



US Army Corps  
of Engineers  
Baltimore District

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# **CONSTRUCTION SPECIFICATIONS FOR**

**SUSQUEHANNOCK ROAD**

**CONSTRUCTION, RAYSTOWN LAKE,**

**PENNSYLVANIA**

SOLICITATION NO. DACW31-03-B-0013

DATE 27 MAY 2003

**SECTION C**  
**DESCRIPTION/SPECS./WORK STATEMENT**  
**Susquehannock Road Construction**

Raystown Lake Project, Baltimore District, U.S. Army Corps of Engineers will contract to improve 1,936 l/f (2,581 sq. yards), of existing seal and chipped roadway. Additionally, the Corps will contract to improve approximately 2,919 l/f, (3,892 sq. yards), of existing, but deteriorated gravel (dirt) roadway and approximately 8,880 sq. ft., (987 sq. yards), of existing parking area. An additional 5,780 sq. ft., (642 sq. yards), in parking areas are planned for construction and paving.

Raystown Lake is located in Huntingdon and Bedford counties in South Central Pennsylvania, approximately 95 miles west of Harrisburg and 175 miles east of Pittsburgh. It is south of the town of Huntingdon and approximately 70 miles from the Pennsylvania-Maryland border. The dam site is on the Raystown Branch of the Susquehannock River with the main access to the project from the north via highway PA 26 south from PA 22 at Huntingdon and north from the Pennsylvania Turnpike (I 76) via US 30 to PA 26 north. Huntingdon Pennsylvania, approximately 13 miles to the North, has a population of 8,000.

This is a **design/build** contract. The information presented in these specifications and standards reflect “industry standards”. The contractor will be required to obtain any additional information that they may deem necessary to complete the job depicted in the narratives, photos, references and drawings contained in these plans and specifications. The contractor, working in cooperation with the Corps of Engineers at Raystown will determine final routes on those sections designated for realignment, final locations for drainage structures, etc. The contractor shall determine final field elevations and alignments based on existing conditions and shall present final design decisions to Corps officials for concurrence. As such, this package constitutes minimal guidance. Final product will be required to meet current PENNDOT standards (or better) for similar work.

Applicable References: **Commonwealth of Pennsylvania, Department of Transportation, Publications: 70M *Guidelines for The Design of Local Roads and Streets* (12-02 Edition), Rural Collector Roads Sections; and 408/2000-9, (Change No. 9, Effective 7/2/02), unless indicated otherwise. Targeted speeds on roadways are to be less than 20 MPH.**

- [www.dot.state.pa.us](http://www.dot.state.pa.us)
- <ftp://ftp.dot.state.pa.us/public/Bureaus/design/Pub408/Change9/INSIDECOVERPAGE.pdf>
- <ftp://ftp.dot.state.pa.us/public/bureaus/design/pub70m/incover.pdf>
  - Sub-base -- SECTION 210—SUBGRADE
  - Bituminous Cement – SECTION 305 (Base); (**Ref 408/2000 initial;** <ftp://ftp.dot.state.pa.us/public/pdf/408/408web/InsideCoverPage/insidecoverpage.pdf>)
  - Bituminous Cement -- SECTION 420, (wearing coarse)
  - Geo-Textile, SECTION 335 (appropriate class for purpose)
  - Misc. Stone, SECTION 613, (appropriate class for purpose)

- Guiderail, SECTION 620
- Gabions, SECTION 626
- Rock Aprons, SECTION 835

## C. 1. LOCATION AND DESCRIPTION OF WORK.

C.1.1. The CONTRACTOR shall furnish all labor, material, and equipment, including equipment operators, necessary to rehabilitate and improve existing chip and seal roadways (1,936 l/f); to improve and surface gravel (dirt) roadways, (2,919 l/f); and to rehab 8,880 sq. ft. of existing parking and construct an additional 5,780 sq. ft. of parking in Huntingdon County, Pennsylvania. The work site will be in Penn Township. The work is to be performed under the direction of the Contracting Officer or the Authorized Representative of the Contracting Officer and may include, but is not limited to, the following:

C.1.1.1 The Government has developed an Erosion and Sedimentation Control Plan, ([Attachment A](#)), for implementation by the CONTRACTOR. The CONTRACTOR will provide, place and maintain in a functional condition all siltation and erosion prevention devices and services as required by the approved E&S plan. The E&S plan is yet to be approved, but anticipated to encompass 480 l/f of 30" silt fence, 12 rock filters/straw bale dikes, and 17 - 8' x 10' rock aprons on outlet facilities (Note: Rock aprons are bid separate of the erosion control plan on section B (bid form). The CONTRACTOR **will** be required to remove the sedimentation barriers at the conclusion of the contract unless determined to be left in place by the government. If so determined, the Contractor will be released from further removal responsibilities for those sections. E&S structures will not be removed until such time as the bare and exposed areas have vegetated.

C.1.1.2 The CONTRACTOR shall be required to scarify existing chip and seal roadways, remove stumps, trees, cut, fill, grade and compact roadway, cut drainage ditches, place drop boxes, culverts, conduits, cut and fill sloped areas, place backfill, riprap, geotextile, road base and bituminous road surface material in accordance with the attached references, attached drawings, field design and industry standards.

C.1.1.3. The CONTRACTOR will provide supplies to include erosion control supplies, needed stone and rock, (various sizes), drop boxes and drain pipes. The CONTRACTOR will also provide all materials needed to locate and maintain the sedimentation fence and other erosion and sediment controls. The contractor will provide supplies to include shale, soil and gravel and stone to establish a roadway and parking areas suitable for application of asphalt and construction of road shoulders in accordance with the profile shown in PENNDOT Publication *70M Guidelines for The Design of Local Roads and Streets* (12-02 Edition, Collectors and Local Roads, Typical Sections w/o Curbs). The Contractor will also supply all materials; equipment and manpower to place a bituminous driving surface as selected by the Corps of Engineers, (see bid schedule and section C.2.1.3).

C.1.1.4. The CONTRACTOR will be required to work with project personnel in the field for establishing sites and final placement of drainage ditches, road crown, culverts, etc. The Corps will provide general on site guidance for the project. Work will be performed on existing roadways closely matching existing slopes. The contractor will be responsible for determining final grade, drop box elevation, etc. PENNDOT Publication *70M Guidelines for The Design of Local Roads and Streets* (12-02 Edition) provides cross sections and guidance. All roadways will be a minimum of 12' wide

with a minimum 2' shoulders on either side. Additional berming material will be required to smoothly transition from road surface to campsite elevations.

## C.2. SCOPE /SCHEDULE

C.2.1. The work on this contract is scheduled to begin on or about 2 Sept. 2003, as weather permits. The CONTRACTOR shall be prepared to commence work no later than that date, and shall end no later than 15 November 2003, unless extensions are approved by the COR.

C.2.1.1 The roadway(s) to be constructed and rehabbed can be divided into three distinct pieces of work:

- a. Rehab – Old chip and seal road, narrow and deteriorated, lacking a significant base and lacking appropriate drainage. Work will involve development of a base, drainage and the scarification of existing chip and seal surface and the compaction of same to form or partially form a sub-base for the application of a bituminous surface. (1,936 l/f -- 2,581 sq. yards).
- b. Construction/completion – Interior roadways within the Susquehannock areas are largely worn shale (dirt). Roadways will be prepared as per reference documents and a bituminous base applied. (2,919 l/f -- 3,892 sq. yard).
- c. Parking Areas – Parking areas are currently undersized, in disrepair and consists of a worn shale (dirt) surfacing. These parking areas will be enlarged, slopes either graded or supported and topped with a bituminous surfacing. (Rehab 8,880 sq. ft -- 987 sq. yards; -- construct 5,780 sq. ft -- 642 sq. yards)
- d. Installation of drop boxes and drainage – Drop boxes, appropriate outlet pipes and outflow rock aprons shall be placed as shown on attachment A, E&S Plan. A table is provided as Attachment D.

### C.2.1.2 Descriptions

**Rehab** -- Work in this area would include placement of sedimentation controls, sweeping of organic materials from the roadway and removal of organics from the ditchlines to create a “clean” working area. Existing chip and seal treatments will be scarified and re-compacted (in accordance with standards) to serve as a partial base for placement of bituminous cements; placement of additional drainage structures; providing and placing NLT 6”, (final composite), 2a crushed limestone subbase, (reference PENNDOT 408 and PENNDOT Publication 70M *Guidelines for The Design of Local Roads and Streets* (12-02 Edition). Bituminous paving material, (12' wide), will be placed on appropriate subgrade on final grade in accordance with specifications (Attachment B) and field direction. Berming, (2' minimum, both sides), ([attachment C](#)), may be placed to match the finished height of the bituminous paving.

**Construction/Completion** -- Work in this area would include the placement of sedimentation controls; removal of woody vegetation, widening the roads as needed; the placement of additional drainage structures; providing and placing 6” 2a, crushed limestone subbase, (reference PENNDOT 408 and PENNDOT Publication 70M *Guidelines for The Design of Local Roads and Streets* (12-02 Edition); laying back and seeding adjacent slopes and providing drainage. Bituminous paving material, (12' wide), will be placed on appropriate subgrade on final grade in accordance with specifications (Attachment B) and field direction. Berming, (2' minimum, both sides), ([attachment C](#)), will be placed to match the finished height of the bituminous paving.

**Parking Areas** -- Work in this area would include the placement of sedimentation controls; removal of woody vegetation, widening the areas as needed; the placement of additional drainage structures; placement of additional fill; providing and placing 6" 2a, crushed limestone subbase, (reference PENNDOT 408 and PENNDOT Publication 70M *Guidelines for The Design of Local Roads and Streets*, 12-02 Edition); laying back and seeding adjacent slopes and providing drainage. Bituminous paving material, (12' wide), will be placed on appropriate subgrade on final grade in accordance with specifications (Attachment B) and field direction. Berming, (2' minimum, both sides), ([attachment C](#)), will be placed to match the finished height of the bituminous paving.

C.2.1.3 The government will seek to place a bituminous surface on this roadway that is within fiscal constraints and considered the best value for the government. As such, the bid schedule (Section B) requests bids for three (3) different surfacing scenarios:

- ◆ 3" BCBC, 1.5" ID2A
- ◆ 2" BCBC, 1.5" ID2A
- ◆ 3" ID3

The Contractor will be required to bid all three options items. The government will select the best value based on the combination of costs for the bid schedule and the fiscal limitations of the project. **CONTRACTORS NOT BIDDING ALL OPTIONS WILL NOT BE CONSIDERED FOR AWARD.**

C.2.1.4 The CONTRACTOR will be required to remove the trees in the road right of way and parking areas. The road right of way and parking areas are defined as that area which will encompass the driving area, shoulders, ditch lines and embankment (cut and fill) work. Stumps, slash and trees will be removed by the CONTRACTOR and disposed of, at the contractor's option, in a spoil area not greater than 3,069 l/f distant from the boundary of the work site, by chipping or by piling and burning in accordance with federal and state burning guidelines. The CONTRACTOR is not permitted to commercially sell any timber from this project.

C.2.1.5 Barrow/Spoil Areas -- The government anticipates this job to be net or slightly borrowed. Should there be excess material from the excavation, it may be taken to the spoil area approximately 3,069 l/ ft. distant. Borrowed material can be obtained from a government provided shale pit 7,300 l/f distant.

### C.3. MATERIALS

C.3.1. The CONTRACTOR can be expected to provide the minimum of the following materials:

- a. 2RC stone or other limestone road base (if applicable)
- b. Culvert pipe, (plastic pipe, NLT 18" diameter)
- c. Standard drop boxes, (concrete, sized to fit culvert pipe.)
- d. straw bales
- e. Erosion control fencing and stakes
- f. Seed and mulch
- g. Limestone rock, (various sizes for rock filters, outfall aprons, stabilizations etc.

- h.* Any permits needed for the transport of materials and/or equipment
- i.* Geo-textile fabric (outfall aprons).
- j.* Asphalt (bituminous paving)

C.3.2 The Government will provide the following:

- a.* All known permits applicable for the job.
  - Approved E&S Plan
  - Highway Occupancy Permit, (as needed)
  - Nationwide Permit for stream crossing work, (as needed)
- b.* On site coordination w/contractor.
- c.* Alignment on road and parking rehab.
- d.* On-site spoil and barrow area.

#### C.4 SEQUENCE OF WORK/SCHEDULING

C.4.1 No later than 5 days after commencement of work, the CONTRACTOR shall provide the Contracting Officer with a progress schedule in linear form, so that the sections and/or components or work are easily identifiable. This schedule shall identify expected duration of each phase and the interdependencies of any phases as appropriate. The chart shall show the beginning and completion dates of all activities on a linear horizontal timeline beginning with the date of the NOTICE TO PROCEED and indicating calendar days to completion. The entire project shall have only one beginning node and one ending node. Key dates for important features or portions of work features are milestone dates and shall be so indicated on the chart. Based on this chart, the CONTRACTOR shall prepare an earnings-line curve, (statement of values), showing the rate of progress in terms of money and percent completion. Schedule progress may not include the value of materials or equipment delivered to the job site but not yet incorporated into the work. The schedule shall be the medium through which the timeliness of the CONTRACTOR'S construction effort is appraised.

C.4.2. The contractor may work on all segments of work in any sequence submitted to, and approved by the government. Areas will be free of public traffic for the duration of this contract.

C.4.3 Paving\_ The roadway is expected to be paved with a bituminous material for a final surface. Paving specifications are included as Attachment B and PENN DOT references within this solicitation.

#### C.5 SUBMITTALS

C.5.1 Submittals as listed must be approved by the government. Disapproved submittals shall be returned to the CONTRACTOR to make all corrections required by the Contracting Officer. The CONTRACTOR shall promptly furnish a corrected submittal in the form and numbers specified in the initial submittal. If the CONTRACTOR considers any correction indicated on the submittals to constitute a change to the contract, a notice shall be given to the COR immediately. A submittal register is included as Attachment E. [culvert pipe – geotextile – drop boxes]

#### C.6. GENERAL

C.6.1 The Government will obtain the permits as listed in C.3.2. The Government’s research indicates that the only outside approvals needed for this job is the Erosion and Sedimentation control plan. The CONTRACTOR will be required to apply for, and obtain, co-permittee status on the NPDES permits covering the roadwork. Should the CONTRACTOR become aware or be made aware of additional permits, the CONTRACTOR shall advise the COR immediately. For the purposes of this contract, the CONTRACTOR shall assume no additional permits are required.

C.6.2 The CONTRACTOR will not be required to work more than (8) hours per day or forty (40) hours per week

C.6.3. The CONTRACTOR may be required to work with other contractors and employees of the Corps of Engineers or those working on behalf of the Corps of Engineers.

C.6.4. Liquidated Damages -- Contract Length – This contract is to be completed within 75 calendar days after issuance of notice to proceed. Liquidated damages in the amount of \$300 per day shall be assessed for each day beyond the scheduled completion date. Days during which the contractor cannot work because of adverse weather shall be documented and discussed with the COR as they occur. The COR shall determine if the requested weather day supports an increase in contract length. The contract length shall be increased one (1) day for each weather day approved by the COR.

C.6.4.1 The following schedule of monthly anticipated adverse weather delays is based on the National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The CONTRACTOR’S progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

**MONTHLY ANTICIPATED ADVERSE WEATHER DELAY  
WORK DAYS BASED ON (5) DAY WORK WEEK**

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
19	11	9	9	9	9	6	7	5	6	6	13

C.6.4.2 Upon acknowledgment of the Notice to Proceed (NTP) and continuing throughout the contract, the CONTRACTOR will record on a daily ledger, the occurrence of adverse weather and the resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50% or more of the CONTRACTOR’S scheduled workday. The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph C.6.5.1 above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent full weather work days and issue a modification for contract extension.

C.6.5 There are no known underground utilities in the area. PA One Call coordination not required by the government for this contract.

C.6.6 As roads are rehabbed, vertical vegetative clearance within the driving lane shall be finished to allow no less than 14 feet clearances.

C.6.7 Only contractors or sub-contractors performing the paving operation are required to be 408 pre-qualified.

C.7. TRANSPORTATION.

C.7.1. Transportation of equipment and personnel to any job site on Raystown Lake from off the project will be at the expense of the CONTRACTOR.

C.7.2. CONTRACTOR will furnish support vehicles sufficient to meet needs for transportation of personnel, equipment, and supplies within and between job sites at the project.

C.8. CONTRACTOR EXPENSES OF MOBILIZATION, OPERATION AND REPAIR/WAGES AND BENEFITS

C.8.1. The CONTRACTOR will furnish at his own expense all skilled operators, labor, fuel, safety equipment and vehicles necessary for equipment transportation and bear all expenses incidental to the efficient operation of the plant in connection with the work. Wages and benefits will be paid at a minimum equal to the current Department of Labor Wage Determination for the appropriate labor classifications.

C.9. CONTRACTOR EQUIPMENT.

C.9.1. All equipment to be used must be inspected and approved by the Contracting Officer or his authorized representatives prior to use and at any other time deemed necessary by the Corps of Engineers. All items must have operable safety equipment as specified in EM 385-1-1, Safety and Health Requirement Manual, dated September 3, 1996. A copy of EM 385-1-1 can be obtained at the Raystown Administration Building or on the Internet at [www.hq.usace.army.mil/soh/EM385/385TOC.htm](http://www.hq.usace.army.mil/soh/EM385/385TOC.htm).

C.10. SAFETY

C.10.1. Application Publications. The publications listed below form a part of this specification and are referred to in the text by basic designation only.

C.10.1.1. U.S. Army Corps of Engineers EM 385-1-1 dtd. September 1996, Army Corps of Engineers - Safety and Health Requirements Manual.  
[http://www.hq.usace.army.mil/soh/hqusace\\_soh.htm](http://www.hq.usace.army.mil/soh/hqusace_soh.htm)

C.10.2. GENERAL: Worker safety is of paramount importance. The CONTRACTOR shall comply with the Contract Clause in the Solicitation entitled ACCIDENT PREVENTION, including the U. S. Army Corps of Engineers Safety and Health Requirements Manual referred to therein in addition to the provisions of this specification.

C.10.3. **SAFETY PROGRAM:** The U. S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, and all subsequent revisions referred to in the Contract Clause ACCIDENT PREVENTION of this contract, are hereby supplemented as follows:

a. The CONTRACTOR shall designate an employee responsible for overall supervision of accident prevention activities. Such duties shall include: (1) assuring applicable safety requirements are incorporated in work methods and (2) inspecting the work to ensure that safety measures and instructions are actually applied. The safety plan must be submitted in writing for acceptance to the Contracting Officer's Representative. The designated individual must be able to demonstrate his/her familiarity and understanding of the safety requirements over a prescribed trial period. The safety supervisor shall have the authority to act on behalf of the CONTRACTOR'S general management to take whatever action is necessary to assure compliance with safety requirements. The safety supervisor is required to be on the site when work is being performed.

b. Prior to commencement of any work at a job site, a pre-construction safety meeting shall be held between the CONTRACTOR and the Corps of Engineers Contracting Officer's Representative to discuss the CONTRACTOR'S safety program and in particular to review the following submittals:

(1) CONTRACTORS Accident Prevention Plan: An acceptable accident prevention plan, written by the prime CONTRACTOR for the specific work and implementing in detail the pertinent requirements of EM 385-1-1, shall be **submitted for Government acceptance**.

(2) Activity Phase Hazard Analysis Plan: Prior to beginning each major phase of work, an activity hazard analysis (phase plan) shall be prepared by the CONTRACTOR for that phase of approval. A phase is defined as an operation involving a type of work presenting hazards not experienced in previous operations or where a new subcontractor or work crew is to perform work. The analysis shall address the hazards for each activity performed in the phase and shall present the procedures and safeguards necessary to eliminate the hazards or reduce the risk to an acceptable level.

C.10.4 **ACCIDENTS:** Accidents are to be investigated by both CONTRACTOR personnel and the Contracting Officer. ACCIDENT REPORTING, ENG FORM 3394: Section I, Paragraph 01.D, of EM 385-1-1 and the Contract Clause entitled ACCIDENT PREVENTION are amended as follows: "The prime CONTRACTOR shall report on Eng. Form 3394, supplied by the Contracting Officer, all injuries to his employees or subcontractors that result in lost time and all damage to property and/or equipment in excess of \$2,000 per incident. Verbal notification of such accident shall be made to the Contracting Officer within 24 hours. A written report on the above noted form shall be submitted to the Contracting Officer within 72 hours following such accidents. The written report shall include the following:

C.10.5 Applicable OSHA Requirements are expected to be followed.

C.10.6 OSHA Inspections: CONTRACTORS shall immediately notify the Contracting Officer's Representative when an OSHA Compliance official (Federal or State representative) presents his/her credentials and informs the CONTRACTOR that the workplace will be inspected for OSHA compliance. CONTRACTORS shall also notify the Contracting Officer's Representative upon determination that **an exit interview will take place** upon completion of the OSHA inspection. (NABSA OCT 05, 1976)

C.10.7. SAFETY SUBMITTALS FOR GOVERNMENT APPROVAL: **Submittals shall** be in accordance with Section 01305 CONTRACTOR SUBMITTAL PROCEDURES. **All required** submittals of items specified in this section shall be for information only, except for those items including, but not limited to, the following which shall be submitted for **Government acceptance**:

- a. Written designation of Safety Representative.
- b. Written Project Specific Accident Prevention Plan.
- c. Written Activity Phase Hazard Analysis Plan.

At the prework conference, the CONTRACTOR will provide a comprehensive Safety Hazard Analysis Plan in accordance with the requirements of EM 385 1-1 – “Safety and Health Requirements Manual” and OSHA for approval of the COR. The plan will address at a minimum – training; first aid; emergency response; accident reporting; safety inspection and correction; hazard analysis; safety equipment inspection, repair and replacement; spill control; control substances, etc.

C.11. OBJECTIONABLE EMPLOYEES.

The CONTRACTOR will remove from the work site any employee who, in the opinion of the Contracting Officer, is objectionable or incompetent. This requirement shall not be the basis of any claim for compensation or damages against the United States or any of its officers or agents.

C.12. CLEANING UP.

The CONTRACTOR shall maintain the premises in a clean and neat condition satisfactory to the Contracting Officer at all times.

C.13. LAYOUT OF WORK.

The Authorized Representative of the Contracting Officer will work with the CONTRACTOR, providing general guidance for work layout. The CONTRACTOR will be responsible for the construction layout and the protection of such layout stakes, etc.

C.14. CONTRACTOR'S RESPONSIBILITY.

C.14.1. The CONTRACTOR shall be responsible that his employees strictly comply with all Federal, State, and municipal laws and all sections of Title 36 CFR 327 that may apply to operations under the contract. It is understood and agreed that the CONTRACTOR assumes full responsibility for the safety of his employees, plant, and materials.

C.14.2. In the CONTRACTOR'S absence, the CONTRACTOR will designate an individual to represent the interests of the CONTRACTOR and act in his behalf with regards to all matters and activities involving the contract, including safety.

C.15. DELAYS. If the CONTRACTOR refuses or fails to begin work within the time specified in Section C.2.1, or any extension thereof, as provided in specification, or to maintain the property in serviceable condition and diligently and competently to conduct the specified operations as indicated by the Contracting Officer, the Government may by written notice, terminate the right of the CONTRACTOR to proceed with delivery or with further performance under the contract or such part of parts thereof affected by the delay. In such event, the Government may use or procure similar property by contract or otherwise and the CONTRACTOR shall be liable to the

Government for any excess cost occasioned thereby. Unless otherwise provided in the specifications, the Government shall not be chargeable for out of service time due to breakdown not caused by the act of negligence of the Government of its agents.

C.15 CHANGES and QUANTITIES

C.15.1 Changes -- No change to the terms of this contract may take place without the expressed written authorization of the Contracting Officer. The CONTRACTOR must request any changes **before** the work takes place. The government will not be obligated to reimburse the contractor for any unauthorized change. The costs of changes will be negotiated between the government and the contractor before the work is performed unless indicated otherwise by the contracting officer.

C.15.2 Quantities -- Quantities listed on these plans and specs are estimated. For those quantities with unit pricing, the CONTRACTOR is obligated to validate the units listed. Any disparity between the CONTRACTOR'S measured quantities and the government estimate must be brought to the government's attention before the work is performed. Any deviation less than 30% of the government estimate shall be adjusted at the bid unit cost. The contractor shall compute all paving before paving commences. The contractor will inform the Contracting Officer's Representative (COR) of any variation in the measured quantities and the quantities in Section B. The COR may elect to add additional units to the contract as the same bid unit price or adjust the scope of work to fit the bid price of the contract. In Lump Sum bidding, additional (less) units shall be negotiated between the contractor and the government.

C.16. INSPECTIONS, DEFICIENCIES, DEDUCTIONS, DEFAULT

C.16.1 The government reserves the right to inspect completed work or work in progress.

C.16.2 Deficiencies: Work found not satisfactory and deemed to have been the result of inadequate work will be noted and may be referred to the contractor for immediate correction, or if judged not feasible, may be deducted from the contractor's pay estimate. Should the contractor fail to correct the deficiency, if requested to re-perform, the Government may:

- (1) deduct the unit cost from the contractor's pay estimate
- (2) perform the services with government personnel and deduct the costs from the contractor's pay estimate
- (3) hire the work performed and deduct the cost from the contractor's pay estimate.

C.16.3 Deductions: Should there arise the need to deduct money for damages or services not rendered, the basis for such deductions shall be subjectively computed by the Contracting Officer's representative. Deductions for damages to government property shall be handled in the same fashion at the same rates and terms. In all cases, the contractor shall be provided with an itemized breakdown of the deduction.

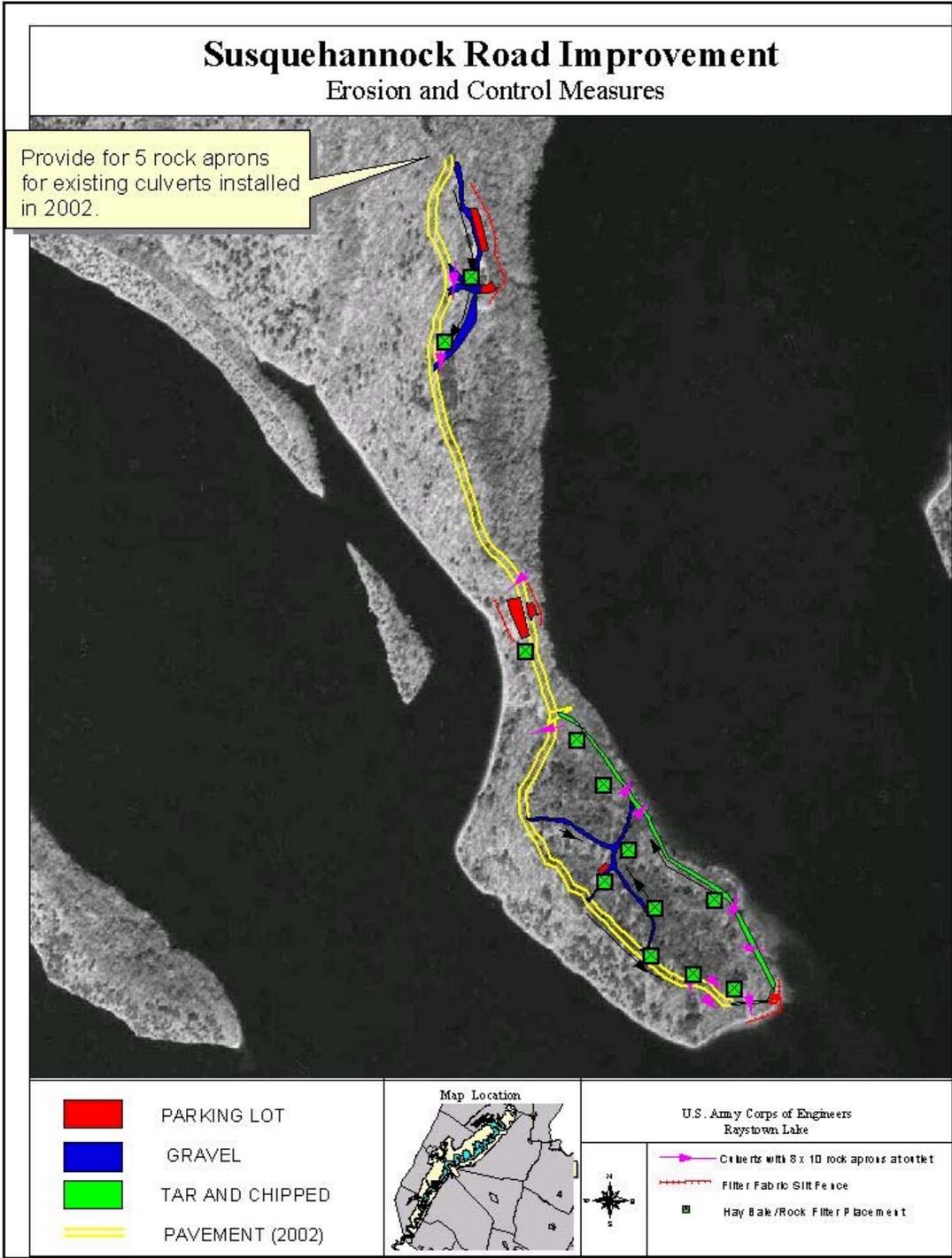
C.16.4 Default: Default of the contract shall be considered for various reasons relating to nonperformance of the contractual specifications. Following is a partial listing of reasons for which default may be considered:

- (1) Repetitive pay deductions for nonperformance.
- (2) Repetitive callbacks for corrections.
- (3) Repetitive safety violations.
- (4) Abnormal high amounts of inflicted damage on government facilities or private property.
- (5) Verbal or physical assaults on other contractors, Government employees, or visitors.
- (6) Repetitive unsatisfactory work.

C.17. PAYMENTS.

Unless otherwise provided in the specifications, partial payments can be made at the end of each two- (2) week period for work completed and/or materials on site justified by appropriate vendor receipts. Invoices shall be prepared and submitted to Operations Manager, U. S. Army Corps of Engineers, R. D. #1, Box 222, Hesston, Pa 16647. Invoices shall contain the following information: contract number, item number(s), materials expended and invoices and cost per unit, invoice date and be signed by the CONTRACTOR or authorized representative. The CONTRACTOR shall estimate the total of the job completed on a percentile basis based on progress schedule. The government reserves the right to, based on inspections, to validate the accuracy of the CONTRACTORS completion percentage and request modified invoices.

C.18 – PRE BID SITE INSPECTION – The government will hold a pre-bid site visit at 9:00 A.M. on May 15, 2003 . Contractor's wishing to participate will need to provide their own transportation. The pre-bid meeting will begin at the Visitor's Center ranger office, (lower level) in the Seven Points Recreation area with an explanation of the requirements and conclude by walking the site. Questions or clarifications posed at the pre-bid will be documented and sent to all interested contractors in the form of an amendment to the solicitation. Estimated duration of the pre-bid will be 2 to 3 hours.



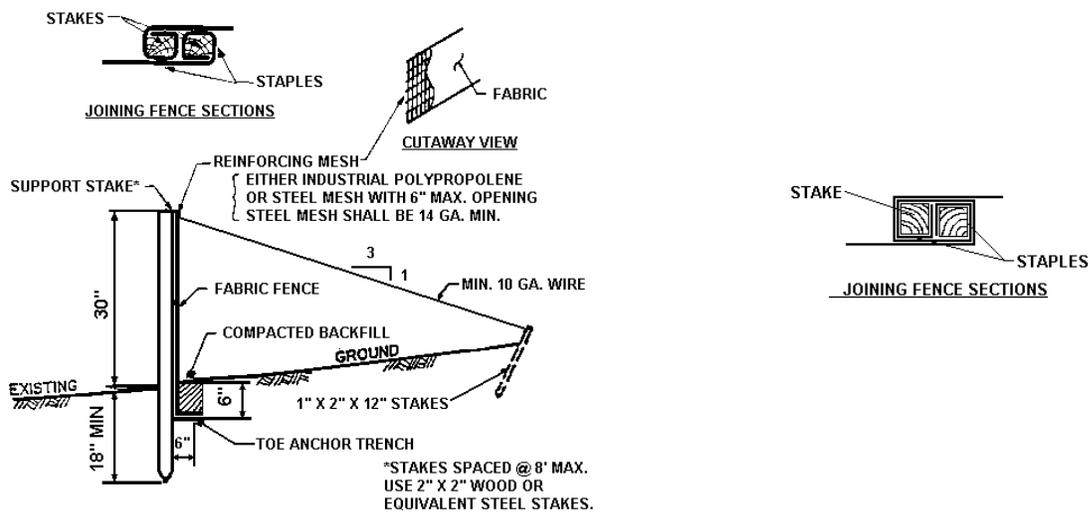
**STANDARD EROSION AND SEDIMENT CONTROL PLAN NOTES**

1. Only limited disturbance will be permitted to provide access to the site for grading and acquiring borrow to construct those BMPs.
2. Erosion and sediment BMP must be constructed, stabilized, and functional before site disturbance begins within the tributary areas of those BMPs.
3. After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed. Areas disturbed during removal of the BMPs must be stabilized immediately.
4. Stockpile heights must not exceed 35 feet. Stockpile slopes must be 2:1 or flatter.

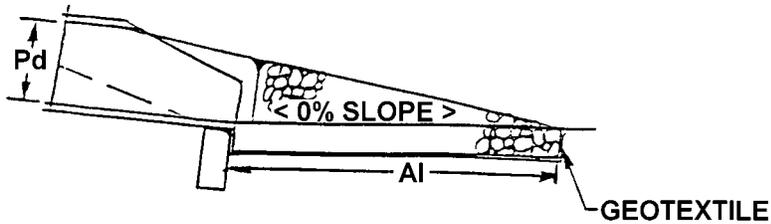
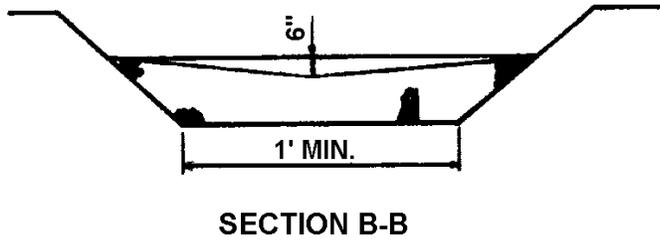
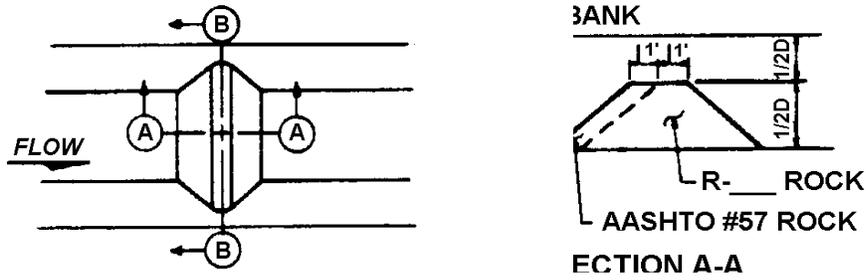
Until the site is stabilized, all erosion and sediment BMPs must be maintained properly. Maintenance must include inspections of all erosion and sediment BMPs after each runoff event and on a weekly basis. All preventive and remedial maintenance work, including clean out, repair, replacement, regrading, reseeding, mulching and renetting must be performed immediately. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs or modifications will be implemented.

**ANTICIPATED CONSTRUCTION SEQUENCE**

1. Place 30" filter fabric as per site plans.
2. Grub live trees and stumps.
3. Install culvert pipes and rock aprons at outfalls.
4. Install rock filters as needed.
5. Remove accumulated sediment from the structures as needed.
6. Complete scarification/grading of roadways.
7. Place base material.
8. Seed and straw all banks and bare soils.
9. Remove BMP's.



Silt Fence Typical



Rock Filter Typical-- Outlet Rock Apron

### Erosion and Sediment Pollution Control Plan General Notes.

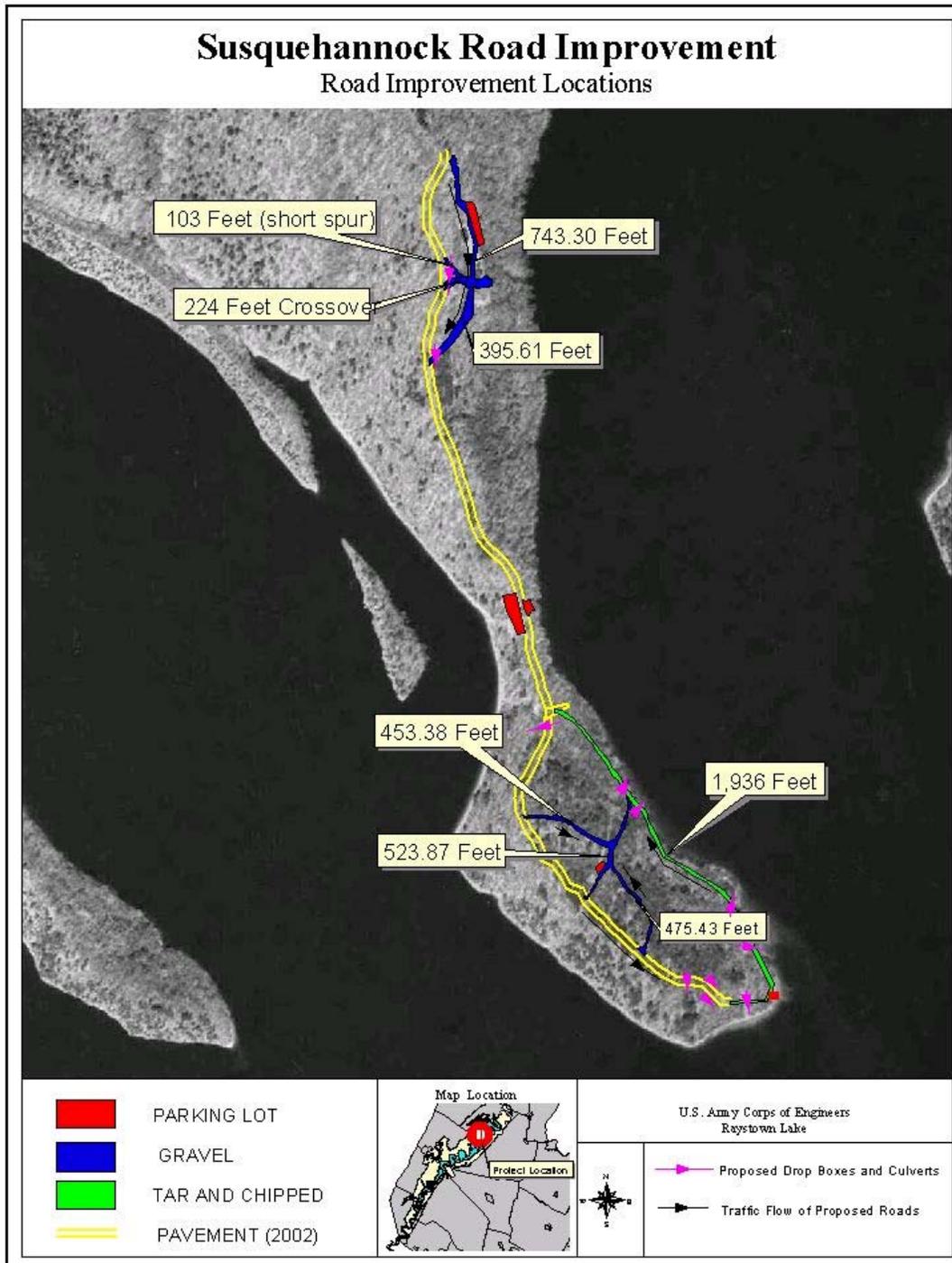
1. The erosion & sediment pollution control plan (E&SPCP) is governed by the Pennsylvania Department of Environmental Protection Title 25, Chapter 102 “Erosion and Sediment Pollution Control Program Manual”, dated May 2000 or later. The contractor shall be responsible for obtaining and keeping a copy of this publication on site.
2. The contractor shall be responsible to conduct all earthmoving operations as detailed in “Sequence of Construction” of the approved E&SPCP plan and in accordance with the “Erosion and Sediment Pollution Control Program manual”.
3. Conduct all operations as specified in the E&SPCP in such a manner to minimize turbidity in the streams. Do not discharge water containing sediments or other pollutants into the streams.
4. The contractor shall notify the County Conservation District at least seven (7) days prior to the initiation of work.
5. “Limits of Disturbance” must be marked in the field prior to any earth disturbance.
6. The contractor shall not disturb any archaeological areas delineated on plans.
7. All E&SPCP devices must be constructed and functional prior to site disturbance within the tributary areas of those devices.
8. Should any measures contained within this E&SPCP prove to be incapable of adequately removing sediment from on-site flows prior to discharge, or of stabilizing the surfaces involved, additional measures must be immediately implemented by the contractor to eliminate all such problems.
9. All E&SPCP control devices must be maintained until final site stabilization. Please refer to the Erosion & Sediment Pollution Control Maintenance Program contained within this plan.
10. After permanent stabilization has been achieved, contact the County Conservation District for an inspection of the stabilized area. Upon approval by the County Conservation District, temporary erosion and sedimentation controls must be removed in accordance with the E&SPCP. Areas disturbed during removal of the controls must be stabilized immediately.
11. The contractor must develop and obtain approval (By the County Conservation District) of a separate E&SPCP for each work area not detailed in the plan located outside of the limits of disturbance, (i.e. haul/access roads, borrow waste areas, fueling areas, staging areas, etc.) The contractor must schedule accordingly to ensure adequate time for County Conservation District subsequent review and approval of NPDES permit revision. Any (haul/access roads, borrow or

waste areas, fueling areas, staging areas, etc.) work are not shown on these plans that are within the limits of disturbance that do not alter design drainage patterns as determined by the engineer will not require a NPDES permit revision. The engineer must evaluate if an NPDES permit revision will be required for work activities (i.e. haul/access roads, borrow or waste areas, fueling areas, staging areas etc.) not shown on plans within the limit of disturbance that does alter drainage patterns. The proposed work will be evaluated based on whether it will impact current or proposed drainage patterns for erosion and sedimentation control measures. The contractor must schedule accordingly to ensure adequate time for County Conservation District subsequent review and approval of NPDES permit revision, if one is required.

12. The owner's representative will limit the area of excavation, borrow, waste, and embankment in accordance with the approved schedule, dependent upon the progress of the contractor's seeding and other specified temporary or permanent erosion control measures. The extent of exposed erodible surface shall be limited in accordance with the approved schedule.
13. Filter fabric fence must be installed at level grade. Both ends of each fence section must extend at least 10' up slope at 45 degrees to the main fence alignment to allow for pooling of water.
14. Filter fabric fences will not be placed in any area of concentrated flow such as ditches, swales, channels, etc.
15. Filter fabric fences will not be placed in areas where rock or rocky soils prevent the full uniform anchoring of the fence toe.
16. Filter fabric material will not be placed across the entrance to pipes or culverts and will not be wrapped around the principal spillway structures of sedimentation basins or dewatering basins.
17. All storm water inlets (existing/proposed) which do not discharge to sediment traps or basins, must be protected (filtered) until the tributary areas are stabilized.
18. The cost of pumping and dewatering the construction area is incidental to other items of construction. No separate payment will be made.
19. Any disturbed area, including stockpiles, on which activity has ceased and will remain exposed for more than 20 days must be stabilized immediately. Mulch must be applied at the recommended rates during non-germinating periods. Disturbed areas which are not at finished grade, and which will be re-disturbed within one year must be stabilized in accordance with temporary seeding specifications (PennDot type E seed). Disturbed areas, which are at finished grade, or which will not be re-disturbed within one year, must be stabilized in accordance with permanent seeding specifications. For seeding specifications and germinating periods, refer to PennDot Publication 408, Section 804.

20. Hay and straw mulch must be applied at rates outlined in the most recent edition of the PennDot Publication 408, Section 805. Mulch must be anchored with approved erosion control netting between October 1 and April 30 of each year.

\*\*\*\*\* END OF ATTACHMENT A \*\*\*\*\*



Plot date: May 14, 2002 z:\data-projects\projects\wildlife.apr

**Attachment B**

## 1. SCOPE

a. Furnish all equipment, labor and materials to excavate, grade, and place bituminous cement at the Raystown Lake Project.

b. Reference Specifications - Pennsylvania Department of Transportation, Form 408, 2000 edition, hereinafter called "PennDot", shall apply to this section.

c. Environmental Conditions - The placing of bituminous concrete shall terminate between October 31 and April 1, unless otherwise approved by the Contracting Officer. Bituminous concrete shall not be placed on wet surfaces, or when the air temperature is 40 degrees F or lower.

d. Product Delivery - Limited tonnage of bituminous concrete enroute to the project site when work is terminated for the day because of weather conditions, may be placed with the approval of the Contracting Officer.

e. Products:

Base Course Materials, [BCBC], shall meet requirements of Section 305.2 of PennDot specifications, Asphalt Cement

Surface Course (wearing course), [ID2A], materials shall meet requirements of Section 420.2 of PennDot specifications, for ID2A bituminous material unless otherwise specified.

Bituminous Tack Coat material shall meet specifications of Section 460 of PennDot 408, Bituminous Tack Coat.

f. Mixes - All bituminous concrete mixes shall meet requirements of Section 305.2 (d) and 420.2 of PennDot specifications.

**PREPARATION OF EXISTING SURFACES, ID2A OVERLAY.**

- a) A tack coat, meeting the requirements of PennDot Section 460 shall be applied to all areas indicated on the drawings or as directed by the contracting officer. Surfaces to receive a tack coat shall be free of excess dust and other loose material. The contracting officer reserves the right to require sweeping of surfaces before the application of tack coats. Application rates shall range from 0.05 to 0.20 gallon per square yard. Work shall be planned so that no more tack than necessary for the day's operation is placed on the surface. The tack coat shall be permitted to cure until the proper degree of tackiness, as determined by the contracting officer, has been obtained.

FINAL PREPARATION OF PAVING SUBGRADE, (IF APPLICABLE)

- a) Preparation - Check for correct elevation and position of each manhole cover, drain, valve box, and similar structure located within areas which are to be paved or surfaced, and make necessary adjustments in such structures.
- b) Compaction - The subgrade to pavements shall conform to the applicable provisions of [Section 2C](#), EXCAVATION, BACKFILL, AND EMBANKMENT.
- c) Condition of Surfaces - Place no base material on a muddy or frozen subgrade. Remove all loose and foreign materials. Sweeping of portions of existing road base shall be performed as needed or directed by the Operations Manager.
- d) Application
  - 1) Bituminous Concrete paving shall be constructed as detailed in accordance with Sections 305 and 420 of PennDot specifications.
  - 2) Finished Grades shall be true and continuous, and conform to the grading plan and profiles.
  - 3) Subbase construction shall meet all requirements of Section 350 through 350.4 of PennDot specifications.
  - 4) AC20, or better, on cold joints.
  - 5) Paving notches as applicable.

All work and materials shall be subject to inspection and approval by Contracting Officer's Representative at all times.

All mating surfaces shall be even, free of dips, potholes, and undulations.

Provide sufficient flaggers and/or pilot vehicles to move traffic through the work zone or over the completed work so as to limit traffic speeds and aggregate distortion pick up. If directed, sweep the surface with a power broom, removing loose chips before and after the road is opened to traffic.

\*\*\*\*\* END OF ATTACHMENT B \*\*\*\*\*

**Attachment C**

**BERMING**

1. General

Furnish all equipment, labor and materials to place and compact 2RC berm material along Susquehannock roadways.

Scope of Work -- The contractor shall provide berming material, equipment, and labor to place berming material to an appropriate depth and a general width of 2' along the newly paved sections of Susquehannock Roadways.

Susquehannock Roadways

- 1) Susquehannock Roadways are scheduled to receive 3" to 4.5 in of BCBC and ID2A surfacing. CONTRACTORS should base their bid on 4.5" of material to be placed. Should a lesser level of blacktop be placed, berm depth will be adjusted accordingly. The government reserves the right to reduce the material costs associated with the berm placement on a percentile basis in alignment with the depth adjustment measured against the bid depth of 4.5". Berm material will be placed to maintain a uniform surface, void of vertical separation between the paved surface and the road berm. The berm shall extend no less than 30" inches from the paved surface and shall taper from a depth needed at the paved surface to 0" at the termination point.
  - 2) Manholes, water turn-off valves and/or any other project feature within the berming zone shall be left open and bermed material placed around so as not to obstruct access.
- a. All work and materials shall be subject to inspection and approval by Contracting Officer's Representative at all times.
  - b. The contractor shall be required to follow all pertinent requirements found in the U.S. Army Corps of Engineers Safety and Health Manual, EM 385-1-1. A copy will be furnished to the contractor for the life of the contract. Requirements will include but not be limited to wearing of protective equipment, traffic control, and good housekeeping. This is a public use area and the contractor shall be responsible to provide signing and barriers to protect the public from the hazards in the work area. At the end of each workday and at the end of the contract, the contractor will be required to remove and properly dispose of any rubble or trash from the worksite.

\*\*\*\*\* END OF ATTACHMENT C \*\*\*\*\*

### Culvert/Drop Box Table – Attachment D

For bidding purposes, drop boxes are to be bid using size 3'W x 5'L x 4'D, concrete complete with grate. NOTE: Table is provided for bidding purposes only. Actual numbers, placement and pipe length may vary depending upon final design.

Culvert	Size	Material	Length	Oultet Protection	Length of Apron	Comments
1	18"	HDPE	20'	Rock apron	8'	
2.	18"	HDPE	25'	Rock apron	8'	
3.	18"	HDPE	60'	Rock apron	8'	
4.	18"	HDPE	35'	Rock apron	8'	
5.	18"	HDPE	100'	Rock apron	8'	
6.	18"	HDPE	20'	Rock apron	8'	
7.	18"	HDPE	20'	Rock apron	8'	
8.	18"	HDPE	30'	Rock apron	8'	
9.	18"	HDPE	30'	Rock apron	8'	
10.	18"	HDPE	35'	Rock apron	8'	
11.	18"	HDPE	30'	Rock apron	8'	
12.	18"	HDPE	30'	Rock apron	8'	