

**RESOLUTION OF THE
WHITE MOUNTAIN APACHE TRIBE OF THE
FORT APACHE INDIAN RESERVATION**

WHEREAS, pursuant to Resolution No. 04-2001-112, the Tribal Council granted a Temporary Construction Easement to the Arizona Department of Transportation (ADOT) for the purpose of constructing road improvements in the vicinity of milepost 295 on Highway 60 in Salt River Canyon; and

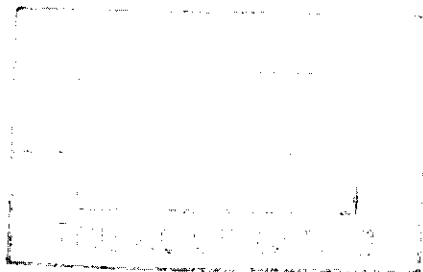
WHEREAS, the Tribal Transportation Planner has advised the Tribal Council of the status of the Salt River Canyon Emergency Repair Work Project, and provided copies of the Project Scope of Work and Final Design documents, attached hereto as Attachments A and B; and

WHEREAS, the Tribal Council has discussed and reviewed the Scope of Work and Final Design documents for the emergency repair work project and believes it would be in the best interest of the Tribe to accept the Final Design and Scope of Work as presented in Attachment A and B.

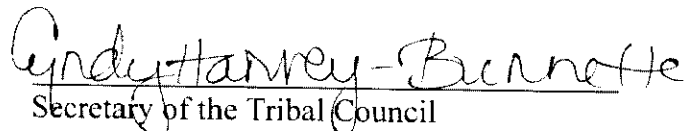
BE IT RESOLVED by the Tribal Council of the White Mountain Apache Tribe that it hereby accepts the Final Design and Scope of Work, attached hereto as Attachments A and B, and further grants permission to ADOT to commence construction of the Salt River Canyon Emergency Repair Work Project.

BE IT FURTHER RESOLVED by the Tribal Council of the White Mountain Apache Tribe that it hereby authorizes the Tribal Chairman, and in his absence the Vice Chairman or other duly authorized representative, to execute any documents necessary to carry out the intent of this resolution.

The foregoing resolution was on July 30, 2001 duly adopted by a vote of FIVE for and ZERO against by the Tribal Council of the White Mountain Apache Tribe, pursuant to authority vested in it by Article IV, Section 1 (a), (b), (h), (t), and (u) of the Constitution of the Tribe, ratified by the Tribe September 30, 1993, and approved by the Secretary of the Interior on November 12, 1993, pursuant to Section 16 of the Act of June 18, 1934 (48 Stat. 984).




Chairman of the Tribal Council


Secretary of the Tribal Council

ITEMIZED ESTIMATE

Project Number: 060 GI 294 H 5791 01C
 Location: US 60 @ MP 294
 Project Limits: US 60, MP 294.9 to 295.2

DATE: July 3, 2001

ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
AC Removal	Sq. Yd.	4,700	\$2	\$9,400
Colluvium Scaling	Cu. Yd.	750	\$300	\$225,000
Rock Blasting on Slope	Cu. Yd.	250	\$350	\$87,500
Excavation for CIP Retaining Wall	Cu. Yd.	750	\$10	\$7,500
AC				
AC (148 lb/ft ³)	Ton	1,040	\$50	\$52,000
Asphalt Cement (5.25%)	Ton	55	\$200	\$11,000
Mineral Admixture (2%)	Ton	20	\$90	\$1,800
TACK COAT				
Tack Coat (0.08 gal/yd ²)	Ton	1.4	\$175	\$245
Apply Tack Coat	Hours	3	\$120	\$360
Aggregate Base	Cu Yd.	800	\$45	\$36,000
CIP Retaining Wall	Sq. Ft.	3,420	\$50	\$171,000
MSE Retaining Wall	Sq. Ft.	4,500	\$45	\$202,500
Structural Backfill for CIP Retaining Wall	Cu. Yd.	1,500	\$50	\$75,000
Structural Backfill for MSE Retaining Wall	Cu. Yd.	7,500	\$50	\$375,000
Rockfall Fence, 10' high, Brugg VHI	L.Ft.	250	\$445	\$111,250
Guardrail Extruder Terminal (GET-2)	Each	2	\$3,000	\$6,000
Guard Rail	L.Ft.	650	\$20	\$13,000
Pavement Marking (Thermoplastic)	L.Ft.	4,250	0.50	\$2,125
Signing	L. Sum	1	\$5,000	\$5,000
Hydroseeding	Acre	2	\$4,000	\$8,000
SUBTOTAL (Rounded)				\$1,400,000
Contingency (20%)				\$280,000
SUBTOTAL (Rounded)				\$1,680,000
Erosion Control (1%)				\$16,800
Quality Control (2%)				\$33,600
Water Supply & Dust Palliative (4%)				\$67,200
Maintenance and Protection of Traffic (15%)				\$252,000
Mobilization (10%)				\$168,000
Construction Survey and Layout (2%)				\$33,600
Engineering Costs (15%)				\$252,000
CONSTRUCTION COST (Rounded)				\$2,503,000
Design Costs (12%)				\$300,000
RIGHT OF WAY COSTS				\$0
UTILITY RELOCATIONS (By Utility Agencies)				\$0

ITEMIZED ESTIMATE

Project Number: 060 GI 294 H 5791 01C

DATE: July 3, 2001

Location: US 60 @ MP 294

TOTAL PROGRAM COST (Rounded)

\$2,803,000

**ARIZONA DEPARTMENT OF TRANSPORTATION
OFFICE MEMO**

July 2001

TO: SEE DISTRIBUTION LIST

FROM: MAXINE ELDREDGE
THRU: HERMAN MOZART
PREDESIGN PROGRAM MANAGEMENT SECTION, 050P

SUBJECT SCOPING LETTER
TRACS NO. 060 GI 294 H 5791 01C
FEDERAL REFERENCE NUMBER 060 - E
US 60 @ MP 294

A. INTRODUCTION

TRACS No. 060 GI 294¹ H 5791 01 C, Federal Reference Number is 060 - E, is a rockfall containment project at a site along US 60 near Milepost (MP) 295.

The project is located within ADOT's Globe District in Gila County, as well as being located within the Fort Apache Indian Reservation. The project limits begin at MP 294.90 and extends 0.3 miles east to MP 295.20.

The project is not listed in the 2001-2005 ADOT Five-Year Highway Transportation Facilities. The total estimated project cost is \$2,503,000 for construction and \$300,000 for the project design. The project will be designed by an On-Call Consultant and use State funds.

The purpose of the project is to improve safety by reducing the likelihood of rocks falling from the slope and capturing those that do. The purpose of this Scoping Letter is to define the scope of work needed to address the rockfall problems at the site, and to develop cost estimates for the work.

B. BACKGROUND DATA

There have been numerous slope failures and rockfalls near MP 295 since US 60 was widened in 1963. These have required ongoing maintenance and pose a hazard to the traveling public. The Globe maintenance personnel have stated that rockfalls occur on a persistent basis after a significant rainfall event or snowmelt. The most recent slope failure occurred on November 7, 2000 that destroyed a wire mesh rock-containment blanket, which had been installed on the slope in 1998 to control rockfall. This event temporarily closed the highway.

The November rockfall event occurred after recent heavy rains had saturated the area. During the evening hours of November 7th, a large mass of talus, colluvium and weathered bedrock detached

¹ Original TRACS number was for MP 295, but subsequently the beginning MP has changed to 294.

from the area above the wire mesh rock-containment blanket. As the mass of rock moved down the slope, it dislodged the wire mesh blanket. The rock and mesh came to a rest on the highway blocking the westbound lanes. ADOT personnel removed the landslide debris. The rockfall event left a "highly irregular, disturbed, landslide scar with multiple elements of questionable stability."

Since the landslide, two emergency scaling projects have been conducted within the rockslide area. The first emergency scaling project was performed in November 2000 to remove approximately 1,400 cubic yards of loose colluvium and weathered rock from the upper one-quarter of the rockslide disturbed area. Golder Associates was retained to evaluate the geotechnical condition of the slope and develop options for remediating the problem. Golder Associates prepared a report, Evaluation of Geotechnical Stabilization Options, US Highway 60 Rockfall at MP 295, Gila County, Arizona, in March 2001 that presented several viable options and cost estimates to assist ADOT with selecting a preferred option that will be designed and constructed at an accelerated schedule. Visits to the site by Golder Associates identified that while... "the November 2000 scaling effort has temporarily reduced the rockfall hazard... subsequent rainfall events will likely dislodge more debris, with a return to conditions similar to those present before the scaling effort..." The report recommended additional scaling work. Subsequent to the report, a second emergency scaling project was completed during May and June of 2001 that removed an additional 1,000 cubic yards of loose colluvium and weathered rock.

This Scoping Letter is not intended to duplicate Golder Associates efforts, but to prepare a planning document that identifies the scope of the work required and a detailed cost estimate that includes necessary roadway modifications.

The Milepost Strip Map shows the following projects have been completed within the project limits:

Project No.	Beginning MP	Ending MP	As-Built Date	Description
Non FA-99 (55)	293.75	297.76	1955	Grade, Drainage, 34' Roadway
F-026-1 (15)	293.10	296.98	1963	40' to 44' AC
F-026-1-912	288.77	296.97	1970	Guardrail Safety Project

F-026-1(20)	286.4	296.9	1986	2" Overlay + 1/2" ACFC
F-026-1-525	294.89	295.29	1999	Rockfall Containment

Existing US 60 roadway is a two-lane rural highway. The roadway is 40-foot wide with 12-foot travel lanes and 8-foot wide paved shoulders through the project limits. The as-built plans indicate the cross slope is 1.5 percent.

The AASHTO functional classification for US 60 within the project limits is a minor rural arterial. The project traverses mountainous terrain with the elevation varying between 4025 to 4085 feet above mean sea level.

The posted speed limit on US 60 is 35 mph within the project limits.

The 2000 Average Daily Traffic (ADT) volume assigned to US 60 between MP 283.5 and 315.8 was 3,150 vehicles per day (vpd) by ADOT's Transportation Planning Division. The projected 2001 ADT is 3,230 vpd and the 2021 ADT is 5,100 vpd. There are traffic counter loop detectors located at MP 283.5 and MP 315.8. Traffic design factors are: K = 18%, D = 52%, and T = 9%.

There are no major structures listed in the ADOT Bridge Record within the project limits. There are two CMP minor drainage structures (spans less than 20 ft) within the project limits.

Traffic Studies Section records indicate that during the five-year period from April 1, 1996 to March 31, 2001, there were a total of 6 reported accidents between MP 294.90 and MP 295.20. Five of the six accidents were property damage only accidents. There were no fatal accidents. Four of the accidents involved collisions with boulders or fallen trees on the highway.

The existing R/W along the project is 100 feet on either side of the centerline of US 60. The highway is located within the Fort Apache Indian Reservation.

ADOT's Statewide Permit Log indicates no utility companies have permitted facilities within or near the project limits:

C. PROJECT SCOPE

The project limits on US 60 will begin at MP 294.90 (Station 713+27) and end at MP 295.20 (Station 723+81). The proposed improvements are listed below and can also be found on the attached exhibits.

- Additional scaling to remove loose rock and colluvium will be required.
- The existing roadway horizontal alignment will be shifted to the south 8 feet from station 716+00 to 720+10 Rt. to accommodate project rockfall containment features. The new roadway section ties back into the existing highway with horizontal curves at each end of the 8 foot horizontal shift.
- Two CIP cantilever retaining walls will be constructed on the outside edge of the roadway (south side). The retaining walls are 220 and 190 feet long (Sta. 716+40 to 718+60 Rt. and Sta. 720+30 to 722+20 Rt.) with the height varying between 3 and 12 feet.
- New guardrail will be set at the edge of the pavement on the outside edge of the roadway from Sta. 716+00 to 722+50 Rt. with Guardrail Extruder Terminals (GET-2 Std.C-10.41) at each end.
- An MSE retaining wall will be constructed on the inside edge of the roadway (Sta. 718+50 to 720+87 Lt.). The height of the MSE wall will vary from 3 to 15 feet. The face of the MSE wall will be set at 21.42 feet from the construction centerline of the roadway.
- A concrete half barrier will be constructed at the face of the MSE wall (Sta. 718+50 to 720+87 Lt.).
- The area behind the MSE wall (Sta. 718+50 to 720+87 Lt.) will be backfilled using material stockpiled from the recent landslide. The area will be graded to form a 12 foot wide rockfall

catchment ditch and maintenance access roadway.

- At the top of the MSE wall (Sta. 718+50 to 720+87 Lt.), a 10-foot high rockfall fence will be constructed.
- Replace or relocate existing traffic signs as necessary.
- Mark roadway as required with thermoplastic pavement markings.
- Two existing CMP drainage culverts shall be protected in place.
- Seed areas disturbed by construction.

D. PROJECT DEVELOPMENT CONSIDERATIONS

The Globe District requested the rockfall containment project. The benefit of providing rockfall containment facilities is increased safety for the motoring public.

Because less than five acres of land will be disturbed, a National Pollutant Discharge Elimination System (NPDES) permit will not be required. A Storm Water Pollution Prevention Plan (SWPPP) may be required.

Environmental Planning Section will determine if there are any special environmental or archaeological concerns and prepare the required documentation.

A Temporary Construction Easement will be needed to continue with the scaling effort outside the existing R/W limits to remove unstable rock material.

Army Corps of Engineer 401/404 Permits will not be required.

This project is not located within an EPA air quality non-attainment area.

During construction, both US 60 eastbound and westbound lanes may have brief periods of temporary closures while scaling and blasting operations are being performed. No seasonal constraints exist for construction activity except for blasting. Blasting needs to be done in the time period of September through December to avoid the eagle breeding season.

Construction staging areas include the Salt River Bridge area and the Becker site.

Construction water is not available at the site. Water will need to be hauled to the project site.

Traffic control requirements will be in accordance with Part VI of the Manual on Traffic Control Devices (MUTCD) and the Arizona Supplements to Part VI of the MUTCD and/or special provisions in the project plans, as determined by ADOT Traffic Design Section during design.

The traffic records section requested that a permanent traffic counter be included with this project.

Pavement marking plans will be required.

The design speed for the project is 40 mph.

No utility work is anticipated. The District permit logs show no utility activity in the area. Utility and Railroad Engineering Section or a designated Consultant will investigate whether or not the utilities exist and will be affected.

E. OTHER REQUIREMENTS

A review of the 5-Year Highway Transportation Facilities Construction Program (Fiscal Years 2001 – 2005) indicates that two construction projects are scheduled to be done in the vicinity of the subject project.

- Item No. 23902 – FY 2002: Mill and Replace 2" ARAC + ½" ARFC, MP 286.5 to 296.9.
- Item No. 19102 – FY 2002: Construct Truck Escape Ramp, MP 291.0.

This project has tentatively been scheduled for construction to start in September of 2001. After it's inclusion in the 5-year program and within six weeks of the design kick-off meeting, the pre-construction phase project manager (in consultation with the design team) shall develop a customized project schedule that will reflect the full scope of the work. Upon request, ADOT's Program and Project Management Section (PPMS) will provide a copy of the project preliminary milestone schedule to the design team prior to the kick-off meeting and the technical support as needed during the development of the customized project schedule. The CPS ID and the bid advertising date have not been assigned. The project design is to be completed in August of 2001.

An On-Call consultant will prepare the plans. ADOT Traffic Engineering Group or a consultant will prepare the signing and work zone traffic control plans.

F. ESTIMATED COST

The estimated costs are based on unit prices obtained from ADOT's "Construction Costs 1999" using cost data from adjacent or similar projects.

Construction Costs are based on a structural section of 4 inches of AC over 6 inches of AB for the areas reconstructed.

The Total Project Cost is estimated at \$2,803,000 comprised of construction costs of \$2,503,000 and design costs of \$300,000. The Project assumes the use of State Funds. See the attached estimate.

G. REQUIRED ACTION BY PRIORITY PLANNING COMMITTEE AND/OR PROJECT REVIEW BOARD

Action is required to program and fund additional dollars for this project.

TRACS No. 060 GI 294 H5791 01 C
 Project Name: US 60 @ MP 294
 Location: Globe – Showlow Highway

SERVICE INVOLVEMENT SHEET

Field Review	Contacted	Service Involvement	Significant	Minimum	None	Unknown	Comments-Identifying Issues Which Make Involvement Significant Or Minimal
	X	Statewide Project Management	X				Consultant Design. PM: Bahram Dariush
X	X	Globe District	X				Construction Administration
	X	Right-of-Way		X			TCE & R/W Clearance
X	X	Traffic Engineering	X				Traffic control requirements.
		Drainage Design			X		
		Bridge Design	X				Review retaining wall plans prepared by Consultant
	X	Pavement Design		X			Materials Memorandum
X	X	Geotechnical Services	X				Review rockfall protection design
X	X	Environmental Planning	X				Environmental Documentation and Clearance
	X	Roadway Design Section	X				Review roadway plans
	X	Utility & Railroad		X			Utility Clearance
		Engineering Survey Section			X		Location Survey and cross sections by consultant.
	X	Roadside Development	X				SWPP Plan and Revegetation Plan
		Contracts & Specs.	X				PS&E / advertise project
	X	White Mountain Apache Tribe		X			Coordinate Construction activity with Tribe.