of the two criteria for an operator must submit an NOI to the USEPA, Storm Water Notice of Intent (4203), 401 M Street, SW, Washington, DC 20460. The NOI should be mailed either certified or registered mail with return receipt requested.

- A notice describing the construction activity and SWPPP must be conspicuously posted near the main entrance of the site. If displaying the notice near the main entrance is infeasible, the notice can be posted in a local public building such as the town hall or public library. The permit notice must include the project's permit number, the name and phone number of a local contact, a brief project description, and the location of the SWPPP if not kept on site. The EPA encourages that the general public have access to the SWPPP at reasonable hours.
- Contractors and/or subcontractors are required to keep a signed copy of this SWPPP and supporting documents. In maintaining plans, all records and supporting documents should be compiled together in an orderly fashion. Federal regulations require permittee(s) to keep the SWPPP and all reports and documents for at least three years after the project is complete. This provision ensures that all records are available in the event the documents need to be reviewed.
- All contractors/subcontractors involved in clearing, grubbing, grading and excavation construction activities, must sign the appropriate certification statement located in **Appendix 6**. At a minimum, this includes the grading, underground utility, and paving contractors, etc.
- U.S. Army Corps of Engineers - Fort Worth District, contractor and/or subcontractor will conduct inspections of the project as described previously to assure compliance with this SWPPP. Based on inspection results, this SWPPP and BMPs may require modification by the contractors and/or subcontractors, to assure the quality of storm water or the identified non-storm water discharges, is leaving the site in compliance with the EPA NPDES Storm Water General Permit. Refer to the USEPA NPDES Storm Water General Permit, Part IV.4, for specific inspection requirements. All modifications must be implemented within 7 calendar days after the inspection.
- C Modifications specific to construction projects must be approved by U.S. Army Corps of Engineers - Fort Worth District prior to implementation by the contractor and/or subcontractor as required under the USEPA NPDES Storm Water General Permit. This SWPPP may be amended at any time if it is found to inadequately address conditions of the USEPA NPDES Storm Water General Permit or any amendments to the permit.
- C This SWPPP must be updated within 7 calendar days from the date of inspection each time there are significant modifications to construction activities, contractors/subcontractors, or pollutant control practices. The Record of Revision is located in **Appendix 5**.
- Discharge of hazardous substances or oil into storm water is subject to reporting requirements. In the event of a spill of a hazardous substance, the operator is required to notify the National Response Center (1-800-424-8802) to properly report the spill. In addition, the operator shall submit a written description of the release (including the type and amount of material released, the date of the release, the circumstances of the release, and the steps to be taken to prevent future spills) to the EPA regional office in Dallas. The SWPPP must be revised within 14 calendar days after the release to reflect the release, stating the information above along with modifications to minimize the possibility of future

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occurrences. Each contractor and subcontractor is responsible for complying with these reporting requirements.

- All tenants and contractors are required to abide by the Department of the Army HQ. U.S. Army Air Defense Center Environmental Spill Plan dated 29 September 1997, including the reporting requirements. A copy of the Spill Plan can be obtained by calling Danny Duran at ph (915) 568-6989 and fax (915) 568-1333.
- Upon completion, and approval by the contracting officer, of the construction activities and final stabilization of the site, the operator and/or contractor must complete a Notice of Termination (NOT). The Contractor may choose to submit the prepared NOT to EPA. COE requests that the contractor submit the NOT to the Environmental Division of the Fort Worth District. Fort Worth District will file both the USACE and the Contractor's NOT to EPA. The Contractor's prepared NOT may be mailed to :

Dr. Hank Jarboe
CESWF-EV-EE, RM 3A14
U.S.Army corps of Engineers
819 Taylor Street
Fort Worth, Texas 76102-0300

Dr. Jarboe may be contacted at (817) 978-5068. NOT forms submitted directly shall be mailed to :

USEPA
Storm Water Notice of Termination (4203),
401 M Street, SW,
Washington, DC 20460

A copy of the NOT (Form 3510-7) is included in **Appendix 8**.

- A copy of the General Construction Permit is included in **Appendix 14**. Questions regarding the USEPA NPDES program and the General Construction Permit can be directed to the EPA Region VI at 1-800-245-6510 or the Notice of Intent Processing Center (703) 931-3230.
- This SWPPP along with supporting documentation must be retained for a period of three (3) years after the completion of the Project. It is recommended that each of the operator(s) maintain a copy of the SWPPP for the three-year period.

The SWPPP is not submitted to the USEPA unless the Director specifically requests a copy for review. However, when the Director requests the SWPPP, the permittee(s) should submit it in a timely manner. In addition, when requested, permittee(s) should also submit the SWPPP to state or local sediment and erosion or storm water management agencies, or to a municipal operator, where the site discharges through a USEPA NPDES storm water permitted municipal separate storm sewer system.

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-99-B-0060

APPENDIX 1 -- Notice of Intent (NOI)

NPDES
FORM



United States Environmental Protection Agency
Washington, DC 20460
Notice of Intent (NOI) for Storm Water Discharges Associated with
CONSTRUCTION ACTIVITY Under a NPDES General Permit

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a NPDES permit issued for storm water discharges associated with construction activity in the State/Indian Country Land identified in Section II of this form. Submission of this Notice of Intent also constitutes notice that the party identified in Section I of this form meets the eligibility requirements in Part I.B. of the general permit (including those related to protection of endangered species determined through the procedures in Addendum A of the general permit), understands that continued authorization to discharge is contingent on maintaining permit eligibility, and that implementation of the Storm Water Pollution Prevention Plan required under Part IV of the general permit will begin at the time the permittee commences work on the construction project identified in Section II below. IN ORDER TO OBTAIN AUTHORIZATION, ALL INFORMATION REQUESTED MUST BE INCLUDED ON THIS FORM. SEE INSTRUCTIONS ON BACK OF FORM.

I. Owner/Operator (Applicant) Information

Name: _____ Phone: _____
Address: _____ Status of Owner/Operator:
City: _____ State: _____ Zip Code: _____

II. Project/Site Information

is the facility located on Indian Country Lands?
Yes No

Project Name: Fort Bliss Tactical Vehicle Overpass
Project Address/Location: Fort Bliss Military Reservation

City: Fort Bliss State: TX Zip Code: 79916 - 6816

Latitude: 31 49' 30" Longitude: 106 24' 30" County: El Paso

Has the Storm Water Pollution Prevention Plan (SWPPP) been prepared? Yes No

Optional: Address of location of SWPPP for viewing Address in Section I above Address in Section II above Other address (if known) below:

SWPPP Address: _____ Phone: _____
City: _____ State: _____ Zip Code: _____

Name of Receiving Water: Rio Grande River via Urban Drainage

11 01 1999 09 01 2000
Month Day Year Month Day Year

Estimated Construction Start Date Estimated Completion Date

Estimate of area to be disturbed (to nearest acre): 8

- Estimate of Likelihood of Discharge (choose only one):
- 1. Unlikely
 - 2. Once per month
 - 3. Once per week
 - 4. Once per day
 - 5. Continual

Based on instruction provided in Addendum A of the permit, are there any listed endangered or threatened species, or designated critical habitat in the project area?

Yes No

I have satisfied permit eligibility with regard to protection of endangered species through the indicated section of Part I.B.3.e.(2) of the permit (check one or more boxes):

- (a)
- (b)
- (c)
- (d)

III. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____ Date: _____
Signature: _____

**Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity to be Covered Under a NPDES Permit****Who Must File a Notice of Intent Form**

Under the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq.; the Act), except as provided by Part I.B.3 the permit, Federal law prohibits discharges of pollutants in storm water from construction activities without a National Pollutant Discharge Elimination System Permit. Operator(s) of construction sites where 5 or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least 5 acres, or any site designated by the Director, must submit an NOI to obtain coverage under an NPDES Storm Water Construction General Permit. If you have questions about whether you need a permit under the NPDES Storm Water program, or if you need information as to whether a particular program is administered by EPA or a State agency, write to or telephone the Notice of Intent Processing Center at (703) 931-3230.

Where to File NOI Form

NOIs must be sent to the following address:

Storm Water Notice of Intent (4203)
USEPA
401 M. Street, SW
Washington, D.C. 20460

Do not send Storm Water Pollution Prevention Plans (SWPPPs) to the above address. For overnight/express delivery of NOIs, please include the room number 2104 Northeast Mall and phone number (202) 260-9541 in the address.

When to File

This form must be filed at least 48 hours before construction begins.

Completing the Form

OBTAIN AND READ A COPY OF THE APPROPRIATE EPA STORM WATER CONSTRUCTION GENERAL PERMIT FOR YOUR AREA. To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, call the Notice of Intent Processing Center at (703) 931-3230.

Section I. Facility Owner/Operator (Applicant) Information

Provide the legal name, mailing address, and telephone number of the person, firm, public organization, or any other entity that meet either of the following two criteria: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have the day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions. Each person that meets either of these criteria must file this form. Do not use a colloquial name. Correspondence for the permit will be sent to this address.

Enter the appropriate letter to indicate the legal status of the owner/operator of the project: F = Federal; S = State; M = Public (other than federal or state); P = Private.

Section II. Project/Site Information

Enter the official or legal name and complete street address, including city, county, state, zip code, and phone number of the project or site. If it lacks a street address, indicate with a general statement the location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

The applicant must also provide the latitude and longitude of the facility in degrees, minutes, and seconds to the nearest 15 seconds. The latitude and longitude of your facility can be located on USGS quadrangle maps. Quadrangle maps can be obtained by calling 1-800 USA MAPS. Longitude and latitude may also be obtained at the Census Bureau Internet site: <http://www.census.gov/cgi-bin/gazetteer>.

Latitude and longitude for a facility in decimal form must be converted to degrees, minutes and seconds for proper entry on the NOI form. To convert decimal latitude or longitude to degrees, minutes, and seconds, follow the steps in the following example.

Convert decimal latitude 45.1234567 to degrees, minutes, and seconds.

- 1) The numbers to the left of the decimal point are degrees.
- 2) To obtain minutes, multiply the first four numbers to the right of the decimal point by 0.006. $1234 \times .006 = 7.404$.
- 3) The numbers to the left of the decimal point in the result obtained in step 2 are the minutes: 7.
- 4) To obtain seconds, multiply the remaining three numbers to the right of the decimal from the result in step 2 by 0.06: $404 \times 0.06 = 24.24$. Since the numbers to the right of the decimal point are not used, the result is 24.
- 5) The conversion for 45.1234 = $45^{\circ} 7' 24''$.

Indicate whether the project is on Indian Country Lands.

Indicate if the Storm Water Pollution Prevention Plan (SWPPP) has been developed. Refer to Part IV of the general permit for information on SWPPPs. To be eligible for coverage, a SWPPP must have been prepared.

Optional: Provide the address and phone number where the SWPPP can be viewed if different from addresses previously given. Check appropriate box.

Enter the name of the closest water body which receives the project's construction storm water discharge.

Enter the estimated construction start and completion dates using four digits for the year (i.e. 05/27/1998).

Enter the estimated area to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest acre; if less than 1 acre, enter "1." Note: 1 acre = 43,560 sq. ft.

Indicate your best estimate of the likelihood of storm water discharges from the project. EPA recognizes that actual discharges may differ from this estimate due to unforeseen or chance circumstances.

Indicate if there are any listed endangered or threatened species, or designated critical habitat in the project area.

Indicate which Part of the permit that the applicant is eligible with regard to protection of endangered or threatened species, or designated critical habitat.

Section III. Certification

Federal Statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner of the proprietor, or

For a municipality, state, federal, or other public facility: by either a principal executive or ranking elected official. An unsigned or undated NOI form will not be granted permit coverage.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, OPPE Regulatory Information Division (2137), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

NPDES
FORM



United States Environmental Protection Agency
Washington, DC 20460

Notice of Intent (NOI) for Storm Water Discharges Associated with
CONSTRUCTION ACTIVITY Under a NPDES General Permit

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a NPDES permit issued for storm water discharges associated with construction activity in the State/Indian Country Land identified in Section II of this form. Submission of this Notice of Intent also constitutes notice that the party identified in Section I of this form meets the eligibility requirements in Part I.B. of the general permit (including those related to protection of endangered species determined through the procedures in Addendum A of the general permit), understands that continued authorization to discharge is contingent on maintaining permit eligibility, and that implementation of the Storm Water Pollution Prevention Plan required under Part IV of the general permit will begin at the time the permittee commences work on the construction project identified in Section II below. IN ORDER TO OBTAIN AUTHORIZATION, ALL INFORMATION REQUESTED MUST BE INCLUDED ON THIS FORM. SEE INSTRUCTIONS ON BACK OF FORM.

I. Owner/Operator (Applicant) Information

Name: Dept of Army HQ US Army Air Defense Center & Fort Bliss Phone: 915-568-0794
Address: Fort Bliss Military Reservation Status of Owner/Operator: M
City: Fort Bliss State: TX Zip Code: 79916 - 6816

II. Project/Site Information

Project Name: Fort Bliss Tactical Vehicle Overpass Is the facility located on Indian Country Lands? Yes No
Project Address/Location: Fort Bliss Military Reservation

City: Fort Bliss State: TX Zip Code: 79916 - 6816

Latitude: 31 | 49' | 30" Longitude: 106 | 24' | 30" County: El Paso

Has the Storm Water Pollution Prevention Plan (SWPPP) been prepared? Yes No

Optional: Address of location of SWPPP for viewing Address in Section I above Address in Section II above Other address (if known) below:

SWPPP Address: _____ Phone: _____
City: _____ State: _____ Zip Code: _____

Name of Receiving Water: Rio Grande River via Urban Drainage

11 01 1999 09 01 2000
Month Day Year Month Day Year

Estimated Construction Start Date Estimated Completion Date

Estimate of area to be disturbed (to nearest acre): 8

- Estimate of Likelihood of Discharge (choose only one):
1. Unlikely 3. Once per week 5. Continual
2. Once per month 4. Once per day

Based on instruction provided in Addendum A of the permit, are there any listed endangered or threatened species, or designated critical habitat in the project area?

Yes No

I have satisfied permit eligibility with regard to protection of endangered species through the indicated section of Part I.B.3.e.(2) of the permit (check one or more boxes):

(a) (b) (c) (d)

III. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____ Date: _____

Signature: _____

**Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity to be Covered Under a NPDES Permit****Who Must File a Notice of Intent Form**

Under the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq.; the Act), except as provided by Part I.B.3 the permit, Federal law prohibits discharges of pollutants in storm water from construction activities without a National Pollutant Discharge Elimination System Permit. Operator(s) of construction sites where 5 or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least 5 acres, or any site designated by the Director, must submit an NOI to obtain coverage under an NPDES Storm Water Construction General Permit. If you have questions about whether you need a permit under the NPDES Storm Water program, or if you need information as to whether a particular program is administered by EPA or a State agency, write to or telephone the Notice of Intent Processing Center at (703) 931-3230.

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When to File

This form must be filed at least 48 hours before construction begins.

Completing the Form

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Section I. Facility Owner/Operator (Applicant) Information

Provide the legal name, mailing address, and telephone number of the person, firm, public organization, or any other entity that meet either of the following two criteria: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have the day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions. Each person that meets either of these criteria must file this form. Do not use a colloquial name. Correspondence for the permit will be sent to this address.

Enter the appropriate letter to indicate the legal status of the owner/operator of the project: F = Federal; S = State; M = Public (other than federal or state); P = Private.

Section II. Project/Site Information

Enter the official or legal name and complete street address, including city, county, state, zip code, and phone number of the project or site. If it lacks a street address, indicate with a general statement the location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

The applicant must also provide the latitude and longitude of the facility in degrees, minutes, and seconds to the nearest 15 seconds. The latitude and longitude of your facility can be located on USGS quadrangle maps. Quadrangle maps can be obtained by calling 1-800 USA MAPS. Longitude and latitude may also be obtained at the Census Bureau Internet site: <http://www.census.gov/cgi-bin/gazetteer>.

Latitude and longitude for a facility in decimal form must be converted to degrees, minutes and seconds for proper entry on the NOI form. To convert decimal latitude or longitude to degrees, minutes, and seconds, follow the steps in the following example.

Convert decimal latitude 45.1234567 to degrees, minutes, and seconds.

- 1) The numbers to the left of the decimal point are degrees.
- 2) To obtain minutes, multiply the first four numbers to the right of the decimal point by 0.006. $1234 \times 0.006 = 7.404$.
- 3) The numbers to the left of the decimal point in the result obtained in step 2 are the minutes: 7.
- 4) To obtain seconds, multiply the remaining three numbers to the right of the decimal from the result in step 2 by 0.06: $404 \times 0.06 = 24.24$. Since the numbers to the right of the decimal point are not used, the result is 24.
- 5) The conversion for 45.1234 = 45° 7' 24".

Indicate whether the project is on Indian Country Lands.

Indicate if the Storm Water Pollution Prevention Plan (SWPPP) has been developed. Refer to Part IV of the general permit for information on SWPPPs. To be eligible for coverage, a SWPPP must have been prepared.

Optional: Provide the address and phone number where the SWPPP can be viewed if different from addresses previously given. Check appropriate box.

Enter the name of the closest water body which receives the project's construction storm water discharge.

Enter the estimated construction start and completion dates using four digits for the year (i.e. 05/27/1998).

Enter the estimated area to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest acre; if less than 1 acre, enter "1." Note: 1 acre = 43,560 sq. ft.

Indicate your best estimate of the likelihood of storm water discharges from the project. EPA recognizes that actual discharges may differ from this estimate due to unforeseen or chance circumstances.

Indicate if there are any listed endangered or threatened species, or designated critical habitat in the project area.

Indicate which Part of the permit that the applicant is eligible with regard to protection of endangered or threatened species, or designated critical habitat.

Section III. Certification

Federal Statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner of the proprietor, or

For a municipality, state, federal, or other public facility: by either a principal executive or ranking elected official. An unsigned or undated NOI form will not be granted permit coverage.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, OPPE Regulatory Information Division (2137), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

NPDES
FORM

EPA

United States Environmental Protection Agency
Washington, DC 20460Notice of Intent (NOI) for Storm Water Discharges Associated with
CONSTRUCTION ACTIVITY Under a NPDES General Permit

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a NPDES permit issued for storm water discharges associated with construction activity in the State/Indian Country Land identified in Section 11 of this form. Submission of this Notice of Intent also constitutes notice that the party identified in Section I of this form meets the eligibility requirements in Part I.B. of the general permit (including those related to protection of endangered species determined through the procedures in Addendum A of the general permit), understands that continued authorization to discharge is contingent on maintaining permit eligibility, and that implementation of the Storm Water Pollution Prevention Plan required under Part IV of the general permit will begin at the time the permittee commences work on the construction project identified in Section 11 below. IN ORDER TO OBTAIN AUTHORIZATION, ALL INFORMATION REQUESTED MUST BE INCLUDED ON THIS FORM. SEE INSTRUCTIONS ON BACK OF FORM.

I. Owner/Operator (Applicant) Information

Name: US Army Corps of Engineers (CESWF-EV-EE)Phone: 817/978-5068Address: 819 Taylor Street, P.O. Box 17300

Status Of

Owner/Operator:

F

City: Fort WorthState: TX Zip Code: 76102

II. Project/Site Information

Project Name: Tactical Vehicle OverpassIs the facility located on Indian
Country Lands?Yes No XProject Address/Location Fred Wilson Road and Earl H. Bruns RoadCity: Fort BlissState: TX Zip Code 79916-6816Latitude: 31° 49' 30"Longitude: 106° 24' 30"County: El PasoHas the Storm Water Pollution Prevention Plan (SWPPP) been prepared? Yes No

Optional: Address of location of

SWPPP for viewing

Address in Section I above X

Address in section 11 above _____ Other address (if known) below:

SWPPP

Address _____

Phone: _____

City: _____

State: _____ Zip Code: _____

Name of Receiving Water: Rio Grande11 01 1999
Month Day Year09 01 2000
Month Day Year

Estimated Construction Start Date

Estimated Completion Date

Estimate of area to be disturbed (to nearest acre): 8

Estimate of Likelihood of Discharge (choose only one);

1. Unlikely 3. Once per week 5. Continual
2. once per month 4. Once per day

Based on instruction provided in Addendum A of the permit, are
there any endangered or threatened species, or designated
critical habitat in the project area?Yes No XI have satisfied permit eligibility with regard to protection of
endangered species through the indicated section of Part
I.B.3.e.(2) of the permit (check one or more boxes):(a) (b) (c) (d)

III. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: MICHAEL J. MOCEK, Deputy District EngineerDate: 8/13/99Signature: Michael J. Mocek

**Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity to be Covered Under a NPDES Permit****Who Must File a Notice of Intent Form**

Under the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.; the Act), except as provided by Part I.B.3 the permit, Federal law prohibits discharges of pollutants in storm water from construction activities without a National Pollutant Discharge Elimination System Permit. Operator(s) of construction sites where 5 or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least 5 acres, or any site designated by the Director, must submit an NOI to obtain coverage under an NPDES Storm Water Construction General Permit. If you have questions about whether you need a permit under the NPDES Storm Water program, or if you need information as to whether a particular program is administered by EPA or a State agency, write to or telephone the Notice of Intent Processing Center at (703) 931-3230.

Where to File NOI Form

NOIs must be sent to the following address:

Storm Water Notice of Intent (4203)
USEPA
401 M. Street, SW
Washington, D.C. 20460

Do not send Storm Water Pollution Prevention Plans (SWPPPs) to the above address. For overnight/express delivery of NOIs, please include the room number 2104 Northeast Mall and phone number (202) 260-9541 in the address.

When to File

This form must be filed at least 48 hours before construction begins.

Completing the Form

OBTAIN AND READ A COPY OF THE APPROPRIATE EPA STORM WATER CONSTRUCTION GENERAL PERMIT FOR YOUR AREA. To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, call the Notice of Intent Processing Center at (703) 931-3230.

Section I. Facility Owner/Operator (Applicant) Information

Provide the legal name, mailing address, and telephone number of the person, firm, public organization, or any other entity that meet either of the following two criteria: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have the day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions. Each person that meets either of these criteria must file this form. Do not use a colloquial name. Correspondence for the permit will be sent to this address.

Enter the appropriate letter to indicate the legal status of the owner/operator of the project: F = Federal; S = State; M = Public (other than federal or state); P = Private.

Section II. Project/Site Information

Enter the official or legal name and complete street address, including city, county, state, zip code, and phone number of the project or site. If it lacks a street address, indicate with a general statement the location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

The applicant must also provide the latitude and longitude of the facility in degrees, minutes, and seconds to the nearest 15 seconds. The latitude and longitude of your facility can be located on USGS quadrangle maps. Quadrangle maps can be obtained by calling 1-800 USA MAPS. Longitude and latitude may also be obtained at the Census Bureau Internet site: <http://www.census.gov/cgi-bin/gazetteer>.

Latitude and longitude for a facility in decimal form must be converted to degrees, minutes and seconds for proper entry on the NOI form. To convert decimal latitude or longitude to degrees, minutes, and seconds, follow the steps in the following example.

Convert decimal latitude 45.1234567 to degrees, minutes, and seconds.

- 1) The numbers to the left of the decimal point are degrees.
- 2) To obtain minutes, multiply the first four numbers to the right of the decimal point by 0.006. $1234 \times 0.006 = 7.404$.
- 3) The numbers to the left of the decimal point in the result obtained in step 2 are the minutes: 7.
- 4) To obtain seconds, multiply the remaining three numbers to the right of the decimal from the result in step 2 by 0.06: $404 \times 0.06 = 24.24$. Since the numbers to the right of the decimal point are not used, the result is 24".
- 5) The conversion for $45.1234 = 45^{\circ} 7' 24''$.

Indicate whether the project is on Indian Country Lands.

Indicate if the Storm Water Pollution Prevention Plan (SWPPP) has been developed. Refer to Part IV of the general permit for information on SWPPPs. To be eligible for coverage, a SWPPP must have been prepared.

Optional: Provide the address and phone number where the SWPPP can be viewed if different from addresses previously given. Check appropriate box.

Enter the name of the closest water body which receives the project's construction storm water discharge.

Enter the estimated construction start and completion dates using four digits for the year (i.e. 05/27/1998).

Enter the estimated area to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest acre; if less than 1 acre, enter "1." Note: 1 acre = 43,560 sq. ft.

Indicate your best estimate of the likelihood of storm water discharges from the project. EPA recognizes that actual discharges may differ from this estimate due to unforeseen or chance circumstances.

Indicate if there are any listed endangered or threatened species, or designated critical habitat in the project area.

Indicate which Part of the permit that the applicant is eligible with regard to protection of endangered or threatened species, or designated critical habitat.

Section III. Certification

Federal Statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner of the proprietor, or

For a municipality, state, federal, or other public facility: by either a principal executive or ranking elected official. An unsigned or undated NOI form will not be granted permit coverage.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, OPPE Regulatory Information Division (2137), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

EPA NPDES STORM WATER PROGRAM

The following information is posted in compliance with Part IV.B.2, of the NPDES Region 6 Storm Water Construction General Permit [63 Fed. Reg. 36502]. Additional information regarding the NPDES Region 6 storm water program may be found on the Internet at <http://www.epa.gov/region6/sw/>.

Permit Number: A permit number has not yet been assigned to this project. In lieu of this permit number, a copy of the NOI submitted to the EPA is posted below.

Contact Name: Emil Madura

Contact Phone: (915) 568-0794

Project Description: The project consists of construction of an two lane overpass structure to provide access from Fort Bliss to Biggs Army Airfield. The bridge will span Fred Wilson Road, a and railway spur. The bridge will be a total of 156 meters and clear the six lane thoroughfare and associated right-of-ways. Approaches at either end of the structure will consist of imported fill material. Earl H. Bruns Road will be extended from its existing dead end to join the southern overpass approach.

EPA NPDES STORM WATER PROGRAM

The following information is posted in compliance with Part IV.B.2, of the NPDES Region 6 Storm Water Construction General Permit [63 Fed. Reg. 36502]. Additional information regarding the NPDES Region 6 storm water program may be found on the Internet at <http://www.epa.gov/region6/sw/>.

Permit Number: A permit number has not yet been assigned to this project. In lieu of this permit number, a copy of the NOI submitted to the EPA is posted below.

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ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-99-B-0060

APPENDIX 2 -- Permit Coverage Notice from EPA

TO BE INSERTED UPON RECEIPT FROM EPA

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-99-B-0060

APPENDIX 3 -- Record of Temporary/Permanent Ceasing of Construction Activities

ACCOMPANYING AMENDMENT NO. 0001 TO SOLICITATION NO. DACA63-99-B-0060

APPENDIX 4 -- Inspection Report

SWPPP INSPECTION REPORT

**Fort Bliss Tactical Vehicle Overpass
 Department of the Army HQ. U.S. Army Air Defense Center And Fort Bliss
 Fort Bliss, Texas 79916-6816**

Inspector: _____ Date: _____

Inspector's Qualifications: _____

Site Conditions: _____

___BIWEEKLY ___RAIN EVENT ___OTHER_____

Measures & Controls	In Conformance with Design Standards	Effective Pollutant Control Practice
Rock Check Dam	YES / NO	YES / NO
Silt Fence	YES / NO	YES / NO
Soil Stabilization	YES / NO	YES / NO
Solid Waste Disposal	YES / NO	YES / NO
Equipment Fueling/Storage	YES / NO	YES / NO
Hazardous Materials Storage	YES / NO	YES / NO
Hazardous Waste	YES / NO	YES / NO
Sanitary / Septic	YES / NO	YES / NO

VIOLATIONS NOTED: (Explain each "NO" circled above)

RECOMMENDED REMEDIAL ACTIONS:

COMMENTS:

Based on the results of the inspection, necessary control modifications shall be implemented within seven (7) calendar days. These reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three years from the date that the site is finally stabilized. A copy of the SWPPP shall be kept at the site at all times during construction.

Certification Statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Telephone: _____

Printed Name: _____

APPENDIX 5 -- Record of Revisions

APPENDIX 6 -- Contractor and Subcontractor Certifications

CONTRACTOR CERTIFICATION

**Storm Water Pollution Prevention Plan
For Storm Water Discharges Associated with Construction Activity**

PROJECT:

**Fort Bliss Tactical Vehicle Overpass
Department of the Army HQ. U.S. Army Air Defense Center And Fort Bliss
Fort Bliss, Texas 79916-6816**

Each contractor engaged in activities under this SWPPP that disturb surface soil must be identified and must sign the following certification statement.

Name of Contractor: _____

Address: _____

Telephone No.: _____ Facsimile: _____

Type of Construction Service to be provided: _____

Certification Statement:

"I certify under penalty of law that I understand the terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

This certification is hereby signed in reference to construction at the above-referenced project.

By:

Signature

Name

Title

Date

SUBCONTRACTOR CERTIFICATION

**Storm Water Pollution Prevention Plan
For Storm Water Discharges Associated with Construction Activity**

PROJECT:

**Fort Bliss Tactical Vehicle Overpass
Department of the Army HQ. U.S. Army Air Defense Center And Fort Bliss
Fort Bliss, Texas 79916-6816**

Each subcontractor engaged in activities under this SWPPP that disturb surface soil must be identified and must sign the following certification statement.

Name of Subcontractor: _____

Address: _____

Telephone No.: _____ Facsimile: _____

Type of Construction Service to be provided: _____

Certification Statement:

"I certify under penalty of law that I understand the terms and conditions of the National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

This certification is hereby signed in reference to construction at the above-referenced project.

By:

Signature

Name

Title

Date

APPENDIX 7 -- Compliance Certifications

OPERATOR COMPLIANCE CERTIFICATION

**Storm Water Pollution Prevention Plan
For Storm Water Discharges Associated with Construction Activity**

PROJECT:

**Fort Bliss Tactical Vehicle Overpass
Department of the Army HQ. U.S. Army Air Defense Center And Fort Bliss
Fort Bliss, Texas 79916-6816**

Name of Operator: _____

Name of Facility: _____

Address: _____

Telephone: _____ Facsimile: _____

Certification Statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

This certification is hereby signed in reference to Storm Water Discharges Associated with Construction Activity at the above-referenced project.

By:

Signature

Name

Title

Date

AUTHORIZED SIGNATORY

Storm Water Pollution Prevention Plan For Storm Water Discharges Associated with Construction Activity

PROJECT:
Fort Bliss Tactical Vehicle Overpass
Department of the Army HQ. U.S. Army Air Defense Center And Fort Bliss
Fort Bliss, Texas 79916-6816

In accordance with the USEPA NPDES General Permit for Storm Water Discharges Associated With Construction Activity, Part IV.C.3., signature and plan review requirements are as follows:

1. *All Notices of Intent shall be signed as follows:*
 - a. *For a corporation: By a responsible corporate officer. For the purposes of this section, a responsible corporate officer means: (1) A president, secretary, treasurer, or vice-president of the corporation in charge of principal business function, or any person who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;*
 - b. *For a partnership or sole proprietorship: by a partner or the proprietor, respectively; or*
 - c. *For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For the purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of USEPA).*
2. *All reports required by the permit or other information requested by the Director (USEPA) or authorized representative of the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:*
 - a. *The authorization is made in writing by a person described above and submitted to the Director (USEPA).*
 - b. *The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).*

The following authorized representative position responsible for signing all reports related to the National Pollutant Discharge Elimination System Permit for the construction activity located at the above-referenced project is:

	Name
	Title

I certify that I meet the requirements of the USEPA NPDES General Permit for Storm Water Discharges Associated With Construction Activity, Part IV.C.3.:

Name of Authorized Signatory

Position/Title

Signature of Authorized Signatory

Date

OWNER CERTIFICATION
FOR
TACTICAL VEHICLE OVERPASS
FORT BLISS, TEXAS

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Michael J. Moczak, P.E.
Deputy District Engineer

Date Certified: 8/13/99

APPENDIX 8 -- Notice of Termination (NOT)

NPDES
FORM



United States Environmental Protection Agency
Washington, DC 20460

Notice of Termination (NOT) of Coverage Under a NPDES General Permit for
Storm Water Discharges Associated with Industrial Activity

Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge storm water associated with industrial activity under the NPDES program. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

I. Permit Information

NPDES Storm Water
General Permit Number: _____

Check Here if You are No Longer
the Operator of the Facility:

Check Here if the Storm Water
Discharge is Being Terminated:

II. Facility Operator Information

Name: Dept. of Army HQ US Army Air Defense Center & Fort Bliss Phone: 915-568-0794

Address: Fort Bliss Military Reservation

City: Fort Bliss State: TX ZIP Code: 79916 - 6816

III. Facility/Site Location Information

Name: Fort Bliss Tactical Vehicle Overpass

Address: Fort Bliss Military Reservation

City: Fort Bliss State: TX ZIP Code: 79916 - 6816

Latitude: 31 49' 30" Longitude: 106 24' 30" Quarter: Section: Township: Range:

IV. Certification: I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

Print Name: _____ Date: _____

Signature: _____

Instructions for Completing Notice of Termination (NOT) Form

Who May File a Notice of Termination (NOT) Form

Permittees who are presently covered under an EPA-issued National Pollutant Discharge Elimination System (NPDES) General Permit (including the 1995 Multi-Sector Permit) for Storm Water Discharges Associated with Industrial Activity may submit a Notice of Termination (NOT) form when their facilities no longer have any storm water discharges associated with industrial activity as defined in the storm water regulations at 40 CFR 122.26(b)(14), or when they are no longer the operator of the facilities.

For construction activities, elimination of all storm water discharges associated with industrial activity occurs when disturbed soils at the construction site have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with industrial activity from the construction site that are authorized by a NPDES general permit have otherwise been eliminated. Final stabilization means that all soil-disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for uncaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

Where to File NOT Form

Send this form to the the following address:

Storm Water Notice of Termination (4203)
401 M Street, S.W.
Washington, DC 20460

Completing the Form

Type or print, using upper-case letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, telephone or write the Notice of Intent Processing Center at (703) 931-3230.

Instructions - EPA Form 3510-7
Notice of Termination (NOT) of Coverage Under The NPDES General Permit
for Storm Water Discharges Associated With Industrial Activity

Section I Permit Information

Enter the existing NPDES Storm Water General Permit number assigned to the facility or site identified in Section III. If you do not know the permit number, telephone or write your EPA Regional storm water contact person.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box:

If there has been a change of operator and you are no longer the operator of the facility or site identified in Section III, check the corresponding box.

If all storm water discharges at the facility or site identified in Section III have been terminated, check the corresponding box.

Section II Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Section III Facility/Site Location Information

Enter the facility's or site's official or legal name and complete address, including city, state and ZIP code. If the facility lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

Section IV Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2138, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

NPDES
FORMUnited States Environmental Protection Agency
Washington, DC 20460
**Notice of Termination (NOT) of Coverage Under a NPDES General Permit for
Storm Water Discharges Associated with Industrial Activity**

Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge storm water associated with industrial activity under the NPDES program. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

I. Permit Information

NPDES Storm Water
General Permit Number: _____Check Here if You are No Longer
the Operator of the Facility: Check Here if the Storm Water
Discharge is Being Terminated:

II. Facility Operator Information

Name: US Army Corps of Engineers Phone: _____Address: 819 Taylor StreetCity: Fort Worth State: TX ZIP Code: 76102

III. Facility/Site Location Information

Name: Fort Bliss Tactical Vehicle OverpassAddress: Fort Bliss Military ReservationCity: Fort Bliss State: TX ZIP Code: 79916 6816Latitude: 31 49' 30" Longitude: 106 24' 30" Quarter: _____ Section: _____ Township: _____ Range: _____

IV. Certification: I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

Print Name: _____ Date: _____

Signature: _____

Instructions for Completing Notice of Termination (NOT) Form
Who May File a Notice of Termination (NOT) Form

Permittees who are presently covered under an EPA-issued National Pollutant Discharge Elimination System (NPDES) General Permit (including the 1995 Multi-Sector Permit) for Storm Water Discharges Associated with Industrial Activity may submit a Notice of Termination (NOT) form when their facilities no longer have any storm water discharges associated with industrial activity as defined in the storm water regulations at 40 CFR 122.26(b)(14), or when they are no longer the operator of the facilities.

For construction activities, elimination of all storm water discharges associated with industrial activity occurs when disturbed soils at the construction site have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with industrial activity from the construction site that are authorized by a NPDES general permit have otherwise been eliminated. Final stabilization means that all soil-disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

Where to File NOT Form

Send this form to the following address:

Storm Water Notice of Termination (4203)
401 M Street, S.W.
Washington, DC 20460

Completing the Form

Type or print, using upper-case letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, telephone or write the Notice of Intent Processing Center at (703) 831-3230.

Instructions - EPA Form 3510-7
Notice of Termination (NOT) of Coverage Under The NPDES General Permit
for Storm Water Discharges Associated With Industrial Activity

Section I Permit Information

Enter the existing NPDES Storm Water General Permit number assigned to the facility or site identified in Section III. If you do not know the permit number, telephone or write your EPA Regional storm water contact person.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box:

If there has been a change of operator and you are no longer the operator of the facility or site identified in Section III, check the corresponding box.

If all storm water discharges at the facility or site identified in Section III have been terminated, check the corresponding box.

Section II Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Section III Facility/Site Location Information

Enter the facility's or site's official or legal name and complete address, including city, state and ZIP code. If the facility lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

Section IV Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

Please See Instructions Before Completing This Form

NPDES
FORMUnited States Environmental Protection Agency
Washington, DC 20460Notice of Termination (NOT) of Coverage Under a NPDES General Permit for
Storm Water Discharges Associated with Industrial Activity

Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge storm water associated with industrial activity under the NPDES program. ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

I. Permit Information

NPDES Storm Water
General Permit Number: _____Check Here if You are No Longer
the Operator of the Facility: Check Here if the Storm Water
Discharge is Being Terminated:

II. Facility Operator Information

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ ZIP Code: _____

III. Facility/Site Location Information

Name: Fort Bliss Tactical Vehicle OverpassAddress: Fort Bliss Military ReservationCity: Fort Bliss State: TX ZIP Code: 79916 6816Latitude: 31 49' 30" Longitude: 106 24' 30" Quarter: _____ Section: _____ Township: _____ Range: _____

IV. Certification: I certify under penalty of law that all storm water discharges associated with industrial activity from the identified facility that are authorized by a NPDES general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with industrial activity under this general permit, and that discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

Print Name: _____ Date: _____

Signature: _____

Instructions for Completing Notice of Termination (NOT) Form

Who May File a Notice of Termination (NOT) Form

Permittees who are presently covered under an EPA-issued National Pollutant Discharge Elimination System (NPDES) General Permit (including the 1995 Multi-Sector Permit) for Storm Water Discharges Associated with Industrial Activity may submit a Notice of Termination (NOT) form when their facilities no longer have any storm water discharges associated with industrial activity as defined in the storm water regulations at 40 CFR 122.26(b)(14), or when they are no longer the operator of the facilities.

For construction activities, elimination of all storm water discharges associated with industrial activity occurs when disturbed soils at the construction site have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all storm water discharges associated with industrial activity from the construction site that are authorized by a NPDES general permit have otherwise been eliminated. Final stabilization means that all soil-disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

Where to File NOT Form

Send this form to the following address:

Storm Water Notice of Termination (4203)
401 M Street, S.W.
Washington, DC 20460

Completing the Form

Type or print, using upper-case letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, telephone or write the Notice of Intent Processing Center at (703) 831-3230.

Instructions - EPA Form 3510-7
Notice of Termination (NOT) of Coverage Under The NPDES General Permit
for Storm Water Discharges Associated With Industrial Activity

Section I Permit Information

Enter the existing NPDES Storm Water General Permit number assigned to the facility or site identified in Section III. If you do not know the permit number, telephone or write your EPA Regional storm water contact person.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box:

If there has been a change of operator and you are no longer the operator of the facility or site identified in Section III, check the corresponding box.

If all storm water discharges at the facility or site identified in Section III have been terminated, check the corresponding box.

Section II Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Section III Facility/Site Location Information

Enter the facility's or site's official or legal name and complete address, including city, state and ZIP code. If the facility lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

Section IV Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

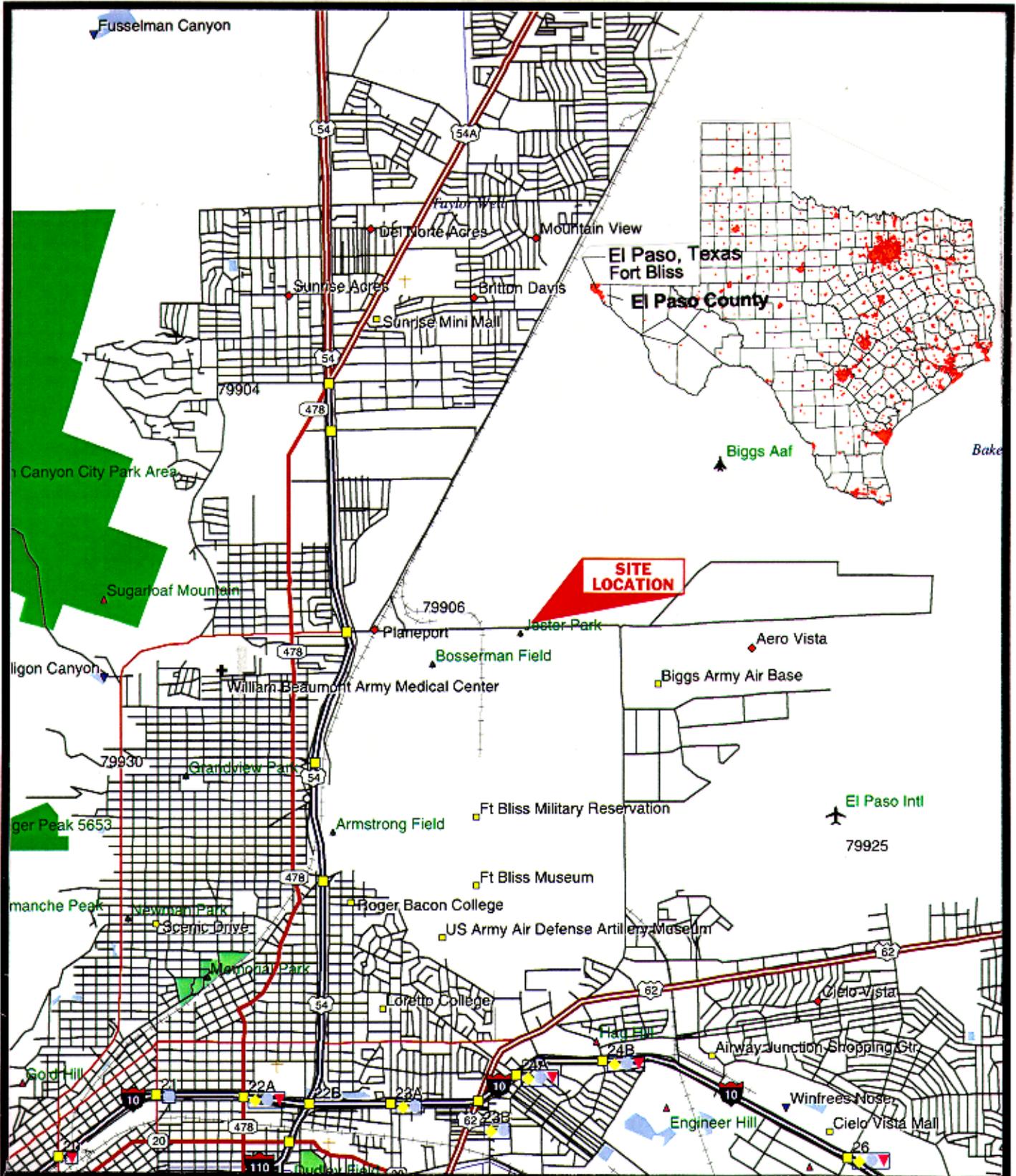
For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, State, Federal, or other public facility: by either a principal executive officer or ranking elected official.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

APPENDIX 9 -- Maps



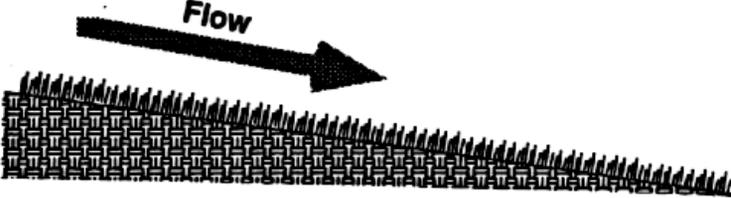
SITE VICINITY MAP

Fort Bliss Tactical Vehicle Overpass
 Fort Bliss, El Paso, Texas
 DeLorme Street Atlas USA



C&B Project No. 961470048 Scale: 1" = 1 miles

APPENDIX 10 -- Soil Stabilization Specifications/Details

<h2 style="text-align: left;">Vegetation</h2> 	<p>Applications</p> <ul style="list-style-type: none"> Perimeter Control <li style="border: 1px solid black; padding: 2px;">Slope Protection Sediment Trapping <li style="border: 1px solid black; padding: 2px;">Channel Protection <li style="border: 1px solid black; padding: 2px;">Temporary Stabilization <li style="border: 1px solid black; padding: 2px;">Permanent Stabilization Waste Management Housekeeping Practices
<p>DESCRIPTION Vegetation, as a Best Management Practice, is the sowing of annual grasses, small grains or legumes to provide interim and permanent vegetative stabilization for disturbed areas.</p> <p>PRIMARY USE Vegetation is used as a temporary or permanent stabilization technique for areas disturbed by construction but not protected by pavement, building or other structures. As a temporary control, vegetation is used to stabilize stockpiles and barren areas which are inactive for long periods of time. As a permanent control, grasses and other vegetation provide good protection for the soil along with some filtering for overland runoff. Subjected to acceptable runoff velocities, vegetation can provide a good method of permanent storm water management as well as a visual amenity to the site.</p> <p>Other BMPs may be required to assist in the establishment of vegetation. These other techniques include erosion control matting, swales and dikes to direct flow around newly seeded areas and proper grading to limit runoff velocities during construction.</p> <p>APPLICATIONS Vegetative techniques can and should apply to every construction project with few exceptions. Vegetation effectively reduces erosion in swales, stock piles, berms, mild to medium slopes and along roadways. Vegetative strips can provide some protection when used as a perimeter control for utility and site development construction.</p> <p>In many cases, the initial cost of temporary seeding may be high compared to tarps or covers for stockpiles or other barren areas subject to erosion yet inactive. This initial cost should be weighed with the amount of time the area is to remain inactive, since maintenance cost for vegetated areas is much less than most structural controls.</p>	<p>Targeted Constituents</p> <ul style="list-style-type: none"> ● Sediment ● Nutrients Toxic Materials ○ Oil & Grease ○ Floatable Materials ○ Other Construction Wastes
	<p>Implementation Requirements</p> <ul style="list-style-type: none"> ● Capital Costs ● Maintenance ○ Training ● Suitability for Slopes >5%
	<p>Legend</p> <ul style="list-style-type: none"> ● Significant Impact ● Medium Impact ○ Low Impact ? Unknown or Questionable Impact
	<p style="text-align: center; font-size: 1.2em;">Fe = 0.90</p>
	<p style="text-align: center; font-size: 1.2em;">E-4</p>
	<div style="text-align: center;">  <p>North Central Texas Council of Governments</p> </div>

Vegetation

- Groove or furrow slopes steeper than 3:1 on the contour line before seeding.
- Provide 4-6 inches of topsoil over rock, gravel or otherwise unsuitable soils.
- Seed-bed should be well pulverized, loose and uniform.

Plant Selection, Fertilization and Seeding

- Use only high quality, USDA certified seed.
- Use an appropriate species or species mixture adapted to local climate, soil conditions and season according to the table on the following page. Consult with the local office of the U.S. Soil Conservation Service (SCS) or Engineering Extension service as necessary for selection of proper species and application technique in this area.
- Seeding rate should be in accordance with the table on the following page or as recommended by the SCS or engineering extension service.
- Fertilizer shall be applied according to the manufacturer's recommendation with proper spreader equipment. Typical application rate for 10-10-10 grade fertilizer is 700-1000 lb/acre. **DO NOT OVER APPLY FERTILIZER.**
- If hydro-seeding is used, do not mix seed and fertilizer more than 30 minutes before application.
- Evenly apply seed using cyclone seeder, seed drill, cultipacker or hydroseeder.
- Provide adequate water to aid in establishment of vegetation.
- Use appropriate mulching techniques where necessary.

LIMITATIONS

Vegetation is not appropriate for areas subjected to heavy pedestrian or vehicular traffic. As a temporary technique, vegetation may be costly when compared to other techniques.

Vegetation is not appropriate for rock, gravel or coarse grained soils unless 4 to 6 inches of topsoil is applied.

MAINTENANCE REQUIREMENTS

Protect newly seeded areas from excessive runoff and traffic until vegetation is established. A watering and fertilizing schedule will be required as part of the SWPPP to assist in the establishment of the vegetation.

Specification Section	N/A
Detail ID	N/A
	

Temporary Vegetation Table

Vegetation - The following plants are commonly used for temporary cover in Texas. For optimum planting dates and adaptations for a specific soil or site, contact your local field office of the Soil Conservation Service.

Species	Veg, Area Adapt. ¹	Soils	Planting Rate	Planting Date	Source	Wildlife Food Value
Cane, Redtop	All	All	30#/ Acre	8/15 thru 9/30	C	D
Millet, German	All	All	40#/ Acre	4/1 thru 5/15	C	B
Oats	All	All	3 bu / Acre	8/15 thru 9/30	C	D
Panicum, Texas	All	All	25#/ Acre	3/15 thru 5/15	C	B
Proso millet	All	All	40#/ Acre	5/1 thru 5/15	C	B
Hye, Elbon	All	All	1.5 bu / Acre	8/15 thru 9/30	C	D
Ryegrass, Annual	All	All	30#/ Acre	8/15 thru 9/30	C	D
Sprangletop, Green	All	All	3.4#/ Acre	2/1 thru 5/15	C	D
Sudangrass	All	All	40#/ Acre	4/1 thru 5/15	C	B

¹ Vegetative Area Adaptation: As taken from 'Texas Plants - A Checklist and Ecological Summary', MP-585, June 1962, Dr. F. W. Gould

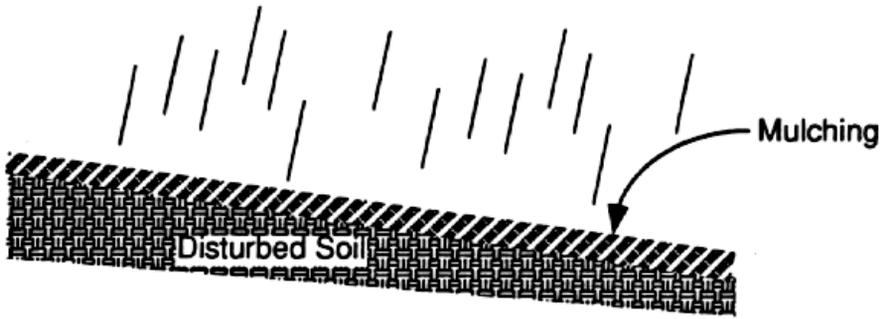
The planting date represents a statewide spread in planting dates. Refer to local guides for specific dates.
Sources: C - Commercial

Wildlife Food Value: B - Bird D - Deer

Adapted from Erosion and Sediment Control Guidelines For Developing Areas in Texas, U.S. Department of Agriculture, Soil Conservation Service, 1976.

Section 4
Best Management Practices

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<h2 style="text-align: left;">Mulching</h2> 	<p>Applications</p> <ul style="list-style-type: none"> Perimeter Control <li style="border: 1px solid black; padding: 2px;">Slope Protection Sediment Trapping Channel Protection <li style="border: 1px solid black; padding: 2px;">Temporary Stabilization Permanent Stabilization Waste Management Housekeeping Practices
<p>DESCRIPTION Mulching is the application of a layer of chopped straw, hay or other material which is spread uniformly over barren areas to reduce the effects of erosion from rainfall. Types of mulch include organic materials, straw, wood chips, bark or other fibers. Mulch also comes in prepackaged forms, using straw, hay or other material with organic and inorganic binding systems.</p> <p>PRIMARY USE Mulch is used to temporarily and/or permanently stabilize clear or freshly seeded areas. It protects the soil from erosion and moisture loss by lessening the effects of wind, water, and sunlight. It also decreases the velocity of sheet flow, thereby reducing the volume of sediment-laden water flow leaving the mulched area.</p> <p>APPLICATIONS Mulch may be used on any construction-related disturbed area for surface protection including:</p> <ul style="list-style-type: none"> • Freshly seeded or planted areas, • Areas at risk due to the time period being unsuitable for growing vegetation, • Areas that are not conducive to seeding or planting. <p>DESIGN CRITERIA Mulch may be used by itself or in combination with netting or other anchors to promote soil stabilization.</p> <p>Several manufacturers provide an organic mulch with an attached netting to simplify installation. Installation should adhere to manufacturer's specifications and requirements.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Choice of mulch depends largely on slope, climate, and soil type in addition to availability of different materials. Straw and hay are the recommended choices due to their availability and biodegradability. <input type="checkbox"/> Mulch should be applied in an even and uniform manner where concentrated water flow is negligible. <input type="checkbox"/> In the North Central Texas area, the application of mulch should be approximately 2 tons dry straw or hay per acre spread uniformly across the disturbed area. Other material should be applied such that 25% of the soil is visible through the mulch. 	<p>Targeted Constituents</p> <ul style="list-style-type: none"> ● Sediment ○ Nutrients Toxic Materials ○ Oil & Grease ○ Floatable Materials ○ Other Construction Wastes <p>Implementation Requirements</p> <ul style="list-style-type: none"> ● Capital Costs ● Maintenance ○ Training ○ Suitability for Slopes >5% <p>Legend</p> <ul style="list-style-type: none"> ● Significant Impact ● Medium Impact ○ Low Impact ? Unknown or Questionable Impact <p style="text-align: center; border: 1px solid black; padding: 5px;">Fe = 0.90</p> <p style="text-align: center; border: 1px solid black; padding: 5px;">E-5</p> <div style="text-align: center;">  <p>North Central Texas Council of Governments</p> </div>

Mulching

- For areas using straw mulch and the slope is greater than 3-5%, anchoring of the mulch with a Krimper Tool is required.

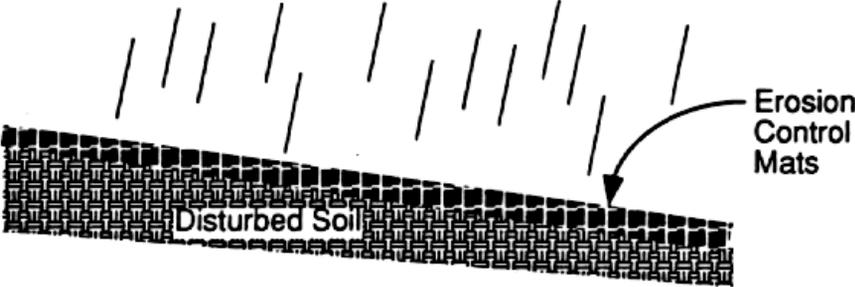
LIMITATIONS

Mulches are subject to removal by wind or water under severe climatic conditions. Mulches lower the soil temperature which may result in longer seed germination periods.

MAINTENANCE REQUIREMENTS

Mulched areas must be inspected on a weekly basis, and after significant (>0.5 inch) rainfall, for thin or bare spots caused by natural decomposition or weather related events. Mulch in high traffic areas should be replaced on a regular basis to maintain uniform protection.

Specification Section	O
Detail ID	N/A
	

<h2 style="text-align: center;">Erosion Control Mats</h2> 	<p>Applications</p> <ul style="list-style-type: none"> Perimeter Control <li style="border: 1px solid black; padding: 2px;">Slope Protection <li style="border: 1px solid black; padding: 2px;">Sediment Trapping Channel Protection <li style="border: 1px solid black; padding: 2px;">Temporary Stabilization <li style="border: 1px solid black; padding: 2px;">Permanent Stabilization Waste Management Housekeeping Practices
<p>DESCRIPTION</p> <p>An erosion control mat (ECM) is a geomembrane or biodegradable fabric placed over disturbed areas to limit the effects of erosion due to rainfall impact and runoff across barren soil. Erosion control mats are manufactured by a wide variety of vendors addressing a wide variety of conditions such as vegetation establishment and high velocity flow. Types of matting include organic (jute, straw) and synthetic (plastic and glass fiber) materials.</p> <p>PRIMARY USE</p> <p>Mats can provide both temporary and/or permanent stabilization for disturbed soil or barren areas. It is used for difficult to stabilize areas such as steep slopes, temporary or permanent drainage swales, embankments or high traffic (pedestrian) areas. Some mats are reusable, reducing the initial cost of the installation.</p> <p>APPLICATIONS</p> <p>Mats can be used on any construction-related disturbed area, but are particularly effective for erosion control of fine grained soils, and on short, steep slopes (such as stream banks) where erosion is high and growth of vegetation is slow.</p> <p>DESIGN CRITERIA</p> <p>A mat may be used by itself or in combination with netting or other anchors to promote soil stabilization. Choice of matting depends largely on slope, climate, soil type, and durability. Mats are usually installed according to the manufacturer's recommended guidelines. After appropriate installation, the matting should be checked for: uniform contact with the soil; security of the lap joints; and flushness of the staples with the ground.</p> <p>Manufacturers information will verify acceptable applications for a particular product.</p> <p>LIMITATIONS</p> <p>Although matting is highly effective in controlling erosion, it may be less cost-effective than other BMPs for erosion control and it may require a contractor with considerable mat installation experience for installation.</p>	<p>Targeted Constituents</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Sediment <input type="radio"/> Nutrients <li style="padding-left: 20px;">Toxic Materials <input type="radio"/> Oil & Grease <input type="radio"/> Floatable Materials <input type="radio"/> Other Construction Wastes <p>Implementation Requirements</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Capital Costs <input checked="" type="radio"/> Maintenance <input checked="" type="radio"/> Training <input checked="" type="radio"/> Suitability for Slopes >5% <p>Legend</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Significant Impact <input checked="" type="radio"/> Medium Impact <input type="radio"/> Low Impact ? Unknown or Questionable Impact <p style="text-align: center; font-size: 1.2em;">Fe = 0.90</p> <p style="text-align: center; font-size: 1.2em;">E-6</p> <div style="text-align: center;">  </div> <p style="text-align: center;">North Central Texas Council of Governments</p>

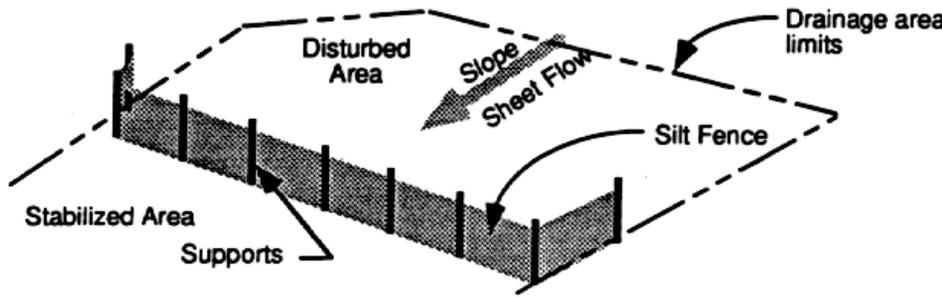
Erosion Control Mats

MAINTENANCE REQUIREMENTS

Matted areas must be inspected on a weekly basis, and after significant (>0.5 inch) rainfall, for bare spots caused by weather related events. Missing or loosened matting must be replaced or re-anchored.

Specification Section	N
Detail ID	2160
	

APPENDIX 11 -- Structural Control Specifications/Details

<h1 style="margin: 0;">Silt Fence</h1>		<h2 style="margin: 0;">Applications</h2>
		<ul style="list-style-type: none"> <li style="border: 1px solid black; padding: 2px;">Perimeter Control <li style="border: 1px solid black; padding: 2px;">Slope Protection <li style="border: 1px solid black; padding: 2px;">Sediment Trapping Channel Protection Temporary Stabilization Permanent Stabilization Waste Management Housekeeping Practices
		<h3 style="margin: 0;">Targeted Constituents</h3> <ul style="list-style-type: none"> <input checked="" type="radio"/> Sediment <input type="radio"/> Nutrients Toxic Materials <input type="radio"/> Oil & Grease <input checked="" type="radio"/> Floatable Materials <input type="radio"/> Other Construction Wastes
<p>DESCRIPTION A silt fence consists of geotextile fabric supported by poultry netting or other backing stretched between either wooden or metal posts with the lower edge of the fabric securely embedded in the soil. The fence is typically located downstream of disturbed areas to intercept runoff in the form of sheet flow. Silt fence provides both filtration and time for sedimentation to reduce sediment and it reduces the velocity of the runoff. Properly designed silt fence is economical since it can be re-located during construction and re-used on other projects.</p> <p>PRIMARY USE Silt fence is normally used as perimeter control located downstream of disturbed areas. It is only feasible for non-concentrated, sheet flow conditions.</p> <p>APPLICATIONS Silt fence is an economical means to treat overland, non-concentrated flows for all types of projects. Silt fences are used as perimeter control devices for both site developments and linear (roadway) type projects. They are most effective with coarse to silty soil types. Due to the potential of clogging, silt fence should not be used with clay soil types.</p> <p>In order to reduce the length of silt fence, it should be placed adjacent to the down slope side of the construction activities.</p> <p>DESIGN CRITERIA</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fences are to be constructed along a line of constant elevation (along a contour line) where possible. <input type="checkbox"/> Maximum slope adjacent to the fence is 1:1. <input type="checkbox"/> Maximum distance of flow to silt fence should be 200 feet or less. <input type="checkbox"/> Maximum concentrated flow to silt fence shall be 1 CFS per 20 feet of fence. <input type="checkbox"/> If 50% or less of soil, by weight, passes the U.S. Standard sieve No. 200, select the equivalent opening size (E.O.S.) to retain 85% of the soil. <input type="checkbox"/> Maximum equivalent opening size shall be 70 (#70 sieve). <input type="checkbox"/> Minimum equivalent opening size shall be 100 (#100 sieve). <input type="checkbox"/> If 85% or more of soil, by weight, passes the U.S. Standard sieve No. 200, silt fences shall not be used due to potential clogging. 		<h3 style="margin: 0;">Implementation Requirements</h3> <ul style="list-style-type: none"> <input checked="" type="radio"/> Capital Costs <input checked="" type="radio"/> Maintenance <input type="radio"/> Training <input checked="" type="radio"/> Suitability for Slopes >5%
		<h3 style="margin: 0;">Legend</h3> <ul style="list-style-type: none"> <input checked="" type="radio"/> Significant Impact <input checked="" type="radio"/> Medium Impact <input type="radio"/> Low Impact ? Unknown or Questionable Impact
		<h2 style="margin: 0;">Fe = 0.75</h2>
		<h2 style="margin: 0;">S-1</h2>
		 <p style="margin: 0;">North Central Texas Council of Governments</p>

Silt Fence

- Sufficient room for the operation of sediment removal equipment shall be provided between the silt fence and other obstructions in order to properly maintain the fence.
- The ends of the fence shall be turned upstream to prevent bypass of stormwater.

LIMITATIONS

Minor ponding will likely occur at the upstream side of the silt fence resulting in minor localized flooding.

Fences which are constructed in swales or low areas subject to concentrated flow may be overtopped resulting in failure of the filter fence. Silt fences subject to areas of concentrated flow (waterways with flows > 1 cfs) are not acceptable.

Silt fence can interfere with construction operations, therefore planning of access routes onto the site is critical.

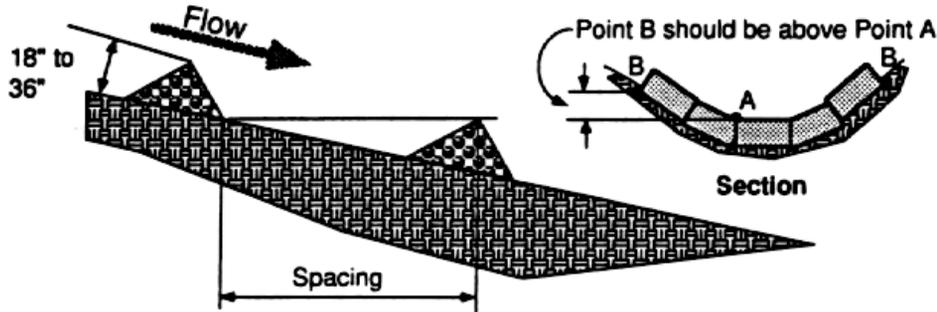
Silt fence can fail structurally under heavy storm flows, creating maintenance problems and reducing the effectiveness of the system.

MAINTENANCE REQUIREMENTS

Inspections should be made on a weekly basis, especially after large storm events. If the fabric becomes clogged, it should be cleaned or if necessary, replaced.

Sediment should be removed when it reaches approximately one-half the height of the fence.

Specification Section	B
Detail ID	2020
	

<h2 style="text-align: left; margin: 0;">Check Dams</h2> 	<p style="text-align: center;">Applications</p> <ul style="list-style-type: none"> Perimeter Control Slope Protection <li style="border: 1px solid black; padding: 2px;">Sediment Trapping <li style="border: 1px solid black; padding: 2px;">Channel Protection Temporary Stabilization Permanent Stabilization Waste Management Housekeeping Practices
<p>DESCRIPTION Check dams are small barriers consisting of straw bales, rock, or earth berms placed across a drainage swale or ditch. They reduce the velocity of small concentrated flows, provide a limited barrier for sediment and help disperse concentrated flows, reducing potential erosion.</p> <p>PRIMARY USE Check dams are used for long drainage swales or ditches in which permanent vegetation may not be established and erosive velocities are present. They are typically used in conjunction with other techniques such as inlet protection, rip rap or other sediment reduction techniques. Check dams provide limited treatment. They are more useful in reducing flow to acceptable levels for other techniques.</p> <p>APPLICATIONS Check dams are typically used early in construction in swales for long linear projects such as roadways. They can also be used in short swales with a steep slope to reduce unacceptable velocities.</p> <p>DESIGN CRITERIA</p> <ul style="list-style-type: none"> <input type="checkbox"/> Check dams should be placed at a distance and height to allow small pools to form between each one. Typically, dam height should be between 18" and 36". Dams should be spaced such that the top of the downstream dam should be at the same elevation as the toe of the upstream dam. <input type="checkbox"/> See design criteria for straw bales, sand bag berms, etc. for specific design criteria. Maximum allowable flow shall be based on the specific technique utilized and the velocity of flow. <input type="checkbox"/> Major flows (greater than 2 year design storm) must pass the check dam without causing excessive upstream flooding. <input type="checkbox"/> Check dams should be used in conjunction with other sediment reduction techniques prior to releasing flow offsite. 	<p>Targeted Constituents</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Sediment <input type="radio"/> Nutrients <li style="padding-left: 20px;">Toxic Materials <input type="radio"/> Oil & Grease <input checked="" type="radio"/> Floatable Materials <input type="radio"/> Other Construction Wastes
	<p>Implementation Requirements</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Capital Costs <input checked="" type="radio"/> Maintenance <input type="radio"/> Training <input checked="" type="radio"/> Suitability for Slopes >5%
	<p style="text-align: center;">Legend</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Significant Impact <input checked="" type="radio"/> Medium Impact <input type="radio"/> Low Impact ? Unknown or Questionable Impact
	<p>Fe = 0.40</p>
	<p>S-7</p>
	 <p style="margin-top: 10px;">North Central Texas Council of Governments</p>

Check Dams

LIMITATIONS

Minor ponding will occur upstream of the check dams.

For heavy flows or high velocity flows, extensive maintenance or replacement of the dams will be required.

Check dams are not a total treatment technique.

MAINTENANCE REQUIREMENTS

Maintenance of the dams should adhere to the maintenance requirements of the management practice used for the dam.

Specification Section	N/A
Detail ID	N/A
	

<h2 style="text-align: center;">Stabilized Construction Entrance</h2>	
	<p>Applications</p> <ul style="list-style-type: none"> Perimeter Control Slope Protection Sediment Trapping Channel Protection <p>Temporary Stabilization</p> <ul style="list-style-type: none"> Permanent Stabilization Waste Management Housekeeping Practices
<p>DESCRIPTION</p> <p>A stabilized construction entrance consists of a pad consisting of gravel, crushed stone, recycled concrete or other rock like material on top of geotextile filter cloth to facilitate the wash down and removal of sediment and other debris from construction equipment prior to exiting the construction site. For added effectiveness, a wash rack area can be incorporated into the design to further reduce sediment tracking. For long term projects, cattle guards or other type of permanent rack system can be used in conjunction with a wash rack. This directly addresses the problem of silt and mud deposition in roadways used for construction site access.</p> <p>PRIMARY USE</p> <p>Stabilized construction entrances are used primarily for sites in which significant truck traffic occurs on a daily basis. It reduces the need to remove sediment from streets. If used properly, it also directs the majority of traffic to a single location, reducing the number and quantity of disturbed areas on the site and providing protection for other structural controls through traffic control.</p> <p>APPLICATIONS</p> <p>Stabilized construction entrances are a required part of the erosion control plan for all site developments larger than 5 acres and a recommended practice for all construction sites. It is not suitable for long, linear projects. If possible, small entrances should be incorporated into small lot construction due to the large percentage of disturbed area on the site and the high potential for offsite tracking of silt and mud.</p> <p>DESIGN CRITERIA</p> <ul style="list-style-type: none"> <input type="checkbox"/> Stabilized construction entrances are to be constructed such that drainage across the entrance is directed to a controlled, stabilized outlet on site with provisions for storage proper filtration and removal of wash water. <input type="checkbox"/> The entrance must be properly graded so that storm water is not allowed to leave the site and enter roadways. <input type="checkbox"/> Minimum width of entrance shall be 15 feet, but in no case shall the width be less than that of the entry way to be used. <input type="checkbox"/> Minimum depth of entrance shall be 8 inches for the entire length of the control. 	<p>Targeted Constituents</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Sediment <input type="radio"/> Nutrients <li style="padding-left: 20px;">Toxic Materials <input type="radio"/> Oil & Grease <input type="radio"/> Floatable Materials <input type="radio"/> Other Construction Wastes <p>Implementation Requirements</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Capital Costs <input checked="" type="radio"/> Maintenance <input type="radio"/> Training <input type="radio"/> Suitability for Slopes >5% <p>Legend</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Significant Impact <input type="radio"/> Medium Impact <input type="radio"/> Low Impact ? Unknown or Questionable Impact
<p>Fe = N/A</p>	
<p>S-9</p>	
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Stabilized Construction Entrance

- Minimum dimensions for the entrance shall be as follows:

Tract Area	Avg. Lot Depth	Min. Width of Entrance	Min. Depth of Entrance
< 1 Acre	100 feet	15 feet	20 feet
< 5 Acres	200 feet	20 feet	30 feet
< 10 Acres	> 200 feet	20 feet	40 feet
> 10 Acres	> 200 feet	25 feet	50 feet

LIMITATIONS

Selection of the construction entrance location is critical in that to be effective, it must be used exclusively.

Stabilized entrances are rather expensive considering that it must be installed in combination with one or more other sediment control techniques, but it may be cost effective compared to labor intensive street cleaning.

MAINTENANCE REQUIREMENTS

Inspections should be made on a regular basis and after large storm events in order to ascertain whether or not sediment and pollution are being effectively detained on site.

When sediment has substantially clogged the void area between the rocks, the aggregate mat must be washed down or replaced.

Periodic re-grading and top dressing with additional stone must be done to keep the efficiency of the entrance from diminishing.

Specification Section

G

Detail ID

2070



APPENDIX 12 -- Specifications/Details for Other Controls

<h2 style="text-align: center;">Solid Waste Management</h2>	<p style="text-align: center;">Applications</p>
<p>DESCRIPTION Large volumes of solid waste are often generated at construction sites including: packaging, pallets, wood waste, concrete waste, soil, electrical wiring, cuttings, and a variety of other materials. The solid waste management practice lists techniques to minimize the potential of storm water contamination from solid waste through appropriate storage and disposal practices.</p>	<p>Perimeter Control Slope Protection Sediment Trapping Channel Protection Temporary Stabilization Permanent Stabilization</p>
<p>PRIMARY USE These practices should be a part of all construction practices. By limiting the trash and debris on site, storm water quality is improved along with reduced clean up requirements at the completion of the project.</p>	<p style="text-align: center;">Waste Management Housekeeping Practices</p>
<p>APPLICATIONS The solid waste management practice for construction sites is based on proper storage and disposal practices by construction workers and supervisors. Key elements of the program are education and modification of improper disposal habits. Cooperation and vigilance is required on the part of supervisors and workers to ensure that the recommendations and procedures are followed. Following are lists describing the targeted materials and recommended procedures:</p>	<p>Targeted Constituents</p> <ul style="list-style-type: none"> <input type="radio"/> Sediment <input checked="" type="radio"/> Nutrients Toxic Materials <input type="radio"/> Oil & Grease <input checked="" type="radio"/> Floatable Materials <input checked="" type="radio"/> Other Construction Wastes
<p><input type="checkbox"/> Targeted Solid Waste Materials</p> <ul style="list-style-type: none"> Paper and cardboard containers Plastic packaging Styrofoam packing and forms Insulation materials (non-hazardous) Wood pallets Wood cuttings Pipe and electrical cuttings Concrete, brick, and mortar waste Shingle cuttings and waste Roofing tar Steel (cuttings, nails, rust residue) Gypsum board cuttings and waste Sheathing cuttings and waste Miscellaneous cutting and waste Food waste Demolition waste 	<p>Implementation Requirements</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Capital Costs <input checked="" type="radio"/> Maintenance <input checked="" type="radio"/> Training <input type="radio"/> Suitability for Slopes >5%
<p>Storage Procedures</p> <ul style="list-style-type: none"> <input type="checkbox"/> Wherever possible, minimize production of solid waste materials. <input type="checkbox"/> Designate a foreman or supervisor to oversee and enforce proper solid waste procedures. <input type="checkbox"/> Instruct construction workers in proper solid waste procedures. <input type="checkbox"/> Segregate potentially hazardous waste from non-hazardous construction site debris. <input type="checkbox"/> Keep solid waste materials under cover in either a closed dumpster or other enclosed trash container that limits contact with rain and runoff. <input type="checkbox"/> Store waste materials away from drainage ditches, swales and catch basins. 	<p>Legend</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Significant Impact <input checked="" type="radio"/> Medium Impact <input type="radio"/> Low Impact ? Unknown or Questionable Impact
	<p style="text-align: center;">N/A</p>
	<p style="text-align: center;">W-1</p>
	<p style="text-align: center;">  North Central Texas Council of Governments </p>

Solid Waste Management

- Do not allow trash containers to overflow.
- Do not allow waste materials to accumulate on the ground.
- Prohibit littering by workers and visitors.
- Police site daily for litter and debris.
- Enforce solid waste handling and storage procedures.

Disposal Procedures

- If feasible, segregate recyclable wastes from non-recyclable waste materials and dispose of properly.
- General construction debris may be hauled to a licensed construction debris landfill (typically less expensive than a sanitary landfill).
- Use waste facilities approved by local jurisdiction.
- Runoff which comes into contact with unprotected waste shall be directed into structural treatment such as silt fence to remove debris.

Education

- Educate all workers on solid waste storage and disposal procedures.
- Instruct workers in identification of solid waste and hazardous waste.
- Have regular meetings to discuss and reinforce disposal procedures (incorporate in regular safety seminars).
- Clearly mark on all solid waste containers which materials are acceptable.

Quality Control

- Foreman and/or construction supervisor shall monitor on-site solid waste storage and disposal procedures.
- Discipline workers who repeatedly violate procedures.

Requirements

- Job-site waste handling and disposal education and awareness program.
- Commitment by management to implement and enforce Solid Waste Management Program.
- Compliance by workers.
- Sufficient and appropriate waste storage containers.
- Timely removal of stored solid waste materials.
- Possible modest cost impact for additional waste storage containers.
- Small cost impact for training and monitoring
- Minimal overall cost impact.

LIMITATIONS

Only addresses non-hazardous solid waste.
 One part of a comprehensive construction site management program.

Specification Section	N/A
Detail ID	N/A
	

Hazardous Waste Management

DESCRIPTION

The hazardous waste management BMP addresses the problem of storm water polluted with hazardous waste through spills or other forms of contact. The objective of the Management Program is to minimize the potential of stormwater contamination from common construction site hazardous wastes through appropriate recognition, handling, storage and disposal practices.

It is not the intent of this Management Program to supersede or replace normal site assessment and remediation procedures. Significant spills and/or contamination warrant immediate response by trained professionals. Suspected job-site contamination should be immediately reported to regulatory authorities and protective actions taken. The General Permit requires reporting of significant spills to the National Response Center (NRC) at (800) 424-8802.

PRIMARY USE

These management practices along with applicable OSHA and EPA guidelines should be incorporated at all construction sites which use or generate hazardous wastes. Many wastes such as fuel, oil, grease, fertilizer and pesticide are present at most construction sites.

INSTALLATION, APPLICATION AND DISPOSAL CRITERIA

The hazardous waste management techniques presented here are based on proper recognition, handling, and disposal practices by construction workers and supervisors. Key elements of the management program are education, proper disposal practices, as well as provisions for safe storage and disposal. Following are lists describing the targeted materials and recommended procedures:

- Targeted Hazardous Waste Materials
 - Paints
 - Solvents
 - Stains
 - Wood preservatives
 - Cutting oils
 - Greases
 - Roofing tar
 - Pesticides
 - Fuels & lube oils
 - Lead based paints (Demolition)

Storage Procedures

- Wherever possible, minimize use of hazardous materials.
- Minimize generation of hazardous wastes on the job-site.
- Segregate potentially hazardous waste from non-hazardous construction site debris.
- Designate a foreman or supervisor to oversee hazardous materials handling procedures.
- Keep liquid or semi-liquid hazardous waste in appropriate containers (closed drums or similar) and under cover.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization

Waste Management

Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- ? Unknown or Questionable Impact

N/A

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Hazardous Waste Management

- Store waste materials away from drainage ditches, swales and catch basins.
- Use containment berms in fueling and maintenance areas and where the potential for spills is high.
- Ensure that adequate hazardous waste storage volume is available.
- Ensure that hazardous waste collection containers are conveniently located.
- Do not allow potentially hazardous waste materials to accumulate on the ground.
- Enforce hazardous waste handling and disposal procedures.
- Clearly mark on all hazardous waste containers which materials are acceptable for the container.

Disposal Procedures

- Regularly schedule hazardous waste removal to minimize on-site storage.
- Use only reputable, licensed hazardous waste haulers.

Education

- Instruct workers in identification of hazardous waste
- Educate workers of potential dangers to humans and the environment from hazardous wastes
- Instruct workers on safety procedures for common construction site hazardous wastes
- Educate all workers on hazardous waste storage and disposal procedures
- Have regular meetings to discuss and reinforce identification, handling and disposal procedures (incorporate in regular safety seminars)
- Establish a continuing education program to indoctrinate new employees.

Quality Assurance

- Foreman and/or construction supervisor shall monitor on-site hazardous waste storage and disposal procedures.
- Educate and if necessary, discipline workers who violate procedures.
- Ensure that the hazardous waste disposal contractor is reputable and licensed.

Requirements

- Job-site hazardous waste handling and disposal education and awareness program.
- Commitment by management to implement hazardous waste management practices.
- Compliance by workers.
- Sufficient and appropriate hazardous waste storage containers.
- Timely removal of stored hazardous waste materials.

Costs

- Possible modest cost impact for additional hazardous storage containers.
- Small cost impact for training and monitoring.
- Potential cost impact for hazardous waste collection and disposal by licensed hauler - actual cost depends on type of material and volume.

LIMITATIONS

This practice is not intended to address site-assessments and pre-existing contamination.

Major contamination, large spills and other serious hazardous waste incidents require immediate response from specialists.

Demolition activities and potential pre-existing materials, such as asbestos, are not addressed by this program. Site specific information on plans is necessary.

Contaminated soils are not addressed.

One part of a comprehensive construction site waste management program.

Specification Section	N/A
Detail ID	N/A
	

<h2 style="text-align: center;">Concrete Waste Management</h2>	<p style="text-align: center;">Applications</p>
<p>DESCRIPTION Concrete waste at construction sites comes in two forms; 1) excess fresh concrete mix including truck and equipment washing, and 2) concrete dust and concrete debris resulting from demolition. Both forms have the potential to impact water quality through storm water runoff contact with the waste.</p>	<p>Perimeter Control Slope Protection Sediment Trapping Channel Protection Temporary Stabilization Permanent Stabilization</p>
<p>PRIMARY USE Concrete waste is present at most construction sites. This BMP should be utilized at sites in which concrete waste is present.</p>	<p style="text-align: center;">Waste Management</p>
<p>APPLICATIONS A number of water quality parameters can be affected by introduction of concrete - especially fresh concrete. Concrete affects the pH of runoff, causing significant chemical changes in water bodies and harming aquatic life. Suspended solids in the form of both cement and aggregate dust are also generated from both fresh and demolished concrete waste.</p>	<p style="text-align: center;">Housekeeping Practices</p>
<p><i>Current Unacceptable Waste Concrete Disposal Practices</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Dumping in vacant areas on the job-site <input type="checkbox"/> Illicit dumping off-jobsite <input type="checkbox"/> Dumping into ditches or drainage facilities <p><i>Recommended Disposal Practices</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Avoid unacceptable disposal practices listed above. <input type="checkbox"/> Develop pre-determined, safe concrete disposal areas. <input type="checkbox"/> Provide a washout area with a minimum of 6 cubic feet of containment area volume for every 10 cubic yards of concrete poured. <input type="checkbox"/> Never dump waste concrete illicitly or without property owners knowledge and consent. <input type="checkbox"/> Treat runoff from storage areas through the use of structural controls as required. <p><i>Education</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Drivers and equipment operators should be instructed on proper disposal and equipment washing practices (see above). <input type="checkbox"/> Supervisors must be made aware of the potential environmental consequences of improperly handled concrete waste. <p><i>Enforcement</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> The construction site manager or foreman must ensure that employees and pre-mix companies follow proper procedures for concrete disposal and equipment washing. <input type="checkbox"/> Employees violating disposal or equipment cleaning directives must be re-educated or disciplined if necessary. <p><i>Demolition Practices</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Monitor weather and wind direction to ensure concrete dust is not entering drainage structures and surface waters. <input type="checkbox"/> Where appropriate, construct sediment traps or other types of sediment detention devices downstream of demolition activities. 	<p>Targeted Constituents</p> <ul style="list-style-type: none"> <input type="radio"/> Sediment <input type="radio"/> Nutrients Toxic Materials <input type="radio"/> Oil & Grease <input type="radio"/> Floatable Materials <input checked="" type="radio"/> Other Construction Wastes
	<p>Implementation Requirements</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Capital Costs <input checked="" type="radio"/> Maintenance <input checked="" type="radio"/> Training <input type="radio"/> Suitability for Slopes >5%
	<p>Legend</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> Significant Impact <input checked="" type="radio"/> Medium Impact <input type="radio"/> Low Impact ? Unknown or Questionable Impact
	<p style="text-align: center; font-size: 24pt;">N/A</p>
	<p style="text-align: center; font-size: 24pt;">W-3</p>
	<div style="text-align: center;">  <p>North Central Texas Council of Governments</p> </div>

Concrete Waste Management

Requirements

- Use pre-determined disposal sites for waste concrete.
- Prohibit dumping waste concrete anywhere but pre-determined areas.
- Assign pre-determined truck and equipment washing areas.
- Educate drivers and operators on proper disposal and equipment cleaning procedures.

Costs

- Minimal cost impact for training and monitoring.
- Concrete disposal cost depends on availability and distance to suitable disposal areas
- Additional costs involved in equipment washing could be significant.

LIMITATIONS

This concrete waste management program is one part of a comprehensive construction site waste management program.

Specification Section	N/A
Detail ID	N/A
	

BMP: Dust Controls

ESC 10

OBJECTIVES:



Can Be Used With

- ESC 1
- ESC 3
- ESC 6
- ESC 12
- ESC 13

GENERAL DESCRIPTION

Dust control measures are used to stabilize soil from wind erosion, and reduce dust generated by construction activities during pre-operations, operations and post-operations.

SUITABLE APPLICATIONS

- clearing and grading activities
- construction vehicle traffic on paved and unpaved roads
- sediment tracking onto paved roads
- soil and debris storage piles
- areas with unstabilized soil

LIMITATIONS

- Water suppression prevents dust for only a short time and should be applied daily to be effective.
- Overwatering may cause erosion.
- Oil should not be used because the oil may migrate into waterways and/or seep into the soil.
- Certain chemically-treated subgrades may make the soil water repellent, which could increase runoff.

INSTALLATION/APPLICATION GUIDELINES

- Schedule construction activities to minimize exposed areas.
- Quickly stabilize exposed soils using vegetation, mulching, spray-on adhesives, calcium chloride, sprinkling, and stone/gravel layering.
- Identify and stabilize key access points prior to commencement of construction.
- Direct construction traffic to stabilized roadways within the project site.

MAINTENANCE REQUIREMENTS

Most dust control measures require frequent, often daily, attention.

COST CONSIDERATIONS

Installation costs for water/chemical dust suppression are low, but annual costs may be quite high.

DESIGN LIFE

A few hours to a few days

POLLUTANT REMOVAL EFFECTIVENESS

- | | |
|--|---|
| <input type="radio"/> Floatable materials | <input checked="" type="radio"/> Sediment |
| <input type="radio"/> Nutrients | <input checked="" type="radio"/> Oil and grease |
| <input checked="" type="radio"/> Toxic chemicals | <input type="radio"/> Other construction waste |

High Medium Low

IMPLEMENTATION REQUIREMENTS

- Capital Costs
- O&M Costs
- Maintenance
- Training

High Medium Low

Additional Information—Dust Controls

GENERAL INFORMATION

Dust control BMPs stabilize exposed surfaces and minimize activities that suspend or track dust particles. Table 4.2A shows Control BMPs for given site conditions. For the chemical stabilization, the types of chemicals available and recommendations for their use are tabulated in Table 4.2B, Commonly Used Chemicals for Dust Control. In addition to these BMPs, preventive measures can also control dust on construction sites. Examples of preventive measures would be minimizing surface areas to be disturbed, limiting on-site vehicle traffic to 15 miles/hour (24 kilometers/hour), and controlling the number and activity of vehicles on a site at any given time.

The following dust control BMPs can also complement BMPs for storm water pollution prevention:

- Pave, vegetate, or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads.
- Provide covers for haul trucks transporting materials that contribute to dust.
- Provide for wet suppression or chemical stabilization of exposed soils.
- Provide for rapid clean-up of sediments deposited on paved roads. Furnish stabilized construction road entrances and vehicle wash down areas.
- Stabilize unpaved haul roads, parking and staging areas. Reduce speed and trips on unpaved roads.
- Implement dust control measures for material stockpiles.
- Prevent drainage of sediment-laden storm water onto paved surfaces.
- Stabilize abandoned construction sites using vegetation or chemical stabilization methods.
- Limit the amount of areas disturbed by clearing and earth-moving operations by scheduling these activities in phases.
- Provide soil storage pile controls.

Limitations

- Oil treated subgrades should not be used because the oil may migrate into waterways and/or seep into the soil.
- Chemically treated subgrades may make the soil water repellent, interfering with long-term infiltration, and the vegetation/re-vegetation of the site. Some chemical dust suppressants may be subject to freezing and may contain solvents. Therefore, those dust suppressants should be handled properly.
- Asphalt, as a mulch tack or chemical mulch, requires a 24-hour curing time to avoid adherence to equipment, worker shoes, etc. Application should be limited because asphalt surfacing may eventually migrate into the drainage system.
- In compacted areas, watering and other liquid dust control measures may wash sediment or other constituents into the drainage system.

TABLE 4.2A
Dust Control BMPs for Given Site Conditions

SITE CONDITION	Dust Control BMPs								
	Permanent Vegetation	Mulching	Wet Suppression (Watering)	Chemical Dust Suppression	Gravel or Asphalt Surfacing	Silt Fence	Temporary Gravel Construction Entrances/ Equipment Wash Down	Haul Truck Covers	Minimize Extent of Area Disturbed
Disturbed Areas without Traffic	✓	✓	✓	✓	✓				✓
Disturbed Areas with Traffic			✓	✓	✓				✓
Material Stock Pile Stabilization			✓	✓		✓			✓
Demolition			✓				✓	✓	
Clearing/Excavation			✓	✓					✓
Truck Traffic on Unpaved Roads			✓	✓	✓			✓	
Mud/Dirt Carry Out					✓		✓		

TABLE 4.2B
Commonly Used Chemicals for Dust Control

	Salts	Organic, Non-Petroleum-Based Products	Petroleum-Based Products ¹	Liquid Copolymers
Chemical Types	<ul style="list-style-type: none"> • Calcium² • Magnesium Chloride³ • Natural Brines 	<ul style="list-style-type: none"> • Calcium Lignosulfonate • Sodium Lignosulfonate • Ammonium Lignosulfonate 	<ul style="list-style-type: none"> • Bunker Oil • Asphalt Primer • Emulsified Asphalt 	<ul style="list-style-type: none"> • Acrylic Copolymers • Copolymer Methacrylates • Polybutadiene
Limitations	<p>Can lose effectiveness in dry periods with low humidity. Leaches from road in heavy rain.</p> <p>Not recommended for gravel roads with low surface fines. Recommended 10-20% fines.</p>	<p>Not affected by dry weather and low humidity. Leached from road in heavy rain if not sufficiently cured.</p> <p>Best performance on gravel roads with high surface fines (10-30%) and dense compact surface with loose gravel.</p>	<p>Generally effective regardless of climatic conditions. May pothole in wet weather.</p> <p>Best performance on gravel roads with 5-10% fines.</p>	<p>Curing time varies with temperature, humidity and moisture content of soils.</p> <p>Moisture and freezing during curing reduces strength and life.</p>
Comments	<p>Calcium Chloride is popular. When used on gravel roads with high surface fines, the surface may become slippery when wet.</p>	<p>Ineffective on gravel surfaces low in fines. When used on gravel roads with high surface fines, the surface may become slippery when wet.</p>	<p>Creates a hardened crust.</p>	<p>The percentage of solids is the key to performance.</p>

¹ Motor oils and oil treatments are not recommended because of adverse effects on plant life and ground water.

² Not recommended because of adverse effects on plant life.

³ Works better in desert areas.

APPENDIX 13 -- Non-Storm Water Discharges Inspection Report

SWPPP NON-STORM WATER INSPECTION REPORT

**Fort Bliss Tactical Vehicle Overpass
 Department of the Army HQ. U.S. Army Air Defense Center And Fort Bliss
 Fort Bliss, Texas 79916-6816**

BIWEEKLY RAIN EVENT OTHER _____

Non-Storm Water Discharge Types	LOCATED ON PROJECT SITE
Discharges from fire fighting activities	YES / NO
Vehicle wash water if no detergents are used	YES / NO
Dust control runoff in accordance with General Construction Permit conditions	YES / NO
Fire hydrant flushings	YES / NO
Potable water sources including water line flushings	YES / NO
Uncontaminated groundwater resulting from dewatering activities	YES / NO
Irrigation drainage	YES / NO
Routine external building wash down which does not use detergents	YES / NO
Pavement washwaters where spills or leak of toxic or hazardous materials have not occurred and where detergents were not used	YES / NO
Air conditioning condensate	YES / NO
Spring water	YES / NO
Uncontaminated groundwater	YES / NO
Foundation or footer drain water where flows are not contaminated with process materials such as solvents	YES / NO

The construction area associated with the grading and typical utility trenching have been inspected and evaluated for non-storm water discharges as indicated above.

Signed: _____

Name: _____

Date: _____

APPENDIX 14 -- Region VI General Construction Permit Language

(NOT USED)