

Foreman	\$16.82/hr
Gen. Laborer	\$10.11/hr
Gen. Laborer	\$10.11/hr

$$4*($50)+2*(18)+6*(50)+[16.28+10.11+10.11]*1 \text{ hr} = \$609$$

$$\$609/28 \text{ SF} = \$21.75/\text{SF}$$

### **72530 Rock Barrier**

36" Min rock boulder @ \$50

Foreman	\$16.82/hr
Gen. Laborer	\$10.11/hr
Excavator Operator	\$13.48/hr
Hydraulic Excavator	\$85.44/hr

$$\$50+[16.82+10.11+13.48+85.44]*30 \text{ min} = \$113 \text{ per boulder}$$

**NFR 245 ROAD MAINTENANCE – UPPER SECTION**

**SECTION C--DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK**

**C-1 – PROJECT DESCRIPTION AND LOCATION**

(a) **Description of Work:** A wild land fire in 2008 caused extensive watershed damage to Forest Road 245. Damage includes the wash out of sections of the road bed, extensive sediment transfer, the clogging of culverts, and damage to existing road features. This project involves earth work to fill in washed out sections of the road, re-establish roadway section including ditches, and the installation, repair and cleaning of roadway culverts and storm drain inlets.

(b) **Project Location:** Project is located in the Cibola National Forest, Mountainair Ranger District, within the Manzano Mountains on Forest Road 245. Forest Road 245 is located in Township 5 North, Range 5 East, approximately 2 miles east of State Road 55 and the Town of Manzano.

**C-2 – ESTIMATED PROJECT CONSTRUCTION COST.** \$250,000.00-500,000.00

**C-3 – PERIOD OF PERFORMANCE.** 90 calendar days

**C-4 – SPECIFICATIONS.** All construction completed as part of this contract shall adhere to STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS (FP-03) U.S. Customary Units (U.S. DEPARTMENT OF TRANSPORTATION, Federal Highway Administration) (2003). Standard Specifications for Construction of Roads & Bridges on Federal Highway Projects (FP-03) are included by reference only. The requirements contained in the referenced Standard Specifications are hereby made a part of this solicitation and any resultant contract, unless superseded by Forest Service Supplemental Specifications contained herein.

Copies of the Standard Specifications for Construction of Roads & Bridges on Federal Highway Projects (FP-03) are available online at:  
<http://www.wfl.fhwa.dot.gov/design/specs/fp03.htm>

**FOREST SERVICE SUPPLEMENTAL SPECIFICATIONS:** The Supplemental Specifications included below replace, supercede, or augment specifications contained in FP-03 Standard Specifications as noted and are made part of this contract:

**FSSS 101-- TERMS, FORMAT, AND DEFINITIONS:**

Add to Subsection 101.01 Meaning of Terms:

Delete all references in FP-03 to Transportation Acquisition Regulations (TAR) in the specifications.

Add to Subsection 101.03 Abbreviations (a) Acronyms:

COR - Contracting Officer Representative

Add to Subsection 101.03 Abbreviations (b) SI symbols:

mp	Milepost
ppm	Part Per Million

Delete the following definitions and substitute the following to Subsection 101.04

Definitions:

**Right-of-Way**--A general term denoting (1) the privilege to pass over land in some particular line (including easement, lease, permit, or license to occupy, use, or traverse public or private lands), or (2) Real property necessary for the project, including roadway, buffer areas, access, and drainage areas.

Add the following Definitions:

**Adjustment in Contract Price**--“Equitable adjustment,” as used in the Federal Acquisition Regulations, or “construction cost adjustment,” as used in the Timber Sale Contract, as applicable.

**Change**--“Change” means “change order” as used in the Federal Acquisition Regulations, or “design change” as used in the Timber Sale Contract.

**Design Quantity**--“Design quantity” is a Forest Service method of measurement from the FS-96 *Forest Service Specifications for the Construction of Roads and Bridges*. Under these FP specifications this term is replaced by the term “Contract Quantities”.

**Forest Service**--The United States of America, acting through the Forest Service, U.S. Department of Agriculture.

**Neat Line**--A line defining the proposed or specified limits of an excavation or structure.

**Pioneer Road**--Temporary construction access built along the route of the project.

**Purchaser**--The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through agents, employees, or subcontractors.

**Protected Streamcourse**--A drainage shown on the plans or timber sale area map that requires designated mitigation measures.

**Road Order**--An order affecting and controlling traffic on roads under Forest Service jurisdiction. Road Orders are issued by a designated Forest Officer under the authorities of 36 CFR, part 260.

**Schedule of Items**--A schedule in the contract that contains a listing and description of construction items, quantities, units of measure, unit price, and amount. The term Schedule of Items and Bid Schedule are synonymous.

**Utilization Standards**--The minimum size and percent soundness of trees described in the specifications to determine merchantable timber.

### **Determination of Quantities**

The following measurements and calculations are used to determine contract quantities.

- For individual construction items, longitudinal and lateral measurements for area computations shall be made horizontally or corrected to horizontal measurement unless otherwise specified.
- The average end area method shall be used to compute volumes of excavation or embankment.
- For items that have linear measurements, such as pipe culverts, measurements shall be made parallel to the base or foundation upon which the structures are placed.

### **Units of Measurement**

Payment will be by units defined and determined according to measure. Unless otherwise specified, the meanings of the following terms are as follows:

- Cubic Yard-Measure solid volumes by the average end area method.
  1. Measure cross sections of the original ground and use with design templates to determine the end areas. Do not measure work outside of the established lines or slopes.
  2. Compute the quantity using average end areas multiplied by the horizontal distance along a centerline or reference line between the end areas. Deduct any quantity outside the designated or staked limits.
- Each-One entire unit, which may consist of one or more parts. The quantity is the actual number of units completed and accepted.
- Linear Foot-Measure from end to end, parallel to the base or foundation base measured, or horizontal.
- Lump Sum-Do not measure directly. The bid amount is complete payment for all work described in the contract and necessary to complete the work for that item.

### **Methods of Measurement**

One of the following methods of measurement for determining final payment is DESIGNATED IN THE SCHEDULE OF ITEMS for each PAY ITEM:

- Designed Quantities (DQ)-These quantities denote the final number of units to be paid for under the terms of the contract. They are based upon the original design data available prior to advertising the project. Original design data include the preliminary survey information, design assumptions, calculations, drawings, and the presentation in the contract. Changes in the number of units DESIGNATED IN THE SCHEDULE OF ITEMS may be authorized under any of the following conditions:
  1. Changes in the work authorized by the CO.
  2. A determination by the CO that errors exist in the original design that cause a PAY ITEM quantity to change by 15 percent or more.
  3. A written request submitted to the CO showing evidence of errors in the original design that cause the quantity of a PAY ITEM to change by 15 percent or more. The evidence must be verifiable and consist of calculations, drawings, or other data that show how the designed quantity is in error.
- Actual Quantities (AQ)-These quantities are determined from measurements of completed work.
- Lump Sum Quantities (LSQ)-These quantities denote one complete unit of work as required by or described in the contract, including necessary materials, equipment, and labor to complete the job.

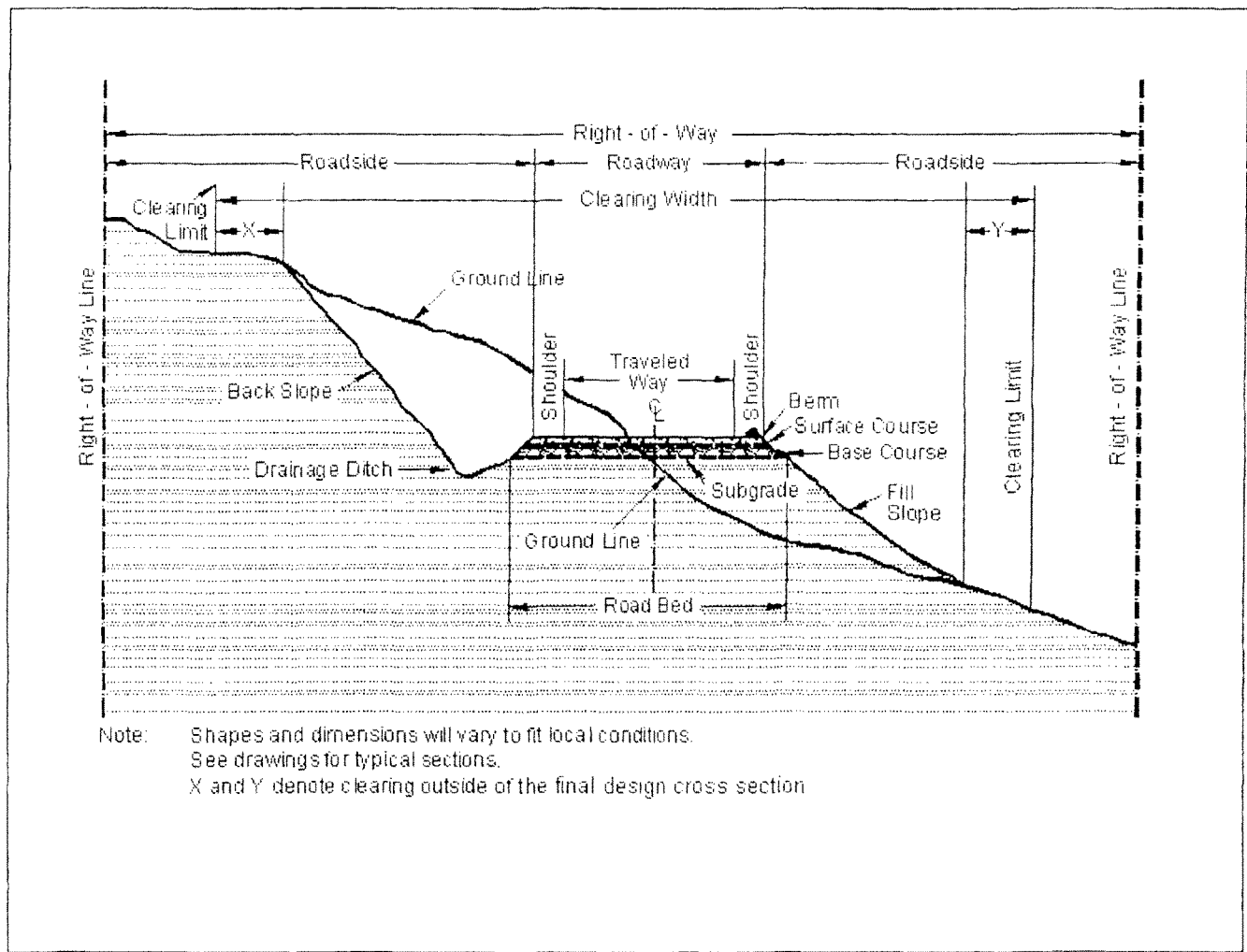


Figure 101-1--Illustration of road structure terms.

## **FSSS102 – BID, AWARD, AND EXECUTION OF CONTRACT**

Delete Section 102 in its entirety.

## **FSSS 103 – SCOPE OF WORK**

Delete all but Subsection 103.01 Intent of Contract.

## **FSSS 104 – CONTROL OF WORK**

Delete Sections 104.01, 104.02, and 104.04.

Add the following subsection:

### **104.06 Use of Roads by Contractor**

The Contractor is authorized to use roads under the jurisdiction of the Forest Service for all activities necessary to complete this contract, subject to the limitations and authorizations designated in the Road Order(s) or described in the contract, when such use will not damage the roads or national forest resources, and when traffic can be accommodated safely.

## **FSSS 105 – CONTROL OF MATERIAL**

Add to Subsection 105.02 Material Sources (a) Government Provided Sources:

Comply with the requirements of 30 CFR 56, subparts B and H. Use all suitable material for aggregate regardless of size unless otherwise designated. When required, re-establish vegetation in disturbed areas according to section 625.

Delete 105.05 (a) and (b) and the last sentence of the second paragraph and substitute the following:

Materials produced or processed from Government lands in excess of the quantities required for performance of this contract are the property of the Government. The Government is not obligated to make reimbursement for the cost of producing these materials.

## **FSSS 106 – ACCEPTANCE OF WORK**

Delete Subsection 106.01 and substitute the following:

Follow the requirements of FAR Clause 52.246-12 Inspection of Construction.

References to standard test methods of AASHTO, ASTM, GSA, and other recognized standard authorities refer to the methods in effect on the date of solicitation for bids.

Perform all work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown on the plans or specified in the contract.

Incorporate manufactured materials into the work according to the manufacturer's recommendations or to these specifications, whichever is more strict.

Plan dimensions and contract specification values are the values to be strived for and complied with as the design values from which any deviations are allowed. Perform work and provide material that is uniform in character and reasonably close to the prescribed value or within the specified tolerance range. The purpose of a tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons.

When standard manufactured items are specified (such as fence, wire, plates, rolled shapes, pipe conduits, etc., that are identified by gauge, unit mass, section dimensions, etc.), the identification will be considered to be nominal masses or dimensions. Unless specific contract tolerances are noted, established manufacturing tolerances will be accepted.

The Government may inspect, sample, or test all work at any time before final acceptance of the project. When the Government tests work, copies of test reports are furnished to the Contractor upon request. Government tests may or may not be performed at the work site. If Contractor testing and inspection is verified by the Government, the Contractor's results may be used by the Government to evaluate work for acceptance. Do not rely on the availability of Government test results for process control.

Acceptable work conforming to the contract will be paid for at the contract unit bid price. Four methods of determining conformity and accepting work are described in Subsections 106.02 to 106.05 inclusive. The primary method of acceptance is specified in each Section of work. However, work may be rejected at any time it is found by any of the methods not to comply with the contract.

Remove and replace work that does not conform to the contract, or to prevailing industry standards where no specific contract requirements are noted, at no cost to the Government.

(a) Disputing Government test results. If the accuracy of Government test results is disputed, promptly inform the CO. If the dispute is unresolved after reasonable steps are taken to resolve the dispute, further evaluation may be obtained by written request. Include a narrative describing the dispute and a proposed resolution protocol that addresses the following:

- (1) Sampling method;
- (2) Number of samples;
- (3) Sample transport;
- (4) Test procedures;
- (5) Testing laboratories;
- (6) Reporting;
- (7) Estimated time and costs; and
- (8) Validation process.

If the evaluation requires additional sampling or testing to be performed, mutually agree with the Government on witnessing procedures and on sampling and testing by a third party laboratory. Use a third party laboratory accredited by the AASHTO accreditation program. Provide proof of the laboratory's accreditation for the test procedures to be used. Do not use the same laboratory that produced the disputed Government test results or that produced the test results used as a basis for the dispute.

The CO will review the proposed resolution protocol and may modify it before final approval and execution.

The Government will use the approved resolution protocol test results to determine the validity of the disputed testing. If the Government test results are validated, the Contractor will be responsible for all costs associated with developing and performing the resolution protocol. If the Government test results are not validated, the Government will be responsible for all costs associated with developing and performing the resolution protocol. If the validity of the Government test results cannot be determined, the Contractor and Government will equally share all costs associated with developing and carrying out the resolution protocol.

(b) Alternatives to removing and replacing non-conforming work. As an alternative to removal and replacement, the Contractor may submit a written request to:

- (1) Have the work accepted at a reduced price; or
- (2) Be given permission to perform corrective measures to bring the work into conformity.

The request must contain supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis. The CO will determine disposition of the nonconforming work.

Delete subsection 106.07.

## **FSSS107. – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC:**

### 107.06 Contractor's Responsibility for Work.

Delete the entire subsection.

### 107.09 Legal Relationship of the Parties.

Delete the entire subsection:

### 107.10 Environmental Protection.

Add the following:

Design and locate equipment repair shops, stationary refueling sites, or other facilities to minimize the potential and impacts of hazardous material spills on Government land.



Before beginning any work, submit a Hazardous Spill Plan. List actions to be taken in the event of a spill. Incorporate preventive measures to be taken, such as the location of mobile refueling facilities, storage and handling of hazardous materials, and similar information. Immediately notify the CO of all hazardous material spills. Provide a written narrative report form no later than 24 hours after the initial report and include the following:

- Description of the item spilled (including identity, quantity, manifest number, and other identifying information).
- Whether amount spilled is EPA or state reportable, and if so whether it was reported, and to whom.
- Exact time and location of spill including a description of the area involved.
- Containment procedures.
- Summary of any communications contractor had with news media, Federal, state and local regulatory agencies and officials, or Forest Service officials.
- Description of clean-up procedures employed or to be employed at the site including final disposition and disposal location of spill residue.

When available provide copies of all spill related clean up and closure documentation and correspondence from regulatory agencies.

The Contractor is solely responsible for all spills or leaks that occur during the performance of this contract. Clean up spills or leaks to the satisfaction of the CO and in a manner that complies with Federal, state, and local laws and regulations.

Add Subsection 107.12:

**107.12 Protection of Existing Archeological Elements.** Existing storm inlets and culverts have been identified as archeologically significant and must not be disturbed or damaged during construction unless directed by the COR. Report any damage of existing elements to the COR immediately.

#### **FSSS108. -- PROSECUTION AND PROGRESS**

Delete Section 108 in its entirety.

#### **FSSS109. -- MEASUREMENT AND PAYMENT:**

Delete the following entire subsections:

- 109.06 Pricing of Adjustments.
- 109.07 Eliminated Work.
- 109.08 Progress Payments.
- 109.09 Final Payment.

#### **109.02 Measurement Terms and Definitions.**

(b) Contract quantity.

Add the following:

Contract quantities will be adjusted only when there are errors in the original design of 15% or more.

Change the following:

“(b) Cubic yard” to “(c) Cubic yard”.

**FSSS204. – EXCAVATION AND EMBANKMENT:**

Add to Section 204.13

(e) Grade Dip Construction

Grade dips are to be constructed and reshaped as shown on the drawings to ensure proper drain ability allowing water to sheet across the road, without impeding the natural flow of water.

Add to Subsection 204.10 Embankment Construction:

(b) Embankment within the roadway prism.

Delete section (b) and replace with the following:

***Specific Methods.*** Place all embankments using one or more of the following methods, as listed in the SCHEDULE OF ITEMS:

*(1) Method 1—Side Casting & End Dumping.* Place embankment by side casting and end dumping. Build solid embankments by working smaller rocks and fines in with the larger rocks and fines to fill the voids.

*(2) Method 2—Layer Placement.* Roughen or step surfaces steeper than a ratio of 3 horizontal to 1 vertical (3:1) upon which embankment is to be placed, when shown on plans, in order to provide permanent bonding of new and old materials.

Layer place embankment, except over rock surfaces. Over rock surfaces, place material by end dumping to the minimum depth needed for operation of spreading equipment. Level and smooth each embankment layer before placement of subsequent layers. Operate hauling and spreading equipment uniformly over the full width of each layer.

Place suitable material in layers no more than 12 inches thick, except when the material contains rock more than 9 inches in diameter, in which case layers may be of sufficient thickness to accommodate the material involved. Ensure that no layer exceeds 2 feet before compaction.

Placing individual rocks or boulders greater than 2 feet in diameter will be permitted, provided that the embankment will accommodate them and that they are at least 6 inches below the subgrade. Carefully distribute rocks and fill the voids with finer material to form a dense and compacted mass.

Where material containing large amounts of rock is used to construct embankments, make layers of sufficient thickness to accommodate the material involved. Construct a solid embankment with adequate compaction by working smaller rock and fines in with the larger

rocks to fill the voids, and by operating hauling and spreading equipment uniformly over the full width of each layer as the embankment is constructed.

Ensure that material is at a moisture content suitable to obtain a mass that will not visibly deflect under the load of the hauling and spreading equipment. Field drain and dry excessively wet material that is otherwise suitable for embankment before placement.

*(3) Method 3—Layer Placement (Roller Compaction).* Place embankments as specified in method 2. Place in horizontal layers not exceeding 12 inches prior to compaction, except when the material contains rock more than 9 inches in diameter, in which case layers may be of sufficient thickness to accommodate the material involved. Obtain compaction using equipment listed in Subsection 204.11(a). Operate compaction equipment over the full width of each layer until visible deformation of the layer ceases or, in the case of the sheepfoot roller, the roller “walks out” of the layer. Make at least three complete passes.

*Method 4—Controlled Compaction.* Place embankments as specified in method 2; but place earth embankments in horizontal layers not exceeding 12 inches (loose measure), and compact them. Ensure that the moisture content of material is suitable for attaining the required compaction. Compact the embankments and the top 12 inches of excavation sections to at least 95 percent of the maximum density, as determined by AASHTO T 99, method C or D.

Determine the density of the embankment material during the progress of the work, in accordance with AASHTO T 191, T 205, or T 238; and T 217, T 239, or T 255. Correct for coarse particles in accordance with AASHTO T 224.

Density requirements will not apply to portions of rock embankments that cannot be tested in accordance with approved methods. When this condition exists, accomplish compaction by working smaller rocks and fines in with the larger rocks to fill the voids and by operating equipment over the embankment materials.

*(5) Method 5—Side casting, End Dumping, Layer Placement, and Controlled Compaction.* Place embankment as specified in Method (1) until the minimum width necessary to operate the spreading equipment is obtained. Place the remainder of the embankment as specified in Method (2) except a minimum depth of 1 foot below subgrade to be placed as specified in Method (3). Embankments otherwise shown on the plans to be entirely placed as specified in Method (3).

## **FSSS209. -- Structure Excavation and Backfill**

### **209.10 Backfill.**

#### Add the following:

On each side of the pipe, excavate an area at least as wide as the diameter of the pipe. Backfill without damaging or displacing the pipe. Complete backfilling of the trench with suitable material.

## 209.11 Compacting.

Delete the subsection and add the following:

Compact backfill using designated compaction method A, B, or C:

**Method A.** Ensure that backfill density exceeds the density of the surrounding embankment.

**Method B.** Adjust the moisture content of the backfill material to a moisture content suitable for compaction. Compact each 6 inch layer with a minimum of three complete passes with a mechanical tamper, approved by the COR.

**Method C.** Determine optimum moisture content and maximum density according to AASHTO T 99 method C. Adjust the moisture content of the backfill material to a moisture content suitable for compaction. Compact material placed in all layers to at least 95 percent of the maximum density. Determine the in place density and moisture content according to AASHTO T 310 or other approved test procedures.

## 209.12 Acceptance

Add the following:

Compaction methods (A) and (B) do not require sampling and testing.

## FSSS303. – ROAD RECONDITIONING:

Delete Section 303 and substitute the following:

### Description

**303.01** This work consists of reconditioning/re-establishing ditches, shoulders, roadbeds, grade dips, turnouts, cattle guards and aggregate surfaces. When necessary, furnish water free of substances detrimental to the work.

### Material

**303.02** Conform to the following Subsection:

Water	725.01
-------	--------

### Construction Requirements

**303.03 Road Prism Reconditioning, in slope/out slope roadbed with ditch.** Refer to road log for exact locations, and drawings.

Remove all organic, deleterious, or oversize material larger than 6 inches from the top 6 inches of subgrade. Dispose of waste according to ditch reconditioning. Scarify to a 6-inch depth, remove surface irregularities and soft unstable areas. Shape to provide uniform surface with a 2% cross slope, utilizing existing roadbed material and maintaining existing roadbed vertical alignment. Operate heavy equipment over the full width until there is no visible deflection.

Remove all slide material, sediment, vegetation, and other debris from the existing ditches and culvert inlets and outlets. Reshape ditches and culvert inlets and outlets to achieve positive drainage and a uniform ditch width, depth, and grade. Remove all harmful material including muck, frozen lumps, roots, sod, or rocks larger than 3 inches, and dispose of waste outside the brushing clearing limits. Do not deposit material in streams, streambeds, culvert inlets or outlets, drainage ways, or cattle guards.

**303.04 Shoulder Reconditioning** Remove all slide material, vegetation, and other debris from existing shoulders including shoulders of parking areas, turnouts, and other widened areas. Reshape shoulders and dispose of waste according to ditch reconditioning.

**303.05 Turnout Reconditioning**

Turnouts are to be maintained and reshaped as shown on the drawings while maintaining a 2% cross slope. Remove all slide material, vegetation, and other debris from existing turnout. Reshape turnouts to match existing roadway, and dispose of waste according to ditch reconditioning.

**303.06 Grade Dip Reconditioning**

Grade dips are to be maintained and reshaped as shown on the drawings to ensure proper drain ability allowing water to sheet across the road, without impeding the natural flow of water.

**303.07 Remove Grade Dip**

Completely obliterate existing grade dip and reshape the road prism as shown on the drawings.

**303.08 Low Water Crossing** Shape and finish the sub grade to a smooth surface and to the cross section required shown in the drawings. Dispose of unsuitable or excess excavation material outside of clearing limits.

**Measurement**

Measure the Section 303 items listed in the bid schedule and the following as applicable.

- Measure road prism reconditioning by the mile along the centerline of the roadway. Road prism reconditioning includes ditch and shoulder reconditioning.
- Measure grade dip construction, grade dip reconditioning, turnout reconditioning, remove grade dip by each individual item.

**Payment**

The accepted quantities will be paid at the contract price per unit of measurement for the Section 303 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section.

**FSSS602. – CULVERTS AND DRAINS:**

Excavate and backfill according to Section 209.

Add Subsection 602.035:

**602.035 18, 24, 30, or 36 inch pipe culvert, and installation**

Refer to road log for culvert install locations, and drawings.

Furnish culvert pipe with a wall thickness not less than that shown on the schedule of items.

Culvert material shall not be ordered until the COR has accepted the final structure size, length, and alignment.

#### **602.05 Laying Metal Pipe.**

Delete the second paragraph and replace with the following.

Join pipe sections together with coupling bands according to AASHTO M 36 or M 196. Limit the use of bell and spigot joints to slopes of 10% or less. Limit the use of bands with projections (dimpled) to slopes of 15% or less.

#### **FSSS607. – CLEANING, RECONDITIONING, AND REPAIRING EXISTING DRAINAGE STRUCTURES:**

Delete Section 607.04 and replace with the following:

**607.04 Cleaning Culverts in Place.** Remove and dispose of all foreign material within the barrel and appurtenances of the culvert by any method that does not damage the culvert.

Clean CCC (Civilian Conservation Corp) catch basin by hand to ensure no damage to the existing inlet structure or culvert.\*

Dispose of waste of waste outside the brushing clearing limits, and do not deposit material in streams, streambeds, culvert inlets or outlets, drainage ways, or cattleguards.

All or part of a culvert designated to be cleaned in place may be removed, cleaned, and relayed according to Section 602\*\*.

\* Contractor's responsibility to conduct his operation in such a fashion to ensure archaeological sites is preserved. Should accidental damage occur, this could result in delays to the contractor along with the cost of repairs/restoring features.

\*\*Excludes culverts with CCC inlet catch basins, they are to be cleaned throughout while left in place.

#### **FSSS703. – AGGREGATE: 703.05 Subbase, Base, & Surface Course Aggregate.**

Replace (1) under 703.05(a) with the following:

(1) Los Angeles abrasion, AASHTO T 96                      40% max.

Replace (1) and add (3) under 703.05(c) with the following:



[Shopping Cart](#) | [Home](#) | [Logout](#) | [Preferences](#) | [Help](#)

[Shop](#) | | [Receiving](#)

[Requisitions](#) | [Notifications](#) | [Approvals](#)  
[Requisitions: Requisitions](#) >

### Requisition 434194

[Delete](#) | [Copy To Cart](#) | [Cancel Requisition](#) | [Change](#)

Description	<b>NFR 245 Road Maintenance - Upper Section</b>	Status	<u>In Process</u>
Created By	<b>MARTINEZ, HENRY</b>	Change History	<b>No</b>
Creation Date	<b>08-Jul-2010 20:27:15</b>	Urgent Requisition	<b>No</b>
Deliver-To	<b>Supervisor's Office 2113 Osuna Rd NE Albuquerque, , NM, 87113-1001</b>	Attachment	<b>None</b>
		Note to Buyer	

Justification

#### Additional Information

FMMI Doc Number

#### Details

Line	Description	Need-By	Deliver-To	Unit	Quantity	Price	Amount (USD)	Details	Order
1	NFR 245 Road Maintenance - Upper Section	10-Jul-2010 00:00:00	83D5	DOLLAR US	260000	1 USD	260000.00		
							<b>Total</b>	<b>260000.00</b>	

[Return](#)

[Delete](#) | [Copy To Cart](#) | [Cancel Requisition](#) | [Change](#)

[Shop](#) | [Requisitions](#) | [Receiving](#) | [Shopping Cart](#) | [Home](#) | [Logout](#) | [Preferences](#) | [Help](#) | [Privacy Statement](#)

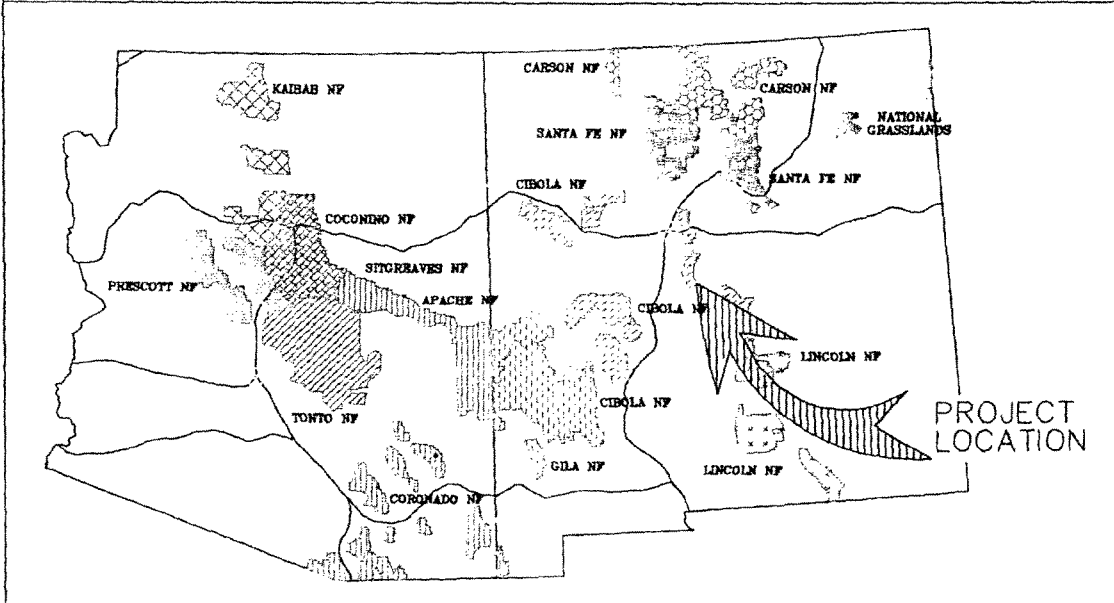
<b>REQUEST FOR CONTRACT ACTION</b> <i>(Reference FSH 6309.31)</i>		TO: ADMINISTRATIVE SERVICES	Date of Request July 9, 2010
		Name and Address of Requesting Unit  Cibola National Forest; Engineering 2113 Osuna Rd. NE Albuquerque, NM 87113-1001	
<b>PROJECT</b>	Type (x appropriate box) <input checked="" type="checkbox"/> construction of public works <input type="checkbox"/> non-personal services <input type="checkbox"/> Personal Property		
Name and Project Description NFR 245 Road Maintenance – Upper Section  This contract will be to maintain 3.80 miles of a National Forest Road, (NFR) 245 on the Mountainair Ranger District, Torrance County, New Mexico. The contract will include the following work items: road reconditioning and gravel surfacing, turnouts, grade dips, cleaning culverts, replacing culverts, and replacing damaged signs.			
<b>LOCATION</b>	State New Mexico	County Torrance	Unit Mountainair Ranger District
Brief description of how project can be located by prospective bidders  The project is accessed by traveling east on I-40 from Albuquerque, NM for 17 miles to New Mexico State Highway (NMSH) 337. Travel south on NMSH 337 30 miles to the junction of NMSH 55. Proceed west on NMSH 55 approximately 12 miles to the town of Manzano. Turn west on B 067 and proceed past the Forest Service boundary approximately 5 miles where the project begins.			
<b>PROGRAM DATA</b>	Available Appropriations Chargeable CMLG03	Quarter Apportioned 3	Estimate of Cost (Confidential) \$204,716
Recommended Contract Time 90 days	Desired Date for Starting Work August 1, 2010	Pre-Bid Meeting or Tour Desired No	Desired Date for Pre-Bid Mtg.
Location of Pre-Bid Meeting			
Person to Contact for Additional Information (Name) Henry Martinez/Richard Graves		Address 2113 Osuna Rd NE	Telephone Number 505-346-3900
Qualified Contracting Officers Representative (Name) Richard Graves		Address 2113 Osuna Rd NE	Telephone Number 505-346-3900
<b>ATTACHMENTS</b>	<input checked="" type="checkbox"/> Schedule of Items, Pages <u>1</u>		<input checked="" type="checkbox"/> Specifications, Pages <u>20</u>
<input type="checkbox"/> Supplementation Specifications, Pages _____		<input checked="" type="checkbox"/> Plans, Drawings and Maps (Including Itemized List)	
<input type="checkbox"/> Form 7700-18 (For Roads, Trails and Bridges Only)		<input type="checkbox"/> List of Interested Prospective Bidders	
Other Attachments or Remarks			
SIGNATURE	TITLE Forest Engineer	DATE July 9, 2010	

**DISTRIBUTION**  
 Original - Contracting Office  
 Yellow - Technical S

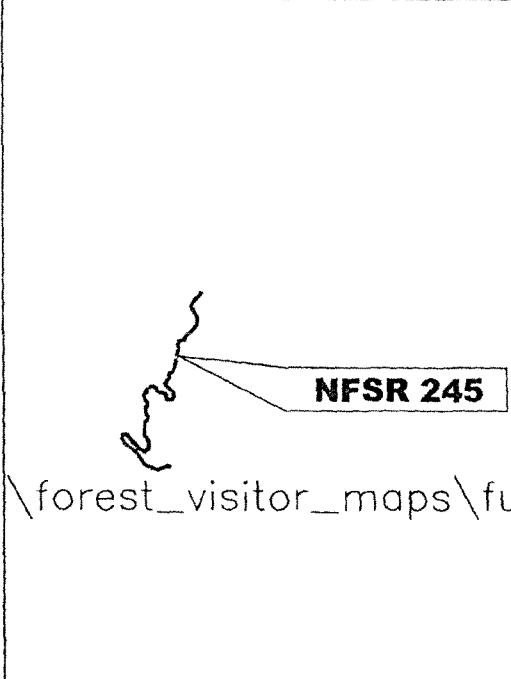
Pink - Budget Office  
 Blue - Requesting Unit File



# MAINTENANCE ON NATIONAL FOREST ROAD 245 LOCATION MAP



## PROJECT SITE MAP



## INDEX OF SHEETS

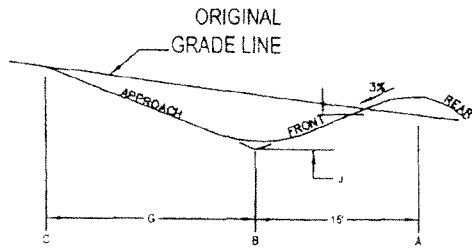
1. LOCATION MAPS and INDEX OF SHEETS
2. GRADE DIP DETAIL
3. GRADE DIP TABLE
4. ROADWAY TURNOUT DETAILS
5. ROAD PRISM RECONDITIONING
6. DITCH RECONDITIONING
7. CULVERT INLET/OUTLET CLEANING
8. CULVERT CLEANING
9. TYPICAL CULVERT INSTALL DETAIL 1
10. TYPICAL CULVERT INSTALL DETAIL 2
11. TYPICAL CULVERT INSTALL DETAIL 3
12. ROCK BARRIER INSTALL
13. BRUSHING LIMITS

U.S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
 R-3  
SOUTHWESTERN REGION

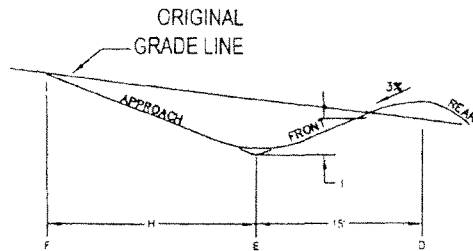


Forest  
**CIBOLA NATIONAL FOREST**  
Project Name  
NFR 245 MAINTENANCE - UPPER

Sheet Title  
**LOCATION MAPS and INDEX OF SHEETS**  
Scale  
NTS  
Sheet  
of 1



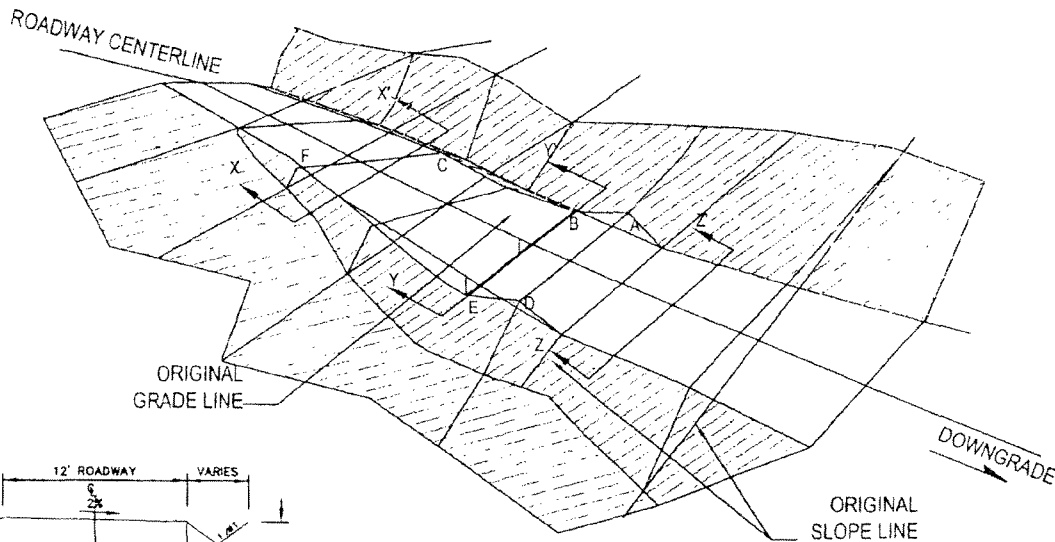
ROAD PROFILE ALONG A-B-C OF GRADE DIP



ROAD PROFILE ALONG D-E-F OF GRADE DIP

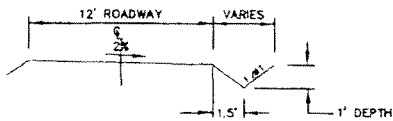
% GRADE OF ROAD	LENGTH		DEPTH	
	G	H	I	J
5 & UNDER	44	44	0.80	0.40
6	49	49	0.80	0.40
7	54	54	0.90	0.45

TABLE OF GRADE DIP DIMENSIONS



PERSPECTIVE VIEW

**GRADE DIP**



SECTION X - X'




SECTION Y - Y'



SECTION Z - Z'

U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE, REGIONAL OFFICE, SOUTHWESTERN REGION, PHOENIX, ARIZONA


 U.S. DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  
**R-3**  
 SOUTHWESTERN REGION

(Empty box)

Forest  
**CIBOLA NATIONAL FOREST**  
 Project Name  
**NFR 245 MAINTENANCE - UPPER**

Sheet Title  
**GRADE DIP DETAIL**  
 Scale  
**NTS**  
 Sheet  
**2**

### GRADE DIP TABLE

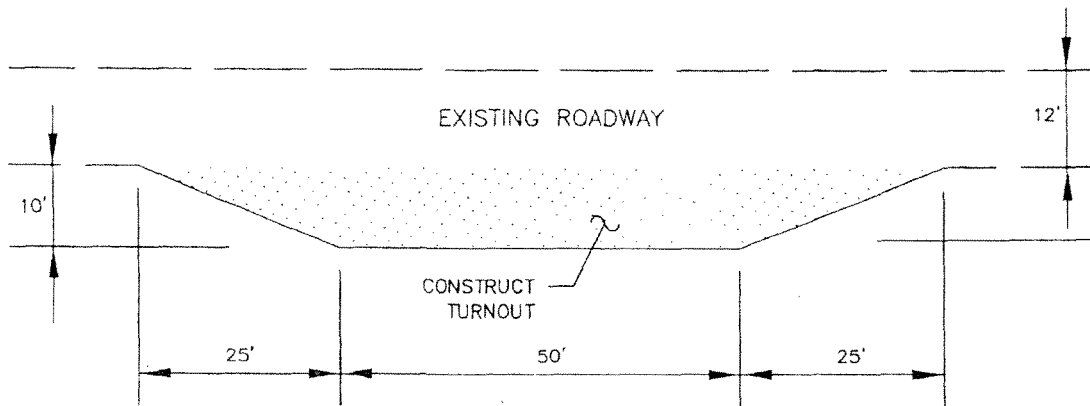
Road Slope	Approach Length	Water Bar Front Length	Water Bar Rear Length	Height of Water Bar Above Grade	Depth of Dip	Dip Slope	Water Bar Front Slope	Water Bar Rear Slope
4%	44	15	15	0.3	0.8	6%	3%	6%
5%	44	15	15	0.4	0.8	7%	3%	8%
6%	49	15	15	0.6	0.8	8%	3%	10%
7%	54	15	15	0.6	0.9	9%	3%	11%
8%	54	15	15	0.8	0.9	10%	3%	13%
9%	54	15	15	0.9	0.9	11%	3%	15%
10%	54	15	15	1.1	0.9	12%	3%	17%
11%	54	15	15	1.1	1	13%	3%	18%
12%	54	15	15	1.3	1	14%	3%	20%
13%	54	15	20	1.4	1	15%	3%	20%
14%	54	15	20	1.6	1	16%	3%	22%
15%	54	15	25	1.7	1	17%	3%	22%
16%	54	15	25	1.9	1	18%	3%	23%
17%	54	15	30	2.0	1	19%	3%	24%
18%	54	15	35	2.2	1	20%	3%	24%
19%	54	15	40	2.3	1	21%	3%	25%
20%	54	15	45	2.5	1	22%	3%	25%

DEPARTMENT OF AGRICULTURE  
 REST SERVICE  
 R-3  
 UTHERINGTON DIVISION

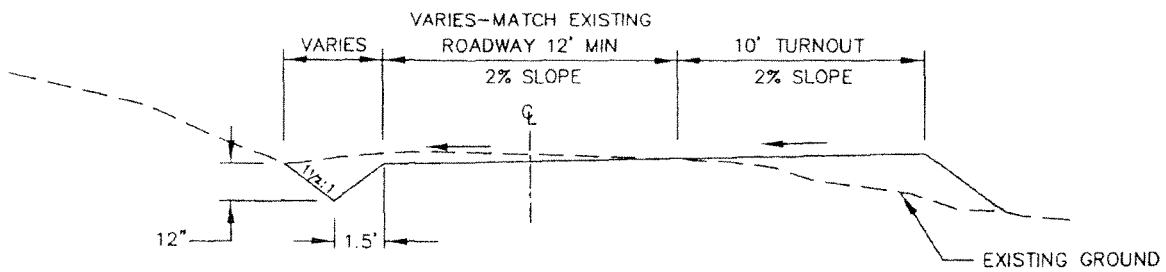
Approved by: \_\_\_\_\_  
 Regional Engineer  
 Recommended by: \_\_\_\_\_  
 Forest Supervisor  
 Date \_\_\_\_\_  
 Date \_\_\_\_\_

Forest  
 LIBOLA NATIONAL FOREST  
 Project Name  
 NFR 245 MAINTENANCE - UPPER

Sheet  
 GRADE DIP TABLE  
 of  
 3  
 Scale  
 NTS



**TURNOUT DETAIL**



**INSLOPED ROADWAY WITH DITCH and TURNOUT**

GENERAL NOTES :

1. BLADE TURNOUT TO MATCH EXISTING ROADWAY.
2. SUBGRADE SHALL BE PREPARED TO A SMOOTH SURFACE, AND TO THE CROSS SECTION REQUIRED.
3. COMPACT FULL ROADWAY WIDTH TO AT LEAST 95% OF MAXIMUM DENSITY.

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE, R-3, SOUTHWESTERN REGION, PROJECT DESIGN, 1978

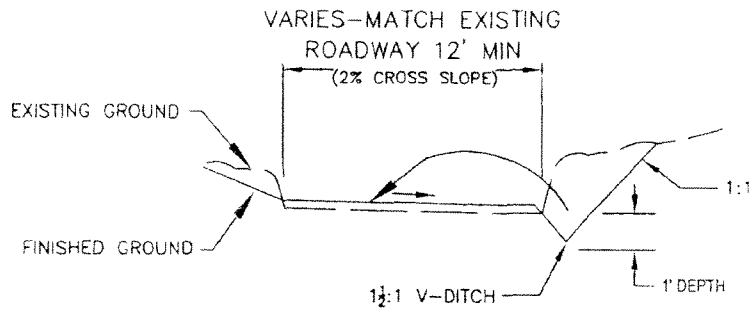
U.S. DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  

**R-3**  
 SOUTHWESTERN REGION

(Empty box)

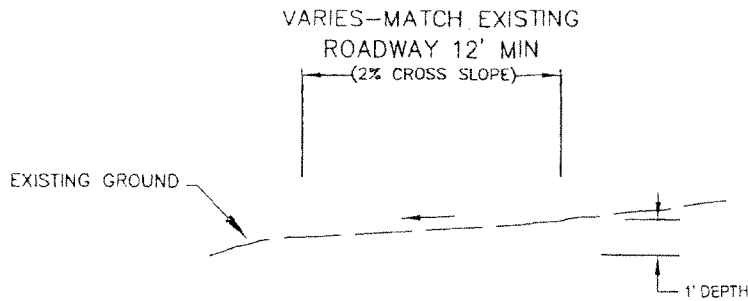
Forest  
**CIBOLA NATIONAL FOREST**  
 Project Name  
**NFR 245 MAINTENANCE - UPPER**

Sheet Title  
**TYPICAL ROADWAY  
 TURNOUT DETAILS**  
 Scale  
**NTS**  
 Sheet  
 of **4**



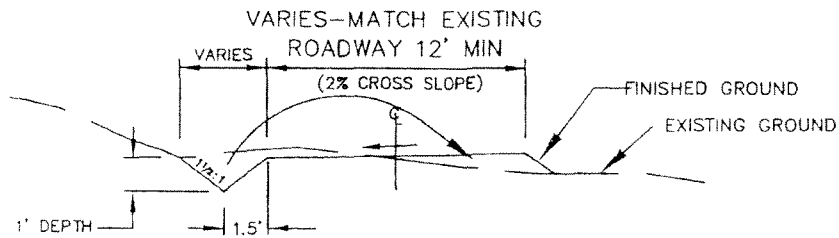
INSLOPE ROADWAY

**THROUGH CUT**



OUTSLOPE ROADWAY

**TYPICAL ROADWAY WITHOUT DITCH**



INSLOPE ROADWAY

**TYPICAL ROADWAY WITH DITCH**

SHEET NOTES:

1. DISTRIBUTE MATERIAL GENERATED FROM RE-ESTABLISHED DITCH INTO ROADWAY PRISM, REMOVING ALL HARMFUL MATERIAL INCLUDING MUCK, FOZEN LUMPS, ROOTS, SOD, OR ROCKS LARGER THAN 3 INCHES.
2. DISPOSE OF WASTE OUTSIDE THE BRUSHING CLEARING LIMITS.
3. DO NOT CREATE WINDROWS OF EXCESS MATERIAL ON ROADWAY EDGE.

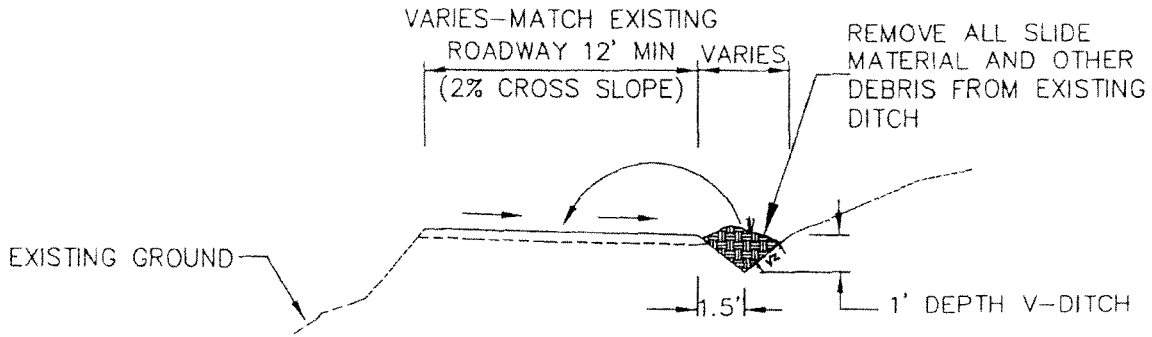
Copyright © 1978, U.S. Department of Agriculture, Forest Service, Southwestern Region, Forest Management Planning Office, Flagstaff, Arizona

U.S. DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  
  
**R-3**  
 SOUTHWESTERN REGION

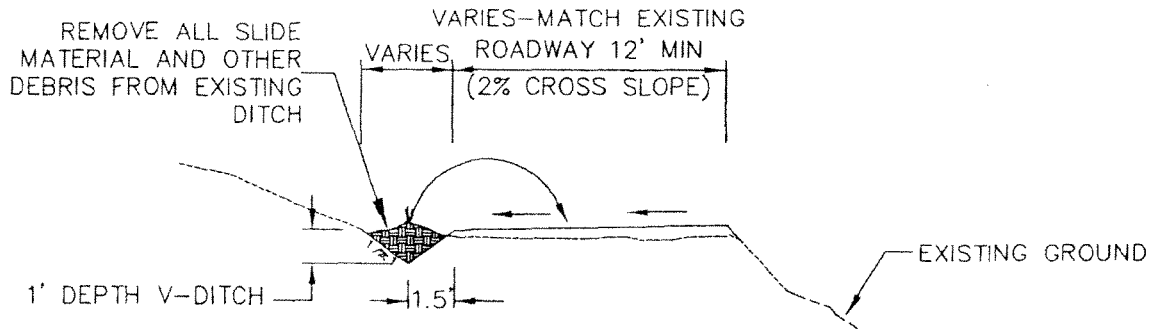
Forest  
**CIBOLA NATIONAL FOREST**  
 Project Name  
**NFR 245 MAINTENANCE - UPPER**

Sheet Title  
**ROAD PRISM RECONDITIONING**  
 Scale  
**NTS**

Sheet  
**5**  
 of



**TYPICAL ROADWAY WITH DITCH RIGHT**



**TYPICAL ROADWAY WITH DITCH LEFT**

SHEET NOTES

1. RESHAPE DITCHES TO ACHIEVE POSITIVE DRAINAGE AND A UNIFORM DITCH WIDTH, DEPTH, AND GRADE.
2. DISPOSE OF WASTE OUTSIDE THE BRUSHING CLEARING LIMITS.
3. DISTRIBUTE MATERIAL GENERATED FROM RE-ESTABLISHED DITCH INTO ROADWAY PRISM, REMOVING ALL HARMFUL MATERIAL INCLUDING MUCK, FOZEN LUMPS, ROOTS, SOD, OR ROCKS LARGER THAN 3 INCHES.

U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE, SOUTHWESTERN REGION, R-3, PROJECT NAME: NFR 245 MAINTENANCE - UPPER, SHEET 6 OF 8

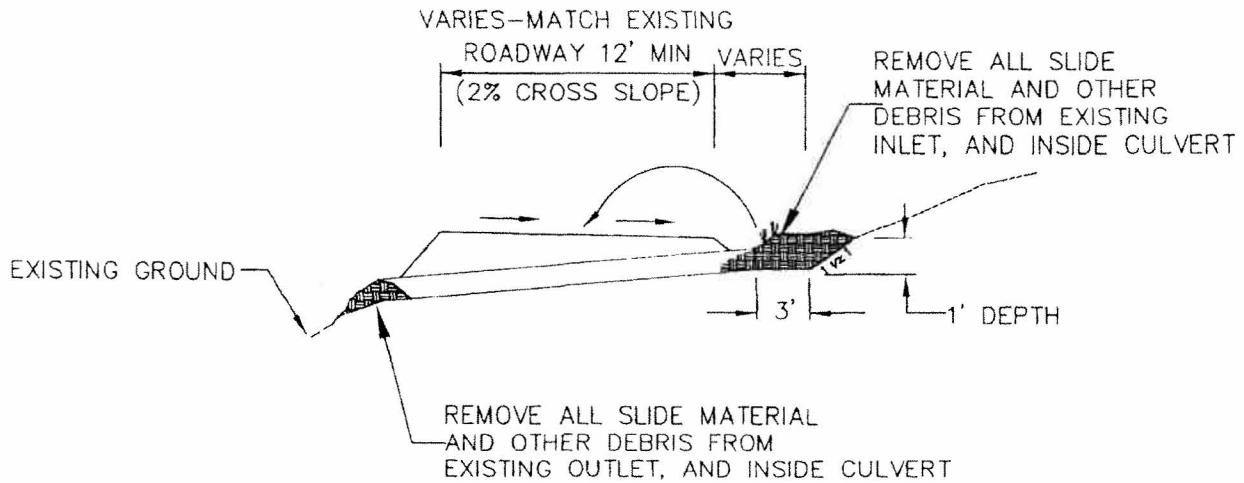
U.S. DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  
  
**R-3**  
 SOUTHWESTERN REGION

Forest  
**CIBOLA NATIONAL FOREST**

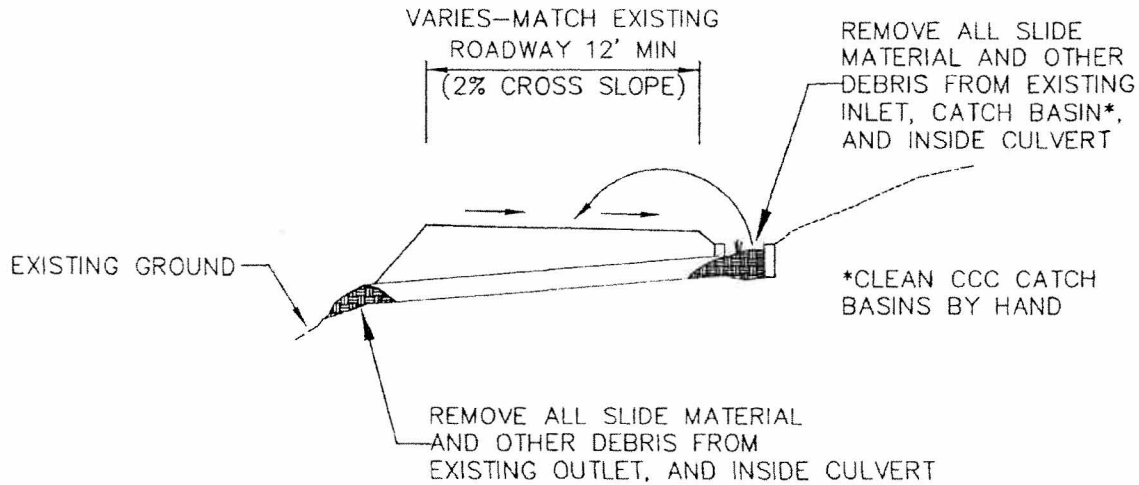
Project Name  
**NFR 245 MAINTENANCE - UPPER**

Sheet Title  
**DITCH RECONDITIONING**

Scale	Sheet of
NTS	6



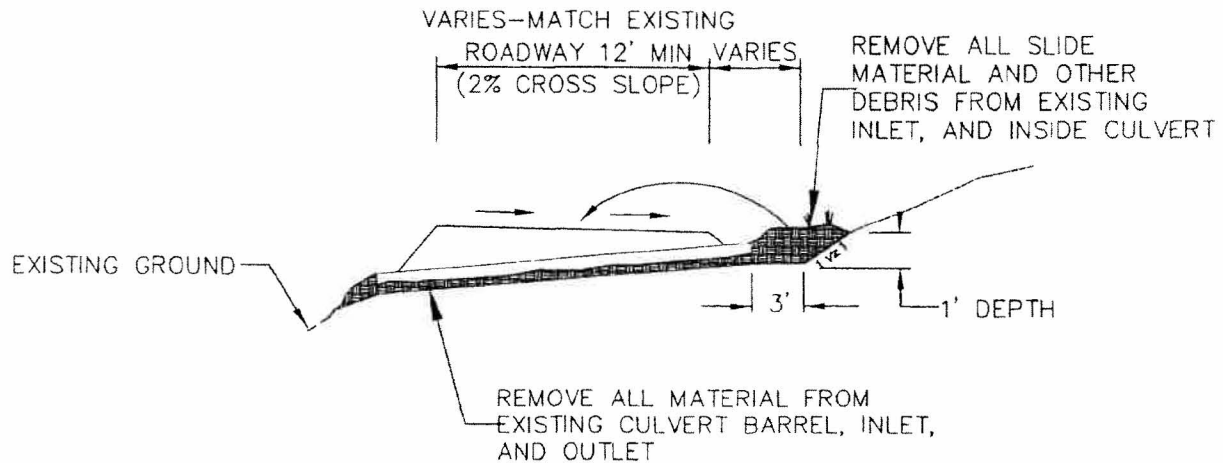
**TYPICAL CULVERT INLET/OUTLET CLEANOUT WITH DITCH**



**TYPICAL CULVERT INLET/OUTLET CLEANOUT WITH DITCH, AND CATCH BASIN**

SHEET NOTES

1. RESHAPE CULVERT INLETS AND OUTLETS TO ACHIEVE POSITIVE DRAINAGE AND A UNIFORM DITCH WIDTH, DEPTH, AND GRADE.
2. DISPOSE OF WASTE OUTSIDE THE BRUSHING CLEARING LIMITS.
3. DISTRIBUTE MATERIAL GENERATED FROM RE-ESTABLISHED DITCH INTO ROADWAY PRISM, REMOVING ALL HARMFUL MATERIAL INCLUDING MUCK, FOZEN LUMPS, ROOTS, SOD, OR ROCKS LARGER THAN 3 INCHES.



**TYPICAL CULVERT  
CLEANING (SECTION 607)**

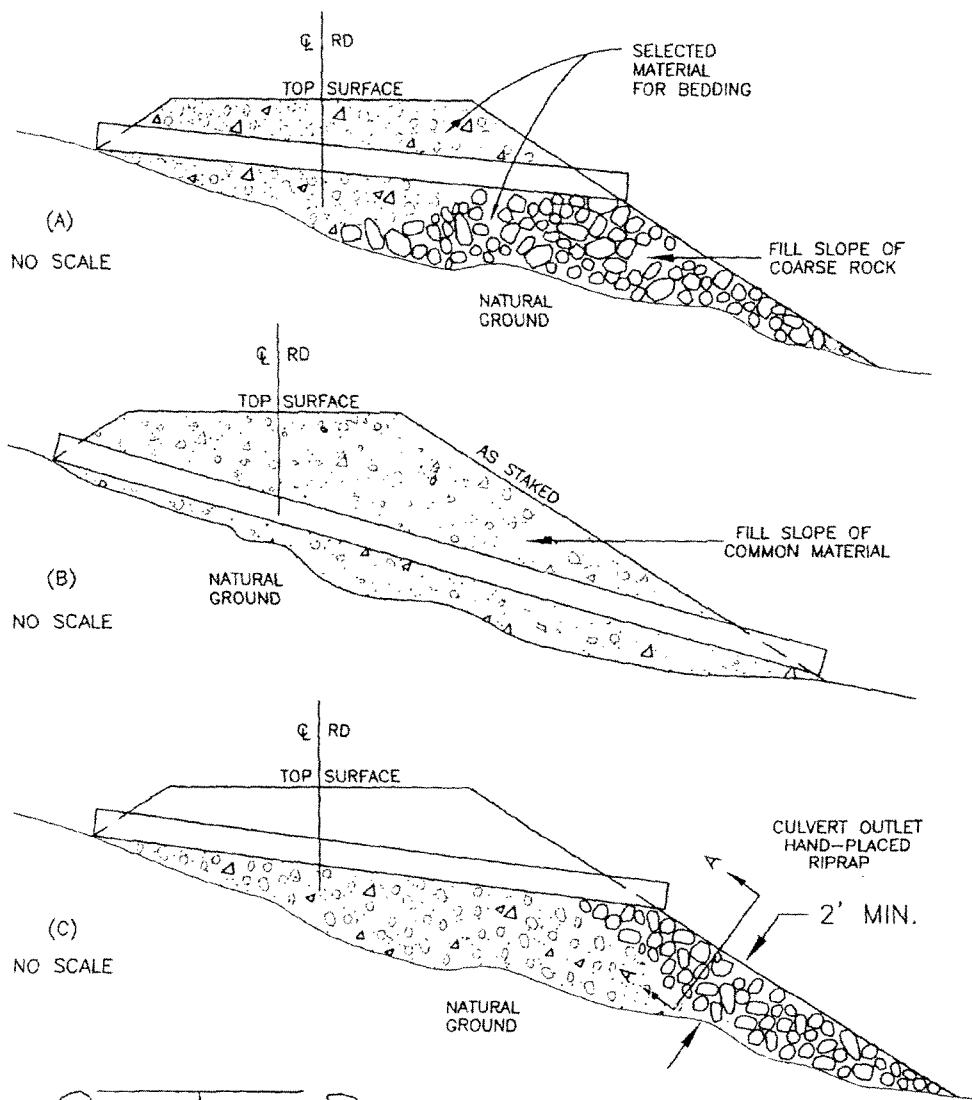
SHEET NOTES

1. REMOVE AND DISPOSE OF ALL FOREIGN MATERIAL WITHIN THE BARREL AND APPURTENANCES OF THE CULVERT BY ANY METHOD THAT DOES NOT DAMAGE THE CULVERT.
2. ALL OR PART OF A CULVERT DESIGNATED TO BE CLEANED IN PLACE MAY BE REMOVED, CLEANED, AND RE-LAID ACCORDING TO SECTION 602.
3. DISTRIBUTE MATERIAL GENERATED FROM RE-ESTABLISHED DITCH INTO ROADWAY PRISM, REMOVING ALL HARMFUL MATERIAL INCLUDING MUCK, FOZEN LUMPS, ROOTS, SOD, OR ROCKS LARGER THAN 3 INCHES.

C:\Users\jgibson\OneDrive\Documents\NFR245\_Maint\_Upper\Drawings\607\607.dwg  
 1/11/2017 10:00 AM  
 Project:

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE  <b>R-3</b> <small>SOUTHWESTERN REGION</small>		<small>Forest</small> <b>CIBOLA NATIONAL FOREST</b> <small>Project Name</small> <b>NFR 245 MAINTENANCE - UPPER</b>	<small>Sheet Title</small> <b>CULVERT CLEANING</b>	<small>Scale</small> <b>NTS</b>	<small>Sheet of</small> <b>8</b>
--	--	---	---	------------------------------------	-------------------------------------

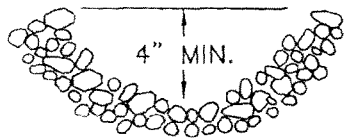




(A)  
NO SCALE

(B)  
NO SCALE

(C)  
NO SCALE



SECTION A - A  
NO SCALE

WIDTH "W" SHALL BE:  
 (A) AT LEAST 3-1/2 FT. OR  
 2X DIAMETER OF PIPE,  
 WHICHEVER IS GREATER.  
 (B) OR AS STAKED

### TYPICAL INSTALLATIONS IN EMBANKMENT

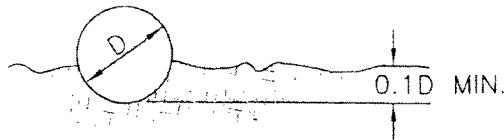
- (A) EMBANKMENT HAVING COARSE ROCK
  - (B) EMBANKMENT OF COMMON MATERIAL
  - (C) ALTERNATE WITH (b) WHERE EMBANKMENT CONTAINS LITTLE OR NO COARSE ROCK
- (A) & (C) WILL BE INSTALLED ONLY WHEN SHOWN ON THE DRAWINGS OR APPROVED IN WRITING BY THE F.S. ENGINEER

U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE, REGIONAL OFFICE, SOUTHWESTERN REGION, PHOENIX, ARIZONA

U.S. DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  
  
**R-3**  
 SOUTHWESTERN REGION

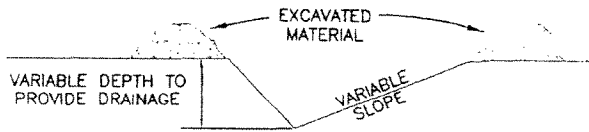
Forest  
**CIBOLA NATIONAL FOREST**  
 Project Name  
**NFR 245 MAINTENANCE - UPPER**

Sheet Title  
**TYPICAL CULVERT INSTALL  
 DETAIL**  
 Scale  
**NTS**  
 Sheet  
 of **9**



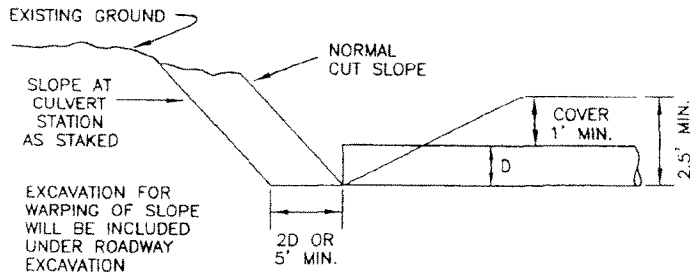
### TYPICAL BEDDING DETAIL

NO SCALE



### OUTLET DITCH DETAIL

NO SCALE



### TREATMENT OF CUT SLOPES AT CULVERT INLET

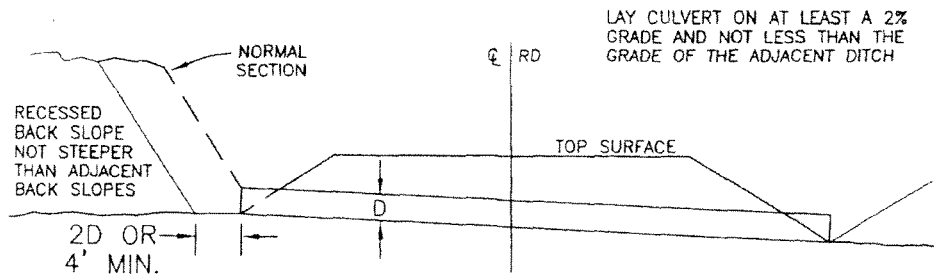
NO SCALE

### NOTES:

CAMBERS: NO CAMBER IS REQUIRED FOR DITCH RELIEF CULVERTS. CAMBERS OF 1 PERCENT OF PIPE LENGTH, NOT TO EXCEED 3/4 OF PIPE SPAN SHALL BE REQUIRED FOR CULVERTS IN THROUGH FILLS. CAMBERS SHALL BE ON PARABOLIC CURVE WITH NO POINT ALONG THE INVERT BEING HIGHER THAN THE INVERT AT THE INLET.

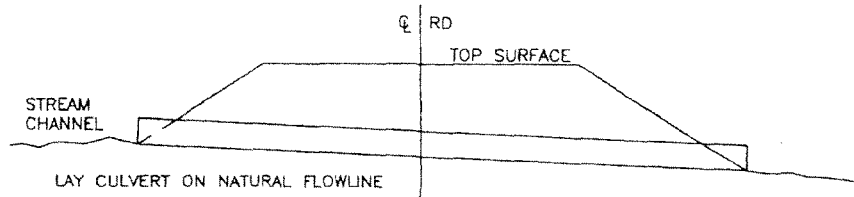
TREATMENT OF DAMAGED SPELTER: THE DAMAGED CORRODED ENDS OF METAL PIPE TO BE EXTENDED SHALL BE REMOVED. DAMAGED SPELTER ON THE GALVANIZED PIPE SHALL BE WIRE BRUSHED TO CLEAN METAL. THE DAMAGED AREA SHALL BE PAINTED WITH TWO COATS OF PAINT, HIGH IN ZINC CONTENT, FOR REPAIR OF THE GALVANIZED SURFACE.

1. 2015-01-15 11:15:00 AM  
 2. 2015-01-15 11:15:00 AM  
 3. 2015-01-15 11:15:00 AM  
 4. 2015-01-15 11:15:00 AM  
 5. 2015-01-15 11:15:00 AM  
 6. 2015-01-15 11:15:00 AM  
 7. 2015-01-15 11:15:00 AM  
 8. 2015-01-15 11:15:00 AM  
 9. 2015-01-15 11:15:00 AM  
 10. 2015-01-15 11:15:00 AM  
 11. 2015-01-15 11:15:00 AM  
 12. 2015-01-15 11:15:00 AM  
 13. 2015-01-15 11:15:00 AM  
 14. 2015-01-15 11:15:00 AM  
 15. 2015-01-15 11:15:00 AM  
 16. 2015-01-15 11:15:00 AM  
 17. 2015-01-15 11:15:00 AM  
 18. 2015-01-15 11:15:00 AM  
 19. 2015-01-15 11:15:00 AM  
 20. 2015-01-15 11:15:00 AM  
 21. 2015-01-15 11:15:00 AM  
 22. 2015-01-15 11:15:00 AM  
 23. 2015-01-15 11:15:00 AM  
 24. 2015-01-15 11:15:00 AM  
 25. 2015-01-15 11:15:00 AM  
 26. 2015-01-15 11:15:00 AM  
 27. 2015-01-15 11:15:00 AM  
 28. 2015-01-15 11:15:00 AM  
 29. 2015-01-15 11:15:00 AM  
 30. 2015-01-15 11:15:00 AM  
 31. 2015-01-15 11:15:00 AM  
 32. 2015-01-15 11:15:00 AM  
 33. 2015-01-15 11:15:00 AM  
 34. 2015-01-15 11:15:00 AM  
 35. 2015-01-15 11:15:00 AM  
 36. 2015-01-15 11:15:00 AM  
 37. 2015-01-15 11:15:00 AM  
 38. 2015-01-15 11:15:00 AM  
 39. 2015-01-15 11:15:00 AM  
 40. 2015-01-15 11:15:00 AM  
 41. 2015-01-15 11:15:00 AM  
 42. 2015-01-15 11:15:00 AM  
 43. 2015-01-15 11:15:00 AM  
 44. 2015-01-15 11:15:00 AM  
 45. 2015-01-15 11:15:00 AM  
 46. 2015-01-15 11:15:00 AM  
 47. 2015-01-15 11:15:00 AM  
 48. 2015-01-15 11:15:00 AM  
 49. 2015-01-15 11:15:00 AM  
 50. 2015-01-15 11:15:00 AM  
 51. 2015-01-15 11:15:00 AM  
 52. 2015-01-15 11:15:00 AM  
 53. 2015-01-15 11:15:00 AM  
 54. 2015-01-15 11:15:00 AM  
 55. 2015-01-15 11:15:00 AM  
 56. 2015-01-15 11:15:00 AM  
 57. 2015-01-15 11:15:00 AM  
 58. 2015-01-15 11:15:00 AM  
 59. 2015-01-15 11:15:00 AM  
 60. 2015-01-15 11:15:00 AM  
 61. 2015-01-15 11:15:00 AM  
 62. 2015-01-15 11:15:00 AM  
 63. 2015-01-15 11:15:00 AM  
 64. 2015-01-15 11:15:00 AM  
 65. 2015-01-15 11:15:00 AM  
 66. 2015-01-15 11:15:00 AM  
 67. 2015-01-15 11:15:00 AM  
 68. 2015-01-15 11:15:00 AM  
 69. 2015-01-15 11:15:00 AM  
 70. 2015-01-15 11:15:00 AM  
 71. 2015-01-15 11:15:00 AM  
 72. 2015-01-15 11:15:00 AM  
 73. 2015-01-15 11:15:00 AM  
 74. 2015-01-15 11:15:00 AM  
 75. 2015-01-15 11:15:00 AM  
 76. 2015-01-15 11:15:00 AM  
 77. 2015-01-15 11:15:00 AM  
 78. 2015-01-15 11:15:00 AM  
 79. 2015-01-15 11:15:00 AM  
 80. 2015-01-15 11:15:00 AM  
 81. 2015-01-15 11:15:00 AM  
 82. 2015-01-15 11:15:00 AM  
 83. 2015-01-15 11:15:00 AM  
 84. 2015-01-15 11:15:00 AM  
 85. 2015-01-15 11:15:00 AM  
 86. 2015-01-15 11:15:00 AM  
 87. 2015-01-15 11:15:00 AM  
 88. 2015-01-15 11:15:00 AM  
 89. 2015-01-15 11:15:00 AM  
 90. 2015-01-15 11:15:00 AM  
 91. 2015-01-15 11:15:00 AM  
 92. 2015-01-15 11:15:00 AM  
 93. 2015-01-15 11:15:00 AM  
 94. 2015-01-15 11:15:00 AM  
 95. 2015-01-15 11:15:00 AM  
 96. 2015-01-15 11:15:00 AM  
 97. 2015-01-15 11:15:00 AM  
 98. 2015-01-15 11:15:00 AM  
 99. 2015-01-15 11:15:00 AM  
 100. 2015-01-15 11:15:00 AM



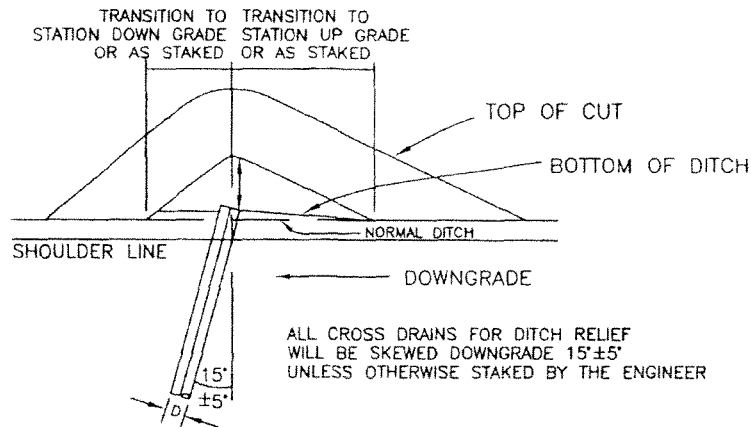
TYPICAL INSTALLATION IN CUT SECTION

NO SCALE



TYPICAL INSTALLATION IN STREAM CHANNEL

NO SCALE



SKEWED PIPE DETAIL

NO SCALE

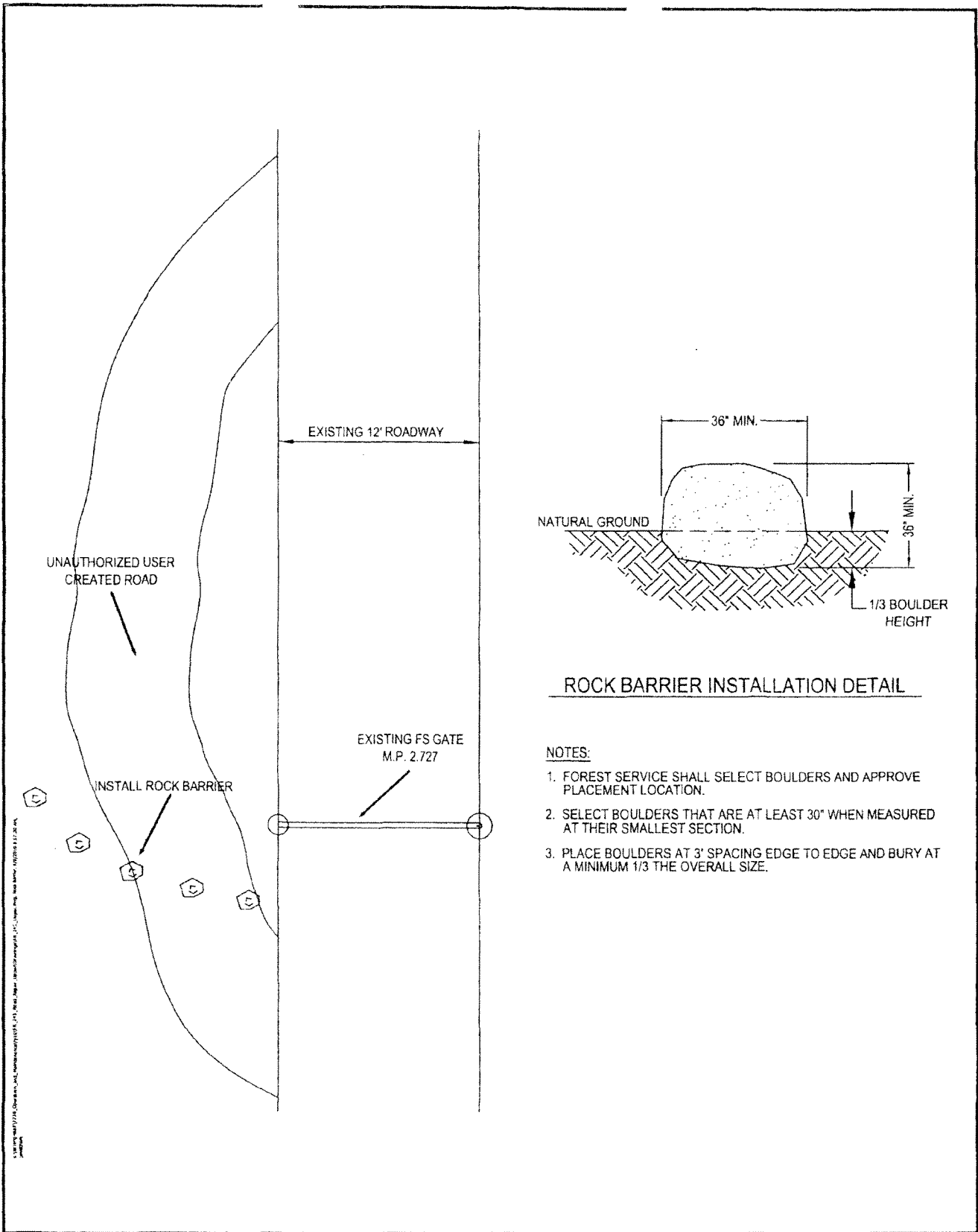
CULVERT LENGTHS:  
ON THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR  
SHOULD DEFER ORDER AND DELIVERY OF PIPE UNTIL  
RECEIPT OF STAKED QUANTITY.

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE, REGION 3, 2015

U.S. DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
**R-3**  
SOUTHWESTERN REGION

Forest  
**CIBOLA NATIONAL FOREST**  
Project Name  
**NFR 245 MAINTENANCE - UPPER**

Sheet Title  
**TYPICAL CULVERT INSTALL  
DETAIL**  
Scale  
**NTS**  
Sheet  
of **11**



**ROCK BARRIER INSTALLATION DETAIL**

**NOTES:**

1. FOREST SERVICE SHALL SELECT BOULDERS AND APPROVE PLACEMENT LOCATION.
2. SELECT BOULDERS THAT ARE AT LEAST 30" WHEN MEASURED AT THEIR SMALLEST SECTION.
3. PLACE BOULDERS AT 3' SPACING EDGE TO EDGE AND BURY AT A MINIMUM 1/3 THE OVERALL SIZE.

U.S. DEPARTMENT OF AGRICULTURE  
 FOREST SERVICE  
**R-3**  
 SOUTHWESTERN REGION

Forest  
**CIBOLA NATIONAL FOREST**  
 Project Name  
**NFE 245 MAINTENANCE - UPPER**

Sheet Title  
**ROCK BARRIER INSTALL**  
 Scale  
**NTS**  
 Sheet  
 of **12**



(1) Gradation

Table 703-2

(3) Plasticity index, AASHTO T 90:

- a) If the percent passing the No. 200 sieve is less than 12%      2 to 9
- b) If the percent passing the No. 200 sieve is greater than 12%      less than 2

Replace Table 703-2 with the following:

Sieve Size	A (Subbase)	B (Subbase)	C (Base)	D (Base)	E (Base)
2 ½ in.	100				
2 in.	97-100	100	100		100
1½ in.		97-100		-	-
1 in.	65-79	-	80-100	100	71-91
¾ in.			64-94	86-100	100
½ in.	45-59				
3/8 in.	-	-	40-69	51-82	62-90
No. 4	28-42	40-60	31-54	36-64	36-74
No. 40	9-17			12-26	12-26
No. 200	4-8	4-12	4-7	4-7	4-7

Replace Table 703-3 with the following:

**Table 703-3. Gradation TV ranges for surface courses.**

% by Mass Passing Designated Sieve (AASHTO T 27 and T 11) Grading Designation						
Sieve Size	F	G	H	S	T	Type I - B
1 ½ in.	100			100		
1 in.	97-100	100		72-92	100	100
¾ in.	76-89	97-100	97-100	-	-	80-100
½ in.	-	-	-	-	71-91	-
3/8 in.	56-68	70-80	80-92	51-71	-	-
No. 4	43-53	51-63	58-70	36-53	43-60	30-60
No. 8	-	-	-	26-40	30-46	-
No. 10	-	-	-	-	-	20-45
No. 16	23-32	28-39	28-40	-	-	-
No. 30	15-23	19-27	16-26	-	-	-
No. 40	-	-	-	14-25	16-28	-
No. 200	10-16	10-16	9 14	8-15	8-15	3-10

Add to Section 703.05 (a)

Quality Requirements:

Type I-B aggregate shall have a percent wear of fifty (50) or less at 500 revolutions when tested in accordance with AASHTO T 96 and the coarse aggregate shall have a soundness loss of eighteen (18) or less when tested in accordance with AASHTO T-104 using magnesium sulfate solution and a test duration of five (5) cycles. The liquid limit shall be twenty five (25) or less and the plasticity index shall be six (6) or less.

\* Fractured Faces tests shall be performed on the material retained on the number 4 sieve. A face shall be counted as fractured whenever one-half (1/2) or more of the surface, when viewed normal to the face, is fractured.

**FSSS725 – MISCELLANEOUS MATERIAL**

Add Subsection 725.30 Barrier Rock:

**Description** - This work shall consist of furnishing and installing large barrier rocks.

**Barrier Rocks** - Barrier rocks requirements are **SHOWN ON THE DRAWINGS**.

Locations for installation will be field staked by the COR.

**Source** - Boulders shall be of grey or iron stone in color OR boulders may be obtained from excavation meeting specified barrier rock requirements **AS SHOWN IN THE DRAWINGS**.

Substitutions of boulders sizes or quantities will not be accepted without the approval of the COR.

**Installation of Barrier Rocks** – Barrier rocks shall be placed **AS SHOWN ON THE DRAWINGS**.

**General** - Trees, brush and other obstacles along the barrier that interfere with the rock barriers shall be removed or pruned at the direction of the COR. Grubbing or grading along the barrier line shall not be done. The barriers shall be constructed on natural ground or grade line **AS SHOWN ON THE DRAWINGS**. When placement into solid rock is required to set a rock, the location may be changed upon approval of the COR.

**Measurement** - The method of measurement, will be designated in the SCHEDULE OF ITEMS.

Measurement will be for each rock barrier installed complete **AS SHOWN ON THE DRAWINGS** and accepted.

**Payment** - Payment will be made at the contract unit price for each barrier rock accepted including clearing and all incidentals required to complete the work described herein.

#### **SPECIAL CONTRACT REQUIREMENTS**

##### **C-5 - CONDITIONS ON USE OF PREMISES (Camping)**

- (a) Camping will be allowed only at the sites designated on the project maps or approved in advance by the Contracting Officer.
- (b) No improvements of a permanent nature shall be constructed without prior written approval of the Contracting officer.

Temporary structures such as tent frames, hitch racks, tents and tent pegs shall be removed at the end of the period of use, all evidence of the camp eliminated, and the site restored to its original condition. Final payment will not be authorized until the campsite has been cleaned up and the site is approved by the Contracting Officer or his designated representative. Reusable native material may be neatly stacked for future use.

- (c) Livestock will not be permitted without written approval from the Contracting Officer.
- (d) Vegetation shall be undisturbed to the maximum extent possible. The Contractor will be permitted to cut only those trees designated by the COR.



- (e) Storage of petroleum products in excess of 50 gallons at the campsite will require the approval of the COR. All petroleum spills shall be immediately cleaned up. All spills will be reported immediately to the CO or COR. Spills over 25 gallons will be reported to the Idaho State Department of Environmental Quality. No waste disposal of petroleum product will be permitted on National Forest land.
- (f) Chemical toilets are preferred for all campsites, however, the Contractor may be permitted to construct a slit trench when conditions warrant. Any slit trench constructed shall not be located closer than 400 feet to any live stream and is subject to approval of the COR. The trench shall be covered and the area restored to as natural a condition as possible when the camp is closed.
- (g) Refuse including waste materials, garbage, and rubbish of all kinds, shall be disposed of in the following manner, and shall guard the purity of streams and living waters:

Garbage, trash, sewage waste, and other litter shall be kept in closed fly-proof containers and periodically hauled to an approved disposal facility located outside of the National Forest.

- (h) Waste water shall be disposed of in a leach pit located at least 300 feet from springs, streams, and lakes. The pit shall be a minimum of 2 x 2 x 2 feet and shall be filled with rock two to eight inches in diameter. The leach pit shall be covered with at least two feet of compacted soil when the camp is closed.
- (i) No waste or by-products shall be discharged if it contains any substances in concentrations which will result in substantial harm to fish and wildlife, or to human water supplies.

Storage facilities for materials capable of causing water pollution, if accidentally discharged, shall be located so as to prevent any spillage into waters, or channels leading into water, that would result in substantial harm to fish and wildlife or to human water supplies.

- (j) The camp area shall be maintained to present a clean, neat, and orderly appearance. Disposal of trash and debris, unusable machinery, Forest Service authorized improvements, etc., shall be kept current. Building materials, firewood, etc., shall be neatly stacked.

The campsite shall be left in a clean condition. Any clean-up work not accomplished by the Contractor at time of camp closure will be done by the Forest Service, and the actual cost of such clean-up will be deducted from payment otherwise due the Contractor.

Groundhog Proposal			Revised Based on Current S of I			Revised		
1	\$16,158.00	\$16,158.00	1	\$16,158.00	\$16,158.00	0	\$16,158.00	\$0.00
25	\$204.76	\$5,119.00	25	\$204.76	\$5,119.00	0	\$204.76	\$0.00
3567	\$60.48	\$215,732.16	4640	\$60.48	\$280,627.20	3700	\$60.48	\$223,776.00
1	\$878.00	\$878.00	1	\$878.00	\$878.00	1	\$878.00	\$878.00
38	\$4,480.00	\$17,024.00	38	\$4,480.00	\$17,024.00	38	\$4,480.00	\$17,024.00
14	\$593.57	\$8,309.98	2	\$593.57	\$1,187.14	2	\$593.57	\$1,187.14
150	\$125.44	\$18,816.00	200	\$125.44	\$25,088.00	200	\$125.44	\$25,088.00
30	\$127.67	\$3,830.10	30	\$127.67	\$3,830.10	30	\$127.67	\$3,830.10
30	\$134.40	\$4,032.00	50	\$134.40	\$6,720.00	50	\$134.40	\$6,720.00
34	\$1,680.00	\$57,120.00	39	\$1,680.00	\$65,520.00	39	\$1,680.00	\$65,520.00
28	\$69.07	\$1,933.96	0	\$69.07	\$0.00	0	\$69.07	\$0.00
5	\$234.00	\$1,170.00	8	\$234.00	\$1,872.00	8	\$234.00	\$1,872.00
		\$350,123.20			\$424,023.44			\$345,895.24

Aggregate Surfacing - 12' wide x 3.8 miles of 4" thick + 0.5 miles 4" thick

Volume compacted in place =  $\frac{(3.8+0.5)*5280*4}{12} = 3364$  cy

Add 15% for curve widening and turnouts  $3364*1.15 = 3869$  cy

Volume loose in truck =  $3869*1.2 = 4643$  cy

Quantity in tons and 1.45 tons/cy =  $4643*1.45 = 6732$  tons

# GOVERNMENT ESTIMATE

## SECTION B – SERVICES AND PRICES (NFR 245 Road Maintenance - Upper Section)

Mountainair Ranger District  
Cibola National Forest  
Torrance County, New Mexico

ITEM NO.	DESCRIPTION	METHOD OF MEASURE	PAY UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
15101	Mobilization	LSQ	Lump Sum	1	\$16,733	\$16,733
30101	NMSH Type I-B Base Course, 4-inch thick, Compaction Method 3	DQ	Cubic Yard	<u>3,920</u>	\$36.25	\$142,100
30102	Contractor Sampling and Testing	LSQ	Lump Sum	1	\$1,500	\$1,500
30301	Road Reconditioning, Compaction Method 3	DQ	Mile	3.8	\$3,345	\$12,711
20401	Construct Grade dips	AQ	Each	<u>2</u>	\$241	\$382
60201	24 inch pipe culvert, 0.079 inch thick, Compaction Method B (6 culverts at 25 LF)	DQ	LF	150	\$80	\$12,000
60202	30 inch pipe culvert, 0.079 inch thick, Compaction Method B	DQ	LF	30	\$102	\$3,060
60203	36 inch pipe culvert, 0.079 inch thick, Compaction Method B	DQ	LF	30	\$125	\$3,750
60701	Clean CCC catch basin and culvert in place	AQ	Each	39	\$244	\$9,516
72530	Barrier Rock	AQ	Each	8	\$113	\$904
	SUB-TOTAL					\$202,656
	NMGRT (5.9375%)					\$12,033
	<b>GRAND TOTAL</b>					<b>\$214,689</b>

15101 Mobilization  
 30101 NMSH Type I-B Base Course, 4-inch thick, Compaction Method 3  
 30102 Contractor Sampling and Testing  
 30301 Road Reconditioning, Compaction Method 3  
 20401 Construct Grade dips  
 60201 24 inch pipe culvert, 0.079 inch thick, Compaction Method B (6 culverts at 25 LF)  
 60202 30 inch pipe culvert, 0.079 inch thick, Compaction Method B  
 60203 36 inch pipe culvert, 0.079 inch thick, Compaction Method B  
 60701 Clean CCC catch basin and culvert in place  
 72530 Barrier Rock

# GOVERNMENT ESTIMATE DATA

## SECTION B – SERVICES AND PRICES (NFR 245 Road Maintenance - Upper Section)

Mountainair Ranger District  
Cibola National Forest  
Torrance County, New Mexico

### 15101 Mobilization

$\$185,923 * (9\%) = \$16,733$

Pg. 43 from 09 Cost Guide

### 30301 Road Reconditioning

Pull ditch =  $\$380/\text{mile} * (3.8 \text{ miles}) \Rightarrow \$1,444$

Scarifying and shaping =  $[\$ (1,130 + 1530) / 2] / \text{mile} * (3.8 \text{ miles}) \Rightarrow \$5,054$

Finish grading with a blade =  $[\$ (500 + 370) / 2] / \text{mile} * (3.8 \text{ miles}) \Rightarrow \$1,653$

Compaction =  $[\$ (1,030 + 1370) / 2] / \text{mile} * (3.8 \text{ miles}) \Rightarrow \$4,560$

$1444 + 5054 + 1653 + 4560 = 12,711$

$12,711 / 3.8 \text{ miles} = 3,345/\text{mile}$

Pg. 85 from 09 Cost Guide

### 30302 Construct Grade Dips

Foreman         $\$16.82/\text{hr}$

Gen. Laborer    $\$10.11/\text{hr}$

Grader Oper.    $\$13.25/\text{hr}$

Grader          $\$80.41/\text{hr}$

$16.82 + 10.11 + 13.25 + 80.41 = \$120.59/\text{hr}$

$\$120.59/\text{hr} * 2\text{hrs} = \$241.18 \text{ Each}$

Pg. 25, 118 from 09 Costs Guide

### 60201 24 inch pipe culvert, 0.079 inch thick, Compaction Method B

Compaction Method B =  $\$5/\text{LF}$

Install Cost = \$35.70/LF

Culvert Material Base Price = \$26.15/LF

Increase in cost by a factor of 1.2 to reflect longer lengths of steepness of side slopes.

$$(5+35.70+26.15)*1.2 = \$80.22$$

Pg. 107 from 09 Cost Guide

**60201 30 inch pipe culvert, 0.079 inch thick, Compaction Method B**

Compaction Method B = \$5/LF

Install Cost = \$47.70/LF

Culvert Material Base Price = \$32.55/LF

Increase in cost by a factor of 1.2 to reflect longer lengths of steepness of side slopes.

$$(5+47.70+32.55)*1.2 = \$102.3$$

Pg. 107 from 09 Cost Guide

**60201 36 inch pipe culvert, 0.079 inch thick, Compaction Method B**

Compaction Method B = \$16/LF

Install Cost = \$59.80/LF

Culvert Material Base Price = \$39.00/LF

Increase in cost by a factor of 1.2 to reflect longer lengths of steepness of side slopes.

$$(5+59.80+39.00)*1.2 = \$124.56$$

Pg. 107 from 09 Cost Guide

**60701 Clean CCC catch basin and culvert in place**

Foreman	\$16.82/hr
Gen. Laborer	\$10.11/hr
Gen. Laborer	\$10.11/hr
Water tanker, highway	\$44.07
16.82+10.11+10.11+44.07 = \$81.11/hr	

$\$81.11/\text{hr} * 3\text{hrs} = \$243.33 \text{ Each}$

Pg. 118 from 09 Costs Guide

**70301 Crushed aggregate 1-inch, NMSH Type I-B Base Course**

$[(3.8 \text{ miles}) * (5280 \text{ ft}) * (4 \text{ inches}/12 \text{ inches}) * (12 \text{ ft wide road})] / 27 = 2972 \text{ CY (compacted in place)}$

$(2972 \text{ CY}) * (0.20 \text{ SHRINK}) = 595 \text{ CY}$

$2972 \text{ CY} + 595 = 3567 \text{ CY (loose in truck)}$

Additional 6 inches for 1/4 mile for rock outcropping =  $[(0.25 \text{ miles}) * (5280 \text{ ft}) * (6 \text{ inches}/12 \text{ inches}) * (12 \text{ ft wide road})] / 27 = 293 \text{ CY}$

$(293 \text{ CY}) * (0.20 \text{ SHRINK}) = 59 \text{ CY}$

$293 \text{ CY} + 59 \text{ CY} = 352 \text{ CY}$

$(3567 \text{ CY} + 352 \text{ CY}) * (1.45 \text{ TONS}/\text{CY}) = 5682.55 \text{ TONS OR } 3919 \text{ CY}$

Material Cost  $(\$15/\text{TON}) * (5682 \text{ TONS}) = \$85,230$

Material Placement  $(\$10/\text{TON}) * (5682 \text{ TONS}) = \$56,820$

$(\$25/\text{TON}) * (5682 \text{ TONS}) = \$129,325$

$\$142,050 / 3919 \text{ CY} = \$36.25/\text{CY}$

**72530 Rock Barrier**

36" Min rock boulder @ \$50

Foreman	\$16.82/hr
Gen. Laborer	\$10.11/hr
Excavator Operator	\$13.48/hr
Hydraulic Excavator	\$85.44/hr

$\$50 + [16.82 + 10.11 + 13.48 + 85.44] * 30 \text{ min} = \$113 \text{ per boulder}$

# GOVERNMENT ESTIMATE

## SECTION B – SERVICES AND PRICES (NFR 245 Road Maintenance - Upper Section)

Mountainair Ranger District  
Cibola National Forest  
Torrance County, New Mexico

ITEM NO.	DESCRIPTION	METHOD OF MEASURE	PAY UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
15101	Mobilization	LSQ	Lump Sum	1		
30101	NMSH Type I-B Base Course, 4-inch thick, Compaction Method 3	DQ	Cubic Yard	<u>4900</u>		
30102	Contractor Sampling and Testing	LSQ	Lump Sum	1		
30301	Road Reconditioning, Compaction Method 3	DQ	Mile	3.8		
20401	Construct Grade dips	AQ	Each	2		
60201	24 inch pipe culvert, 0.079 inch thick, Compaction Method B (6 culverts at 25 LF)	DQ	LF	<u>180</u>		
60202	30 inch pipe culvert, 0.079 inch thick, Compaction Method B	DQ	LF	30		
60203	36 inch pipe culvert, 0.079 inch thick, Compaction Method B	DQ	LF	<u>50</u>		
60701	Clean CCC catch basin and culvert in place	AQ	Each	39		
72530	Barrier Rock	AQ	Each	8		
	SUB-TOTAL					
	NMGRT (5.9375%)					
	<b>GRAND TOTAL</b>					

*Handwritten notes:*  
 2000 500 1000 2000 3000 4000 5000 6000 7000 8000 9000  
 10000 11000 12000 13000 14000 15000 16000 17000 18000 19000  
 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000

**Aggregate Base – 3.8 miles x 12' wide x 4" thick + 0.25 miles x 12' wide x 6" thick**

$$\text{Volume compacted in place} = \frac{3.8 \times 5280 \times 12 \times 4/12 + 0.25 \times 5280 \times 12 \times 6/12}{27} = 3266 \text{ cy}$$

$$\text{Add 15\% for curve widening and turnouts} \rightarrow 3266 \times 1.15 = 3756 \text{ cy}$$

$$\text{Volume loose in truck (30\% volume increase)} = 3756 \times 1.3 = \underline{\underline{4883 \text{ cy}}}$$

$$\text{Aggregate weight (assume 1.45 tons/cy)} = 4883 \times 1.45 = \underline{\underline{7080 \text{ tons}}}$$



DOES NOT INCLUDE BRIDGE BY PASS!!!

			UNIT PRICE	TOTAL	TOTAL WITH TAX
Mobilization	Lump Sum	1	\$5,000.00	\$5,000.00	\$5,325.00
NMSH Type I-B Base Course, 4-inch thick, Compaction Method 3	Cubic Yard	4900	\$49.00	\$240,100.00	\$255,706.50
Contractor Sampling and Testing	Lump Sum	1	\$750.00	\$750.00	\$798.75
Road Reconditioning, Compaction Method 3	Mile	3.8	\$2,552.00	\$9,697.60	\$10,327.94
Construct Grade dips	Each	2	\$593.57	\$1,187.14	\$1,264.30
24 inch pipe culvert, 0.079 inch thick, Compaction Method B (6 culverts at 25 LF)	LF	180	\$78.00	\$14,040.00	\$14,952.60
30 inch pipe culvert, 0.079 inch thick, Compaction Method B	LF	30	\$89.67	\$2,690.10	\$2,864.96
36 inch pipe culvert, 0.079 inch thick, Compaction Method B	LF	50	\$92.96	\$4,648.00	\$4,950.12
Clean CCC catch basin and culvert in place	Each	39	\$1,344.00	\$52,416.00	\$55,823.04
Barrier Rock	Each	8	\$234.00	\$1,872.00	\$1,993.68
SUB TOTAL				\$332,400.84	\$354,006.89
BOND COST	Each	1			\$6,100.00
TOTAL W/BOND & TAX					\$360,106.89

Mobilization	Lump Sum	1	\$5,000.00	\$5,000.00	\$5,325.00
NMSH Type I-B Base Course, 4-inch thick, Compaction Method 3	Cubic Yard	4900	\$49.00	\$240,100.00	\$255,706.50
Contractor Sampling and Testing	Lump Sum	1	\$750.00	\$750.00	\$798.75
Road Reconditioning, Compaction Method 3	Mile	3.8	\$2,205.00	\$8,379.00	\$8,923.64
Construct Grade dips	Each	2	\$593.57	\$1,187.14	\$1,264.30
24 inch pipe culvert, 0.079 inch thick, Compaction Method B (6 culverts at 25 LF)	LF	180	\$78.00	\$14,040.00	\$14,952.60
30 inch pipe culvert, 0.079 inch thick, Compaction Method B	LF	30	\$89.67	\$2,690.10	\$2,864.96
36 inch pipe culvert, 0.079 inch thick, Compaction Method B	LF	50	\$92.96	\$4,648.00	\$4,950.12
Clean CCC catch basin and culvert in place	Each	39	\$950.00	\$37,050.00	\$39,458.25
Barrier Rock	Each	8	\$234.00	\$1,872.00	\$1,993.68
SUB TOTAL				\$315,716.24	\$336,237.80
BOND COST	Each	1			\$6,100.00
TOTAL W/BOND & TAX					\$342,337.80

10/1/04  
 10/1/04  
 10/1/04

10/1/04

**PART I—THE SCHEDULE – Revised 9/10/09**  
**SECTION B--SUPPLIES OR SERVICES AND PRICES/COSTS**  
**NFR 245 Road Maintenance – Upper Section**  
**Cibola National Forest**  
**Torrance County, New Mexico**

**SECTION B - SCHEDULE OF ITEMS**

BASE ITEM NO.	DESCRIPTION	METH. OF MEAS.	PAY UNIT	EST. QTY.	UNIT PRICE	AMOUNT
15101	Mobilization (including bonding)	LSQ	Lump Sum	1	\$11,425.00	\$ 11,425.00
30101	Crushed aggregate 1-inch, NMSH Type I-B Base Course, 4-inch thick Compaction Method 3	DQ	Cubic Yard	4,900	\$ 52.19	\$ 255,706.50
30102	Contractor Sampling and Testing	LSQ	Lump Sum	1	\$ 798.75	\$ 798.75
30301	Road Reconditioning	DQ	Mile	3.8	\$2,348.33	\$8,923.64
20401	Construct Grade dips	AQ	Each	2	\$632.15	\$1,264.30
60201	24 inch pipe culvert, 0.079 inch thick, Compaction Method B (6 culverts at 251f)	DQ	LF	180	\$83.07	\$14,952.60
60202	30 inch pipe culvert, 0.079 inch thick, Compaction Method B	DQ	LF	30	\$95.50	\$2,864.96
60203	36 inch pipe culvert, 0.079 inch thick, Compaction Method B	DQ	LF	50	\$99.00	\$4,950.12
60701	Clean CCC catch basin and culvert in place	AQ	Each	39	\$1,011.75	\$39,458.25
72530	Rock Barrier	AQ	Each	8	\$ 249.21	\$1,993.68
<b>TOTAL AMOUNT</b>						<b>\$342,337.80</b>

\*Abbreviations: DQ – Designed Quantities; AQ – Actual Quantities; LSQ – Lump Sum Quantities; LS - Lump Sum; LF -- Linear Foot; CY – Cubic Yard; SY – Square Yard; AC – Acre; EA - Each.

**NOTE:** Estimated start date will be late September 2010 (depending on weather conditions), or spring 2011. **Contract Time: 90 calendar days.**

\_\_\_\_\_  
Signature

9/21/2010  
Date

68-0581840  
Federal Tax ID Number

961331808  
DUNS Number

For questions concerning technical aspects of this solicitation, contact Richard Graves (Cibola National Forest), 346-3846. (Include Applicable Federal, State and Local Taxes).

**SECTION C--DESCRIPTION/SPECIFICATIONS/STATEMENT OF WORK**

# GOVERNMENT ESTIMATE

## SECTION B – SERVICES AND PRICES (NFR 245 Road Maintenance - Upper Section)

Mountainair Ranger District  
Cibola National Forest  
Torrance County, New Mexico

ITEM NO.	DESCRIPTION	METHOD OF MEASURE	PAY UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
15101	Mobilization	LSQ	Lump Sum	1	\$16,733	\$22,645
30101	NMSH Type I-B Base Course, 4-inch thick, Compaction Method 3	DQ	Cubic Yard	4,900	\$36.25	\$177,625
30102	Contractor Sampling and Testing	LSQ	Lump Sum	1	\$1,500	\$1,500
30301	Road Reconditioning, Compaction Method 3	DQ	Mile	3.8	\$3,345	\$12,711
20401	Construct Grade dips	AQ	Each	2	\$241	\$482
60201	24 inch pipe culvert, 0.079 inch thick, Compaction Method B (6 culverts at 30 LF)	DQ	LF	180	\$80	\$14,400
60202	30 inch pipe culvert, 0.079 inch thick, Compaction Method B (1 culvert at 30 LF)	DQ	LF	30	\$102	\$3,060
60203	36 inch pipe culvert, 0.079 inch thick, Compaction Method B (1 culverts at 50 LF)	DQ	LF	50	\$125	\$6,250
60701	Clean CCC catch basin and culvert in place	AQ	Each	39	\$244	\$9,516
72530	Barrier Rock	AQ	Each	8	\$113	\$904
	<b>SUB-TOTAL</b>					\$249,093
	NMGRT (5.9375%)					\$14,790
	<b>GRAND TOTAL</b>					\$263,883

## AGGREGATE HAUL CALCULATIONS ROAD 245 (UPPER PART)

Note: Cells shaded green to be filled in by user.

Material Units (cy or tons): tons  
 Truck Type (12 cy end dump or 20 cy bottom dump): 12 cy end dump

Fixed Costs:

	CY	Tons
12 CY end dump	1.78	1 227586
20 CY bottom dump	1.74	1.2

Variable Costs: Updated for 2007

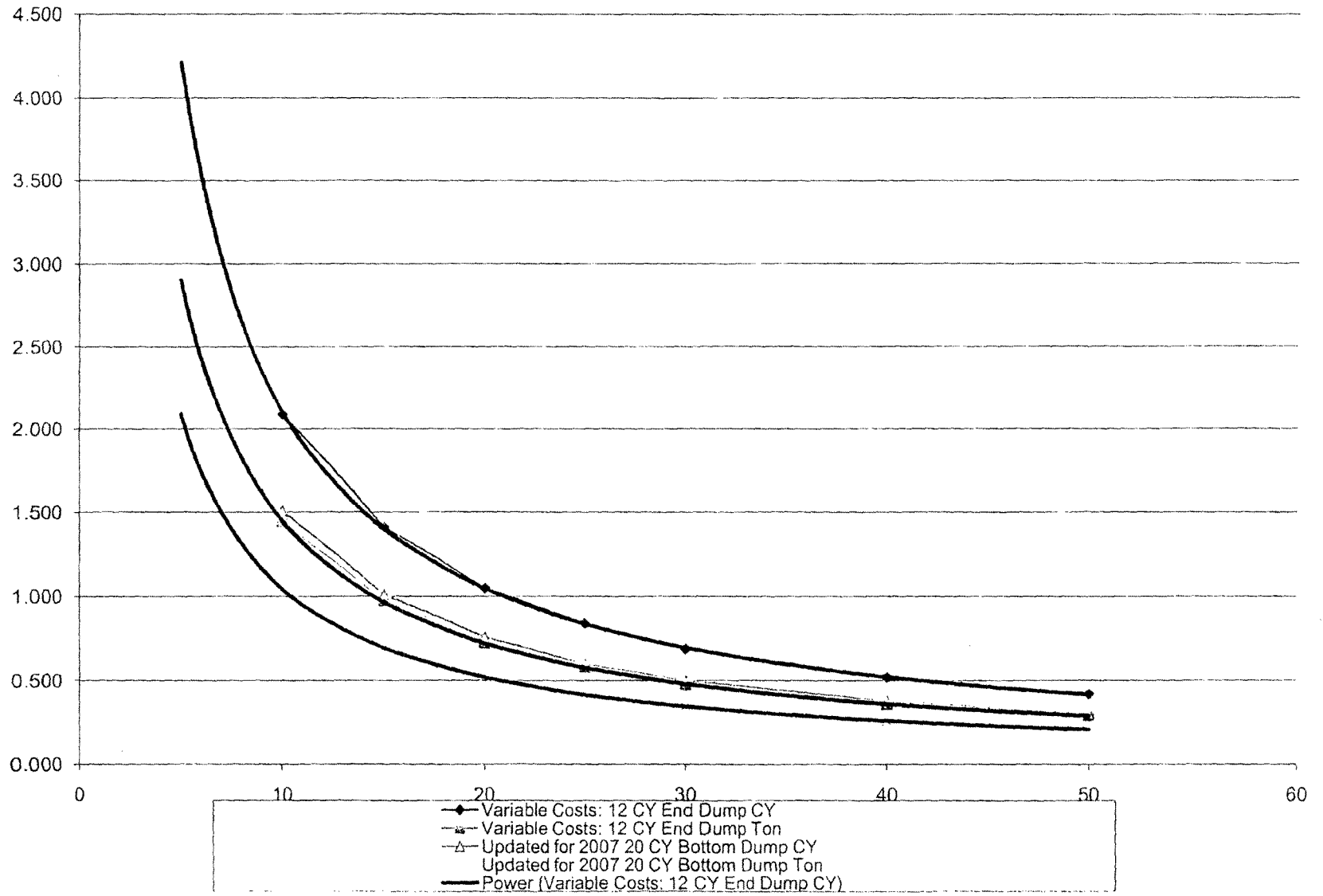
Speed (mph)	12 CY End Dump		20 CY Bottom Dump	
	CY	Ton	CY	Ton
10	2.090	1.441	1.510	1.041
15	1.410	0.972	1.010	0.697
20	1.050	0.724	0.760	0.524
25	0.840	0.579	0.600	0.414
30	0.690	0.476	0.500	0.345
40	0.520	0.359	0.380	0.262
50	0.420	0.290	0.300	0.207

Road Segment or Number	Average Speed Roundtrip (mph)	Road Segment Length (mi)	Unit Cost (\$/ton)	Quantity (tons)	Variable Cost (\$)
NMSH	45	40	0.359	3521	50508.1
FR 245	10	10	1.441	7100	102337.9

$\Sigma = 152846.1$

Total haul cost is sum of fixed and variable costs.

$$\text{Total Cost} = \frac{\Sigma \text{ Variable Cost}}{\text{Quantity}} + \text{Fixed Cost} = 22.76 \text{ \$/ton}$$



**AGGREGATE HAUL CALCULATIONS (ROAD 245 - UPPER PART)**  
**Mountainair to job site**

Note: Cells shaded green to be filled in by user.

Material Units (cy or tons): \_\_\_\_\_ tons  
 Truck Type (12 cy end dump or 20 cy bottom dump): 12 cy end dump

Fixed Costs:

	CY	Tons
12 CY end dump	1.78	1.227586
20 CY bottom dump	1.74	1.2

Variable Costs: Updated for 2007

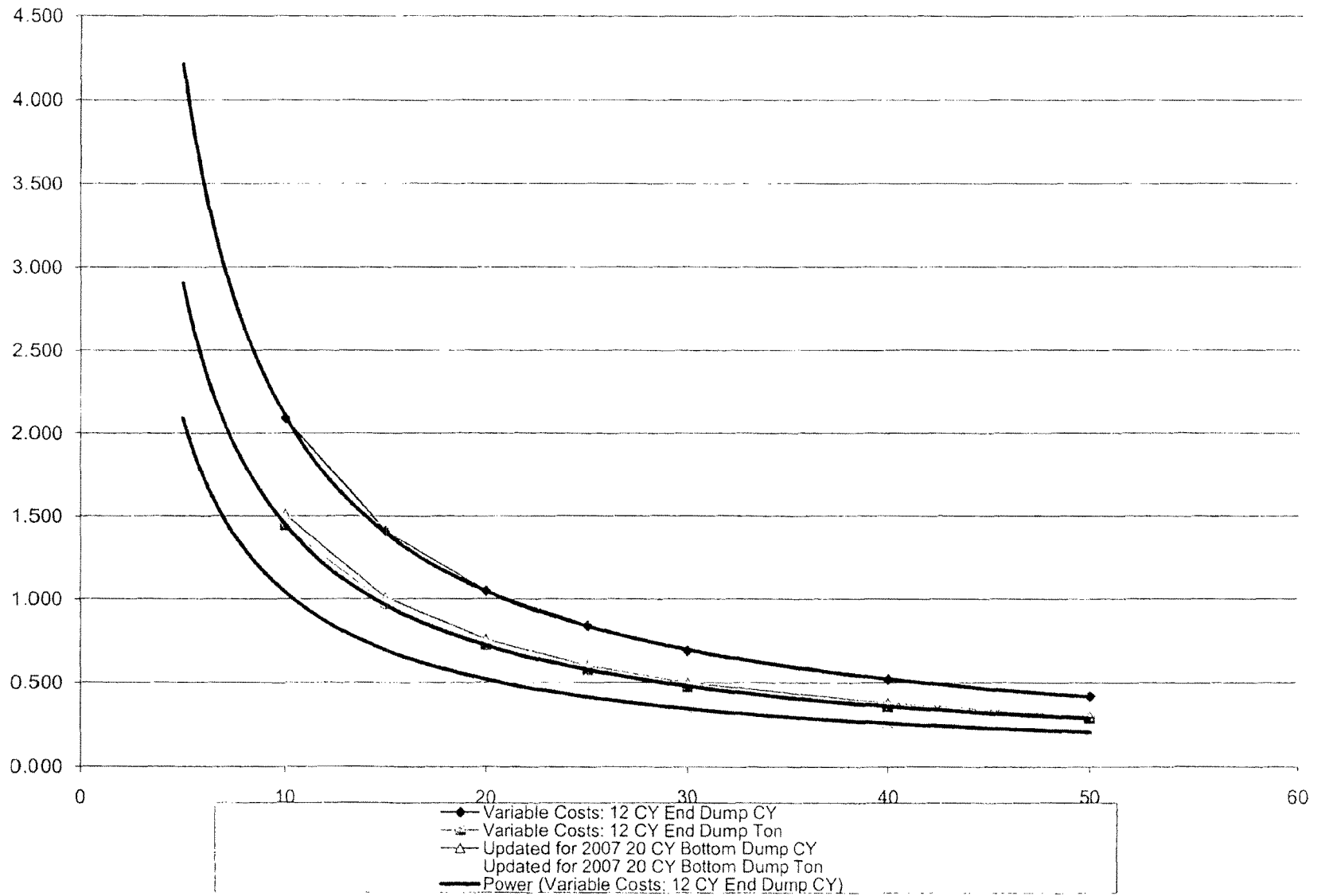
Speed (mph)	12 CY End Dump		20 CY Bottom Dump	
	CY	Ton	CY	Ton
10	2.090	1.441	1.510	1.041
15	1.410	0.972	1.010	0.697
20	1.050	0.724	0.760	0.524
25	0.840	0.579	0.600	0.414
30	0.690	0.476	0.500	0.345
40	0.520	0.359	0.380	0.262
50	0.420	0.290	0.300	0.207

Road Segment or Number	Average Speed Roundtrip (mph)	Road Segment Length (mi)	Unit Cost (\$/ton)	Quantity (tons)	Variable Cost (\$)
NMSH	45	13	0.359	3521	16415.1
FR 245	10	10	1.441	7100	102337.9

$\Sigma = 118753.1$

Total haul cost is sum of fixed and variable costs.

**Total Cost** =  $\frac{\Sigma \text{ Variable Cost}}{\text{Quantity}} + \text{Fixed Cost} = 17.95 \text{ \$/ton}$





Requisition 434194

[Copy To Cart](#) [Cancel Requisition](#) [Change](#)

Description	<b>NFR 245 Road Maintenance - Upper Section</b>	Status	<b>In Process</b>
Created By	<b>MARTINEZ, HENRY</b>	Change History	<b>No</b>
Creation Date	<b>08-Jul-2010 20:27:15</b>	Urgent Requisition	<b>No</b>
Deliver-To	<b>Supervisor's Office 2113 Osuna Rd NE Albuquerque, , NM, 87113- 1001</b>	Attachment	<b>None</b>
Justification	<b>Increased dollar amount</b>	Note to Buyer	

Additional Information

FMMI Doc Number

Details

Line	Description	Need-By	Deliver-To	Unit	Quantity	Price	Amount (USD)	Details	Order
1	NFR 245 Road Maintenance - Upper Section	25-Sep-2010 00:00:00	83D5	DOLLAR US	342940	1 USD	342940.00		

Total 342940.00

[Return](#)

[Copy To Cart](#) [Cancel Requisition](#) [Change](#)



9/23/2010

The original Government Estimate for this project was \$263,883, which is substantially less than the bid price of \$342,337.80 provided by Groundhog Excavating, Inc. I revisited the Government Estimate and found two work items that each constitutes a substantial portion of the total contract estimate.

One of these items is the placement of aggregate surfacing material (Item 30101) on 3.8 miles of the road. The Government Estimate for this item is \$177,625, which is based on a supplier in Mountainair, NM. Some material from this supplier, however, has, in the past, failed to meet project specifications and was subsequently rejected. The contractor's bid price is based on purchasing the material from a supplier in Moriarity, NM, which is 26 miles farther from the job site than Mountainair. This increase in distance would result in a 30% increase in the delivered cost of the material. Increasing the cost estimate for this item in the Government Estimate would result in a total cost estimate of \$320,360, which is 94% of the contractor's bid price.

The other work item is cleaning the culverts and catch basins (Item 60701). The vast majority of catch basins were constructed of stone and mortar by the Civilian Conservation Corp in the 1930's and 40's. As such, they are of significant archeological value and must be cleaned with hand tools, taking care to avoid damage to the catch basin structures. There are 39 culvert/catch basin combinations in the Schedule of Items. The contractor's unit bid price for this item is \$1,011.75, which is \$767.75 higher than the Government Estimate of \$244. The resulting total difference between the contractor's bid price and the Government Estimate for this item is \$29,942.25.

As a result of time constraints in assembling the contract for this project, each of the 39 culverts and catch basins was not thoroughly inspected to determine the extent of work necessary for an adequate cleaning. It is likely that the contractor performed a more thorough inspection and determined that significantly more effort would be required than was assumed in preparing the Government Estimate.

Given the difference in the total estimated cost resulting from the different aggregate source and the uncertainty in the work effort required for cleaning the culverts and catch basins, I believe that the contractor's bid price is reasonable, and it would be in the best interest of the Government to accept this bid.

Richard L. Graves

*Handwritten notes:*  
...the contractor's bid price is reasonable...  
...based on what Rick states above, revised price is \$447...  
...I have more experience/knowledge how much they cost...  
...not thoroughly inspected...  
...What is the price break even cost? Rick or Contractor?  
...I believe that the contractor's bid price is reasonable...  
...it would be in the best interest of the Government to accept this bid.

MILEPOST FROM FOREST BOUNDARY	Item Number	DESCRIPTION	Quantity	Unit	Remarks
0.000		Forest Boundary Gate, FR245			
2.727		Forest Service Gate above New Canyon Campground, Begin Project			BEGIN road reconditioning
	30101	Begin placing 4" of Type 1-B NMSH Base Course, Compaction Method 3	4,900	Cubic Yard	
	72530	Place Barrier Rocks on user created road around gate	8	Each	
2.743	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
	30301	Reslope road inslope, construct ditch (Incidental to Item #30301)			
2.772	60701	Clean CCC catch basin and culvert in place	1	Each	
2.787	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
2.817	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			Maintain Existing Grade Dip, No inslope at grade dip
2.851	30301	Transition to outslope. (Incidental to Item #30301)			Transition to outslope. Water crossing road
2.937	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
	30301	Begin inslope with ditch (Incidental to Item #30301)			
3.004	20401	Construct Grade Dip	1	Each	Water crossing road, Construct Grade Dip
	30301	inslope road without ditch (Incidental to Item #30301)			
3.031	30301	Outslope road without ditch (Incidental to Item #30301)			
3.064	20401	Construct Grade Dip	1	Each	Water crossing road, Construct Grade Dip
3.100	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
3.116	30301	Maintain Existing Turnout Left (Incidental to Item #30301)			
3.135	60701	Clean CCC catch basin and culvert in place	1	Each	
3.194	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
3.211	60701	Clean CCC catch basin and culvert in place	1	Each	
3.253	30301	Remove Existing Grade Dip (Incidental to Item #30301)			

MILEPOST FROM FOREST BOUNDARY	Item Number	DESCRIPTION	Quantity	Unit	Remarks
3.275	60701	Clean CCC catch basin and culvert in place		1 Each	
3.320	30301	Remove Existing Grade Dip (Incidental to Item #30301)			
3.560	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
3.360	60701	Clean CCC catch basin and culvert in place		1 Each	Maintain outslope left around turn, maintain ditch left to drain to culvert inlet
3.371	30301	Transition to inslope with ditch (Incidental to Item #30301)			
3.391	30301	Remove Existing Grade Dip, Maintain inslope ditch left (Incidental to Item #30301)			
3.446	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
3.450	60203	36" pipe culvert, 0.079 inch thick, Compaction Method B(1 culvert at 50 LF)	50	Lin. Ft.	Existing CCC inlet headwall to remain in place
	30301	Maintain outslope around curve. Maintain existing ditch left to drain to new inlet. (Incidental to Item #30301)			
3.480	20401	Construct Grade Dip		1 Each	
3.489	60701	Clean CCC catch basin and culvert in place		1 Each	
	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			Inslope with ditch
3.511	30301	Rock Outcrop, Maintain existing ditch (Incidental to Item #30301)			Rock Outcrop
3.572	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			Inslope with ditch
3.616	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
3.623	60701	Clean CCC catch basin and culvert in place		1 Each	Inslope with ditch
3.667	60701	Clean CCC catch basin and culvert in place		1 Each	
	30301	Maintain inslope without ditch (Incidental to Item #30301)			
3.684	30301	Maintain inslope without ditch (Incidental to Item #30301)			Rock Outcrop, Inslope without ditch
3.758	30301	Begin inslope with ditch			
3.810	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			Maintain Existing Turnout Right
3.840	60701	Clean CCC catch basin and culvert in place		1 Each	

MILEPOST FROM FOREST BOUNDARY	Item Number	DESCRIPTION	Quantity	Unit	Remarks
3.941	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
3.949	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
3.970	60701	Clean CCC catch basin and culvert in place		1 Each	
	30301	Start to regrade inslope with ditch (Incidental to Item #30301)			
3.986	30301	Stop regrade			
4.010	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
4.042	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
	60201	24" pipe culvert, 0.079 inch thick, Compaction Method B(1 culvert at 30 LF)	30	Lin. Ft.	Install above grade dip
4.073	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
	60201	24" pipe culvert, 0.079 inch thick, Compaction Method B(1 culvert at 30 LF)	30	Lin. Ft.	Install above grade dip
4.079	30301	Relocate Grade Dip below new culvert (Incidental to Item #30301)			
	60201	24" pipe culvert, 0.079 inch thick, Compaction Method B(1 culvert at 30 LF)	30	Lin. Ft.	Install above grade dip
4.100	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			Maintain Existing Turnout Right
4.120	60701	Clean CCC catch basin and culvert in place		1 Each	
4.202	60701	Clean CCC catch basin and culvert in place		1 Each	
4.264	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
4.289	60701	Clean CCC catch basin and culvert in place		1 Each	
4.336	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
4.346	60701	Clean CCC catch basin and culvert in place		1 Each	
4.365	60701	Clean CCC catch basin and culvert in place		1 Each	
4.404	60701	Clean CCC catch basin and culvert in place		1 Each	
4.418	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
4.447	60701	Clean CCC catch basin and culvert in place		1 Each	

MILEPOST FROM FOREST BOUNDARY	Item Number	DESCRIPTION	Quantity	Unit	Remarks
4.543	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
4.552	60701	Clean CCC catch basin and culvert in place	1	Each	
4.560	60202	30" pipe culvert, 0.079 inch thick, Compaction Method B(1 culvert at 30 LF)	30	Lin. Ft.	Install new 30" culvert and inlet, direct water flow to inlet
4.596	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
4.611	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
4.651	60701	Clean CCC catch basin and culvert in place	1	Each	
4.702	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
	60701	Clean CCC catch basin and culvert in place	1	Each	
4.781	30301	Maintain Existing Grade Dip (Incidental to Item #30301)			
	60701	Clean CCC catch basin and culvert in place	1	Each	
4.834	60201	24" pipe culvert, 0.079 inch thick, Compaction Method B(1 culvert at 30 LF)	30	Lin. Ft.	
4.867	60701	Clean CCC catch basin and culvert in place	1	Each	
4.918	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
4.931	60701	Clean CCC catch basin and culvert in place	1	Each	
4.962	30301	Grade dip eroded, Reshape road with ditch left			Grade dip eroded, Reshape road with ditch left
5.014	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
5.032	60701	Clean CCC catch basin and culvert in place	1	Each	
5.098	60201	24" pipe culvert, 0.079 inch thick, Compaction Method B(1 culvert at 30 LF)	30	Lin. Ft.	
5.142	60201	24" pipe culvert, 0.079 inch thick, Compaction Method B(1 culvert at 30 LF)	30	Lin. Ft.	rock out crop begins
5.192	60701	Clean CCC catch basin and culvert in place	1	Each	
5.295	60701	Clean CCC catch basin and culvert in place	1	Each	
5.342	60701	Clean CCC catch basin and culvert in place	1	Each	
5.469	60701	Clean CCC catch basin and culvert in place	1	Each	

MILEPOST FROM FOREST BOUNDARY	Item Number	DESCRIPTION	Quantity	Unit	
5.475	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
5.496	60701	Clean CCC catch basin and culvert in place	1	Each	
5.578	60701	Clean CCC catch basin and culvert in place	1	Each	
5.565	30301	Maintain Existing Turnout Right (Incidental to Item #30301)			
5.675	30101	Begin 10" NMSH Type I-B Base Course, Compaction Method 3			
5.719	30301	Maintain Existing Turnout Left (Incidental to Item #30301)			
5.734	60701	Clean CCC catch basin and culvert in place	1	Each	
5.769	30301	End 10" Base course. Continue 4" Base Course			
5.824	60701	Clean CCC catch basin and culvert in place	1	Each	
5.863	30301	Maintain Existing Turnout Left (Incidental to Item #30301)			
5.875		Clean culvert and catch basin	1	Each	
5.975	60701	Clean CCC catch basin and culvert in place	1	Each	
6.000	30301	Reshape road inslope right with ditch			
6.057	60701	Clean CCC catch basin and culvert in place	1	Each	
6.128	60701	Clean CCC catch basin and culvert in place	1	Each	
6.233	60701	Clean CCC catch basin and culvert in place	1	Each	
6.289	60701	Clean CCC catch basin and culvert in place	1	Each	
6.373	60701	Clean CCC catch basin and culvert in place	1	Each	
6.421	60701	Clean CCC catch basin and culvert in place	1	Each	
6.446		Junction right			
6.543		END OF PROJECT			END road reconditioning, in slope / out slope roadbed with

MILEPOST FROM FOREST BOUNDARY	Item Number	DESCRIPTION	Quantity	Unit	Remarks
0.000					Forest Boundary Gate, FR245
2.727		Begin road reconditioning			Forest Service Gate above New Canyon Campground, Begin Project
	30101	Begin placing base course, 4" layer	4,900	CY	
	72530	Place Barrier Rocks on user created road around gate	8	Each	
2.743		Maintain Existing Grade Dip (Incidental to Item #30301)			
		Inslope road, construct ditch (Incidental to Item #30301)			
2.772	60701	Clean Civilian Conservation Corps catch basin and culvert in place	1	Each	
2.787		Maintain Existing Grade Dip (Incidental to Item #30301)			
2.817		Maintain Existing Grade Dip. Transition to no side slope at dip (Incidental to Item #30301)			No inslope at grade dip
2.851		Transition to outslope. (Incidental to Item #30301)			Water crossing road
2.937		Maintain Existing Grade Dip (Incidental to Item #30301)			
		Begin Inslope with ditch (Incidental to Item #30301)			
3.004	20401	Construct Grade Dip	1	Each	Water crossing road
		Inslope road without ditch (Incidental to Item #30301)			
3.064	20401	Construct Grade Dip	1	Each	Water crossing road
3.100		Maintain Existing Grade Dip (Incidental to Item #30301)			
3.116		Maintain Existing Turnout Left (Incidental to Item #30301)			
3.135	60701	Clean CCC catch basin and culvert in place	1	Each	
3.194		Maintain Existing Grade Dip (Incidental to Item #30301)			
3.211	60701	Clean CCC catch basin and culvert in place	1	Each	
3.253		Remove Existing Grade Dip (Incidental to Item #30301)			
3.275	60701	Clean CCC catch basin and culvert in place	1	Each	
3.320		Remove Existing Grade Dip (Incidental to Item #30301)			
3.560		Maintain Existing Grade Dip (Incidental to Item #30301)			
3.360	60701	Clean CCC catch basin and culvert in place	1	Each	Maintain outslope left around turn, maintain ditch left to drain to culvert inlet
3.371		Transition to inslope with ditch (Incidental to Item #30301)			
3.391		Remove Existing Grade Dip, Maintain inslope ditch left (Incidental to Item #30301)			
3.446		Maintain Existing Grade Dip (Incidental to Item #30301)			
3.450	60203	Install 36" CMP	50	LF	Existing CCC inlet headwall to remain in place

		Maintain outslope around curve. Maintain existing ditch left to drain to new inlet at MP 3.450.(Incidental to Item #30301)			
3.480	20401	Construct Grade Dip	1	Each	
3.489	60701	Clean CCC catch basin and culvert in place	1	Each	
		Maintain Existing Grade Dip (Incidental to Item #30301)			Road is insloped with ditch
3.511		Maintain existing ditch (Incidental to Item # 30301)			Rock Outcrop
3.572		Maintain Existing Grade Dip (Incidental to Item #30301)			Road is insloped with ditch
3.616		Maintain Existing Grade Dip (Incidental to Item #30301)			
3.623	60701	Clean CCC catch basin and culvert in place	1	Each	Road is insloped with ditch
3.667	60701	Clean CCC catch basin and culvert in place	1	Each	
		Maintain inslope without ditch (Incidental to Item #30301)			
3.684		Maintain inslope without ditch (Incidental to Item #30301)			Rock Outcrop
	30301	Begin inslope with ditch (Incidental to Item #30301)			
3.810		Maintain Existing Turnout Right (Incidental to Item #30301)			
3.840	60701	Clean CCC catch basin and culvert in place	1	Each	
3.941		Maintain Existing Grade Dip (Incidental to Item #30301)			
3.949		Maintain Existing Turnout Right (Incidental to Item #30301)			
3.970	60701	Clean CCC catch basin and culvert in place	1	Each	
		Begin inslope with ditch (Incidental to Item #30301)			
3.986	30301	End inslope with ditch (Incidental to Item #30301)			
4.010		Maintain Existing Turnout Right (Incidental to Item #30301)			



4.042		Maintain Existing Grade Dip (Incidental to Item #30301)			
	60201	Install 24" CMP	30	LF	Install above grade dip
4.073		Maintain Existing Grade Dip (Incidental to Item #30301)			
	60201	Install 24" CMP	30	LF	Install above grade dip
4.079		Relocate Grade Dip below new culvert (Incidental to Item #30301)			
	60201	Install 24" CMP	30	LF	Install above grade dip
4.100		Maintain Existing Turnout Right (Incidental to Item #30301)			
4.120	60701	Clean CCC catch basin and culvert in place	1	Each	
4.202	60701	Clean CCC catch basin and culvert in place	1	Each	
4.264		Maintain Existing Turnout Right (Incidental to Item #30301)			
4.289	60701	Clean CCC catch basin and culvert in place	1	Each	
4.336		Maintain Existing Grade Dip (Incidental to Item #30301)			
4.346	60701	Clean CCC catch basin and culvert in place	1	Each	
4.365	60701	Clean CCC catch basin and culvert in place	1	Each	
4.404	60701	Clean CCC catch basin and culvert in place	1	Each	
4.418		Maintain Existing Turnout Right (Incidental to Item #30301)			
4.447	60701	Clean CCC catch basin and culvert in place	1	Each	
4.543		Maintain Existing Grade Dip (Incidental to Item #30301)			
4.552	60701	Clean CCC catch basin and culvert in place	1	Each	
4.560	60202	Install 30" CMP	30	LF	Direct water flow to inlet
4.596		Maintain Existing Grade Dip (Incidental to Item #30301)			

4.611		Maintain Existing Turnout Right (Incidental to Item #30301)			
4.651	60701	Clean CCC catch basin and culvert in place	1	Each	
4.702		Maintain Existing Grade Dip (Incidental to Item #30301)			
	60701	Clean CCC catch basin and culvert in place	1	Each	
4.781		Maintain Existing Grade Dip (Incidental to Item #30301)			
	60701	Clean CCC catch basin and culvert in place	1	Each	
4.839	60201	Install 24" CMP	30	LF	
4.867	60701	Clean CCC catch basin and culvert in place	1	Each	
4.918		Maintain Existing Turnout Right (Incidental to Item #30301)			
4.931	60701	Clean CCC catch basin and culvert in place	1	Each	
4.962	30301	Reshape eroded grade dip and ditch left (Incidental to Item #30301)			Grade dip eroded
5.014		Maintain Existing Turnout Right (Incidental to Item #30301)			
5.032	60701	Clean CCC catch basin and culvert in place	1	Each	
5.098	60201	Install 24" CMP	30	LF	
5.142	60201	Install 24" CMP	30	LF	Rock out crop begins
5.192	60701	Clean CCC catch basin and culvert in place	1	Each	
5.295	60701	Clean CCC catch basin and culvert in place	1	Each	
5.342	60701	Clean CCC catch basin and culvert in place	1	Each	
5.469	60701	Clean CCC catch basin and culvert in place	1	Each	
5.475		Maintain Existing Turnout Right (Incidental to Item #30301)			
5.496	60701	Clean CCC catch basin and culvert in place	1	Each	

5.578	60701	Clean CCC catch basin and culvert in place	1	Each	
5.565		Maintain Existing Turnout Right (Incidental to Item #30301)			
5.675	30101	Begin additional 6" base course layer			
5.719	30301	Maintain Existing Turnout Left (Incidental to Item #30301)			
5.734	60701	Clean CCC catch basin and culvert in place	1	Each	
5.769	30301	End additional 6" Base course. Continue with 4" Base Course			
5.824	60701	Clean CCC catch basin and culvert in place	1	Each	
5.863		Maintain Existing Turnout Left (Incidental to Item #30301)			
5.875	60701	Clean CCC catch basin and culvert in place	1	Each	
5.975	60701	Clean CCC catch basin and culvert in place	1	Each	
6.000	30301	Inslope right with ditch (Incidental to Item #30301)			
6.057	60701	Clean CCC catch basin and culvert in place	1	Each	
6.128	60701	Clean CCC catch basin and culvert in place	1	Each	
6.233	60701	Clean CCC catch basin and culvert in place	1	Each	
6.289	60701	Clean CCC catch basin and culvert in place	1	Each	
6.373	60701	Clean CCC catch basin and culvert in place	1	Each	
6.421	60701	Clean CCC catch basin and culvert in place	1	Each	
6.446		Junction right			
6.543	30301	End road reconditioning			
6.543	30101	End base course			



<troy@ghoginc.com>

09/22/2010 04:08 PM

Please respond to  
<troy@ghoginc.com>


To "Richard L Graves" <rlgraves@fs.fed.us>

cc

bcc

Subject NFR 245 REBID-2

RICH,

THIS IS AS CLOSE AS I CAN GET IT! 



TROY OTERO

GROUNDHOG EXCAVATING, INC.

505.243.2133 OFFICE

505.238.2282 CELL

505.243.1444 FAX



NFR 245 UPPER REBID 2.xls

# GOVERNMENT ESTIMATE

## SECTION B – SERVICES AND PRICES (NFR 245 Road Maintenance - Upper Section)

Mountainair Ranger District  
Cibola National Forest  
Torrance County, New Mexico

ITEM NO.	DESCRIPTION	METHOD OF MEASURE	PAY UNIT	EST. QTY.	UNIT PRICE	TOTAL PRICE
15101	Mobilization	LSQ	Lump Sum	1	\$26,674.11	\$26,674.11
30101	NMSH Type I-B Base Course, 4-inch thick, Compaction Method 3	DQ	Cubic Yard	4,900	<u>\$49.93</u>	\$244,657.00
30102	Contractor Sampling and Testing	LSQ	Lump Sum	1	\$1,589.06	\$1,589.06
30301	Road Reconditioning, Compaction Method 3	DQ	Mile	3.8	\$3,543.61	\$13,465.72
20401	Construct Grade dips	AQ	Each	2	\$255.31	\$510.62
60201	24 inch pipe culvert, 0.079 inch thick, Compaction Method B (6 culverts at 30 LF)	DQ	LF	180	\$84.75	\$15,255.00
60202	30 inch pipe culvert, 0.079 inch thick, Compaction Method B (1 culvert at 30 LF)	DQ	LF	30	\$108.06	\$3,241.80
60203	36 inch pipe culvert, 0.079 inch thick, Compaction Method B (1 culverts at 50 LF)	DQ	LF	50	\$132.42	\$6,621.00
60701	Clean CCC catch basin and culvert in place	AQ	Each	39	\$258.49	\$10,081.11
72530	Barrier Rock	AQ	Each	8	\$119.71	\$957.68
	<b>GRAND TOTAL</b>					<b>\$323,053.10</b>

Approved 09/24/10



IAS Requisition Workflow  
Mailer - Production System -  
DO NOT REPLY  
<NoReplyTo@iaspddb-d.nfc.usda.gov>

To "GUTOWSKI, DEENA M" <dgutowski@fs.fed.us>  
cc  
bcc

09/23/2010 03:23 PM

Subject Action Required: Purchase Requisition 434194 for  
MARTINEZ, HENRY (342940.00 USD)

Please respond to  
NoReplyTo@iaspddb-d.nfc.usda.gov

From MARTINEZ, HENRY Description NFR 245 Road Maintenance - Upper  
m Section  
To GUTOWSKI, DEENA Requisition 342940.00 USD  
M Total  
Sent 23-Sep-2010 15:20:40 Estimated Tax 0.00 USD  
ID 16896639 Justification Increased dollar amount

### Requisition Lines

Line	Description	Supplier	Cost Center	Unit	Quantity	Price (USD)	Amount (USD)
1	NFR 245 Road Maintenance - Upper Section		11	DOLLAR US	342940	1	342940.00

### Approval Sequence

Num	Name	Action	Action Date	Note
1	MARTINEZ, HENRY	Submitted	08-Jul-2010 20:30:21	
2	MARTINEZ, HENRY	Forwarded	08-Jul-2010 20:30:21	
3	GUTOWSKI, DEENA M	Approved	09-Jul-2010 18:04:18	
4	INTERFACE, FINANCIAL	Approved	10-Jul-2010 05:04:38	
5	MARTINEZ, HENRY	Withdrawn	23-Sep-2010 14:39:38	
6	MARTINEZ, HENRY	Submitted	23-Sep-2010 15:20:40	Increased dollar amount
7	MARTINEZ, HENRY	Forwarded	23-Sep-2010 15:20:40	
8	GUTOWSKI, DEENA M	Pending		

### Related Applications

- Edit Requisition
- View Requisition Details
- Open Document

Copyright (c) 2006, Oracle. All rights reserved.

[Please click here to Respond](#)

CMLG Alloc # 627,125  
 Current exp 540,421.96  
 86,703 bal avail.  
 82,940  
 3,763 YE Bal.

IS - General  
 11/03/03/2540/CMLG0310  
 + #82,940

**Project Header**

Name: CMLG - FR 245  
 Description: Project to address storm damage to FR 245 due excessive storm runoff after forest fire.  
 National Goal: 4 - Sustain and Enhance Outdoor Recreation Opportunities  
 Objective: 4.1.0 - Improve the quality and availability of outdoor recreation experiences  
 Leader: Kevin Broderick Fiscal Year: 2010  
 Unit Priority: Unit: CIBOLA NF  
 Approved: Yes Status:  
 Stewardship Contract?: No  
 District ID for Project:  
 Project UDF 2:  
 Project UDF 3:  
 Project UDF 4:  
 Comments: entered jc 031810.dmg

Created by Kevin Broderick on 2010-02-11  
 Last Modified by Monique Aragon on 2010-08-30

**Project Totals**

Total Personnel Costs:	\$8,885
Total Fleet Cost:	\$300
Total Other Cost:	\$342,940
<b>Total Project Cost:</b>	<b>\$352,125</b>

**Activities**

CMLG	
Job Code: CMLG03	
Activity Name	Allocated Cost
CMLG-RM	\$352,125
BLI Total	\$352,125
Activity Total	\$352,125
Balance	\$0

**Accomplishments**

CMLG		
CMLG-RM		
	Planned	Actual
rd-pc-maint	4.0	0.0
<b>Integrated</b>		
s&w-rsrc-imp	5.0	0.0

**Personnel**

Personnel	Rate/day	CMLG	Total Days	Total
BRODERICK, KEVIN	\$326.99	\$1,635	5	\$1,635
DERESKE, MARY	\$477.01	\$477	1	\$477
ENGINEERING TECH, GS-07	\$187.17	\$1,497	8	\$1,497
GRAVES, RICHARD	\$336.17	\$1,345	4	\$1,345
MARTINEZ, HENRY	\$262.06	\$3,931	15	\$3,931
<b>Total</b>		<b>\$8,885</b>	<b>33</b>	<b>\$8,885</b>

**Fleet**

Fleet	FOR Rate/Month	Months	Use Rate	Use Units	CMLG	Total
8045 - 2DR JEEP SUV	\$300	1	\$0.21/MILE	0	\$300	\$300
<b>Total</b>					<b>\$300</b>	<b>\$300</b>

**Other Resources**

Other Resources	Units Needed	CMLG	Total
Construction Contract-req#434194	342,940 EACH	\$342,940	\$342,940
<b>Total</b>		<b>\$342,940</b>	<b>\$342,940</b>

9/23/2010


The original Government Estimate for this project was \$263,883, which is substantially less than the bid price of \$342,337.80 provided by Groundhog Excavating, Inc. I revisited the Government Estimate and found two work items that each constitutes a substantial portion of the total contract estimate.

One of these items is the placement of aggregate surfacing material (Item 30101) on 3.8 miles of the road. The Government Estimate for this item is \$177,625, which is based on a supplier in Mountainair, NM. Some material from this supplier, however, has, in the past, failed to meet project specifications and was subsequently rejected. The contractor's bid price is based on purchasing the material from a supplier in Moriarity, NM, which is 26 miles farther from the job site than Mountainair. This increase in distance would result in a 30% increase in the delivered cost of the material. Increasing the cost estimate for this item in the Government Estimate would result in a total cost estimate of \$320,360, which is 94% of the contractor's bid price.

The other work item is cleaning the culverts and catch basins (Item 60701). The vast majority of catch basins were constructed of stone and mortar by the Civilian Conservation Corp in the 1930's and 40's. As such, they are of significant archeological value and must be cleaned with hand tools, taking care to avoid damage to the catch basin structures. There are 39 culvert/catch basin combinations in the Schedule of Items. The contractor's unit bid price for this item is \$1,011.75, which is \$767.75 higher than the Government Estimate of \$244. The resulting total difference between the contractor's bid price and the Government Estimate for this item is \$29,942.25.

As a result of time constraints in assembling the contract for this project, each of the 39 culverts and catch basins was not thoroughly inspected to determine the extent of work necessary for an adequate cleaning. It is likely that the contractor performed a more thorough inspection and determined that significantly more effort would be required than was assumed in preparing the Government Estimate.

Given the difference in the total estimated cost resulting from the different aggregate source and the uncertainty in the work effort required for cleaning the culverts and catch basins, I believe that the contractor's bid price is reasonable, and it would be in the best interest of the Government to accept this bid.



Richard L. Graves



# Memorandum

**To:** Documentation File  
**From:** Henry B. Martinez  
**Date:** 09/22/2010  
**Re:** FR 245 Upper Section Road Repair

---

I approached Richard Graves in his office to discuss changes to this project. We started to discuss what changes Kevin wanted to make to this project and that we will need additional base course material to cover up some rock outcropping. I mention that Kevin estimated about half a mile of more material needed at 6 inches deep. Rich stated that it was only a quarter mile. So I asked him what figure do I use to recalculate the quantity. Rich got upset and raised his voice to me and said "this is my fuck'n project" and to use a quarter mile. He then instructed me to go work on the new estimate for the new gravel quantity needed.

In the afternoon I went back into Rich's office to give him the updated government estimate he had requested. I also asked him how much Groundhogs original estimate was compared to my first estimate of \$204,716, and he said \$350K. So I questioned how we can still move forward with this project if we only have about 345K in the budget assuming the price will increase since we've added more gravel quantities. I asked him how we justify the difference. Rich said "I told the contractor how much money we had in the budget because we don't have time to mess around". I responded and asked Rich if you can tell the contractor how much we have in the budget for this project. Rich said "probably not but I did".

Rich then told me to go update the government estimate again based off another gravel quantities increase he came up with from adding more for turnouts and curves so he can get Groundhog to resubmit his proposal based on the new quantities.

After this conversation with Rich I felt concerned about Rich revealing our budget information for this project and I felt that I needed to notify Greg Martinez who is the Contracting Officer assigned to this project.

At 4 pm I went to Greg's office and spoke with him about Rich's actions with Groundhog. I informed Greg about Rich revealing to Groundhog how much we have in the budget for this project. Greg responded "Rich can't do that without my approval".

H. Martinez

9/22/10

# Memorandum

**To:** Documentation File  
**From:** Henry B. Martinez  
**Date:** 09/23/2010  
**Re:** FR 245 Upper Section Road Repair

---

At 9am Rich walked over to my cubicle and asked me if I finished the road log revisions for the FR 245 project. I told him I was still making those changes.

I then asked Rich if we are going to still move forward with this contract, he said "yes". I reminded him that our new government estimate is \$263,883. Rich said "we don't have time to mess around so I told the contractor how much we have and were going to do it for \$342K". I said "we can't do that", Rich responded and said "well I did".

Venus Jensen who sits across from my cubicle made a comment saying "we can do that if it's a negotiated contract".

Later that afternoon from 3-5pm I felt that I needed to inform my boss of what has occurred with this project. I told Kevin that Rich told the contractor how much we had in the budget for this project. Kevin said "not to worry about it, things will get better back here in engineering" I asked him if we can tell contractors how much we have in the budget for any of our projects, and he said "no you can't". So I questioned why Rich can tell contractors how much we have in the budget for projects, and Kevin said "he's not sure that's what he did". I told Kevin I could verify that Rich did tell the contractor how much we had in the budget for this project because Rich had told me twice that he told Groundhog (Troy) how much we had in the budget.

H B M 9/23/10