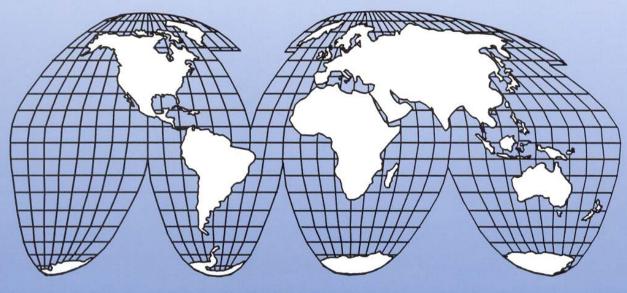
USAID

OFFICE OF INSPECTOR GENERAL

Audit of USAID/Mozambique's Performance Monitoring of Road Repair and Reconstruction Activities Funded by the Southern Africa Floods Supplemental Appropriations

Audit Report No. 4-656-03-001-P

January 31, 2003





PRETORIA, SOUTH AFRICA



January 31, 2003

MEMORANDUM

FOR: USAID/Mozambique Mission Director, Jay Knott

FROM: Regional Inspector General/Pretoria, Jay Rollins /s/

SUBJECT: Audit of USAID/Mozambique's Performance Monitoring of

Road Repair and Reconstruction Activities funded by the Southern Africa Floods Supplemental Appropriations

(Report No. 4-656-03-001-P)

This is our report on the subject audit. In finalizing this report, we considered management comments on the draft report and have included those comments, in their entirety, as Appendix II in this report.

This report contains two recommendations for your action. Management's comments on the draft report indicated acceptance of both recommendations and stated that the Mission had already taken some action to address them. Consequently, we consider both recommendations to have received a management decision. Please provide M/MPI with evidence of final action in order to close both recommendations.

I appreciate the cooperation and courtesy extended to my staff during the audit.

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Summary of Results

During the year 2000, southern Africa experienced the worst flooding in a century. Hardest hit was the country of Mozambique. To help alleviate problems caused by this flooding, the U.S. Congress passed emergency supplemental appropriations totaling \$160 million. These supplemental appropriations were to provide immediate rescue, relief, resettlement and reconstruction activities in the affected countries. USAID/Mozambique programmed \$35 million of the supplemental appropriations to repair and reconstruct four damaged road segments totaling 206 kilometers and one major bridge. (See pages 4-5.)

The objective of this audit was to determine whether USAID/Mozambique implemented and monitored its road and bridge repair and reconstruction activities under the supplemental appropriations funding in accordance with USAID policies and procedures. (See page 6.)

As a result of this audit, the Regional Inspector General/Pretoria determined that USAID/Mozambique generally implemented and monitored its road and bridge repair and reconstruction activities under the supplemental appropriations in accordance with USAID policies and procedures. For example, USAID/Mozambique:

- reviewed and approved deliverables;
- maintained a Cognizant Technical Officer's workfile;
- reported variations, proposed substitutions, and problems;
- recommended modifications:
- analyzed financial reports; and
- approved interim payments.

In addition, USAID/Mozambique conducted monthly site visits and participated in monthly meetings with contractor personnel to discuss the progress of activities. Consequently, the bridge and three of the four road segments planned for reconstruction were on target to be completed within established time and budget limitations. (See page 6.)

In spite of USAID/Mozambique's actions in response to problems identified with contractor performance on one road segment, reconstruction work on that segment continued to be substantially delayed, and the quality of work was substandard. As a result, although a temporary functional road had been restored for local residents affected by the floods, those residents will not benefit from a permanent road as soon as anticipated. (See pages 8-10.)

USAID/Mozambique did not conduct required annual performance evaluations for two engineering consulting firms with which it had direct contracts. As a result, vital information on the contractors' performance had not been officially documented. This could result in the future selection of contractors with poor past performance. (See page 11.)

Background

From February through May 2000, southern Africa experienced its worst flooding in a century. Hardest hit was Mozambique, one of the ten poorest countries in the world. In February 2000, Cyclone Eline struck the provinces of Sofala, Inhambane and Manica in Mozambique. The heavy rains caused three major rivers to reach their hundred-year flood levels, completely submerging the towns of Chokwe, Xai-Xai, Nova Mambone and Machanga. Cyclone Hudah then struck central Mozambique, further aggravating the situation. These floods and cyclones affected all or part of Maputo City and six provinces—Maputo, Gaza, Inhambane, Sofala, Manica, and Tete—which account for 48 percent of Mozambique's population. It is estimated that two million residents of Mozambique were affected.

As a result of the rainfall and flooding, much of the road network in southern and central Mozambique sustained severe damage, including the complete washout of road segments and bridge approaches, and blockage of drainage systems. In total, an estimated 1,500 kilometers of roads were damaged.

To provide assistance for southern African countries affected by this flooding, the U.S. Congress appropriated \$25 million in fiscal year 2000 for the Southern Africa Flood Reconstruction Program.¹ The following year, Congress appropriated an additional \$135 million for the same purpose.² Of those amounts, USAID/Mozambique received \$132 million, \$35 million of which was allocated to rehabilitate and reconstruct roads damaged by the floods. The remaining \$97 million was programmed for other emergency uses, such as railroad rehabilitation and agricultural programs.

In a joint effort with the Government of Mozambique, USAID/Mozambique identified four key road segments and one major bridge to finance—in part—with supplemental appropriations funding. To implement these activities, USAID/Mozambique awarded direct contracts to two engineering consulting firms to design and supervise the reconstruction of the four road segments and the bridge. In addition, host-country contracts were awarded to three construction firms by the Government of Mozambique for the road and bridge repair and reconstruction. USAID/Mozambique was to provide 94 percent of the funding and indirectly monitor the construction contractors through the engineering consulting firms. To determine the Government of Mozambique's capability to handle this arrangement, USAID/Mozambique conducted an assessment of the host country's procurement system and certified its capability in accordance with USAID requirements.³

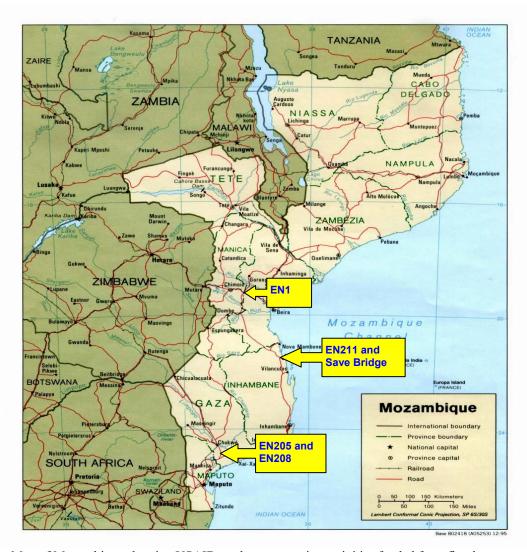
¹ Public Law 106-246, dated July 13, 2000.

² Public Law 106-429, dated November 6, 2000.

³ ADS 301.5.2, *Procurement System Assessment,* states that when the Strategic Objective or Results Package Team is considering assigning a contract anticipated to exceed \$250,000 to an agency of the host country, they must first establish a team to assess the agency's procurement system and then obtain the Mission Director's certification of its capability.

The four road segments (totaling 206 kilometers) and bridge to be repaired and reconstructed with supplemental appropriations funds included:

- EN208 from the town of Chibuto to Guija, (60 km);
- EN205 from the town of Chokwe to Macarretane, (25 km);
- EN1 from the town of Gorongosa to Inchope, (74 km);
- EN211 from the town of Nova Mambone to the EN1, (47 kms); and
- Save River Suspension Bridge



Map of Mozambique showing USAID road reconstruction activities funded from fiscal year 2000-2001 emergency supplemental appropriations for post-flood rehabilitation in southern Africa (Map source: http://www.lib.utexas.edu/maps/africa/mozambique_pol95.jpg)

Audit Objective

This audit was designed by the Regional Inspector General/Pretoria as part of a comprehensive plan to provide concurrent performance and financial audit coverage over activities funded by the Southern Africa Floods Supplemental Appropriations. The audit was performed to answer the following question:

Did USAID/Mozambique implement and monitor its road and bridge repair and reconstruction activities under the Southern Africa Floods Supplemental Appropriations funding in accordance with USAID policies and procedures?

Appendix I provides a complete discussion of the scope and methodology for this audit.

Audit Findings

Did USAID/Mozambique implement and monitor its road and bridge repair and reconstruction activities under the Southern Africa Floods Supplemental Appropriations funding in accordance with USAID policies and procedures?

USAID/Mozambique generally implemented and monitored its road and bridge repair and reconstruction activities in accordance with USAID policies and procedures.

In accordance with the requirements of USAID's Automated Directives System,⁴ USAID/Mozambique:

- reviewed and approved deliverables;
- maintained a Cognizant Technical Officer's workfile;
- reported variations, proposed substitutions and problems;
- recommended modifications:
- analyzed financial reports; and
- approved interim payments.

In addition, USAID/Mozambique conducted monthly site visits to each of the road segments to observe progress and participated in monthly meetings with engineering consulting firms and construction contractors. With the assistance of these implementing partners, USAID/Mozambique has made substantial progress toward its goal of re-establishing access to and use of key rural, national, and regional roads in flood-affected areas of the country. As a result of USAID/Mozambique's implementation and monitoring efforts, the bridge and three of the four road segments planned for reconstruction were on target to be completed within established time and budget limitations.

⁴ See ADS 202.



Photograph of a section of the EN205 road segment between the towns of Chokwe and Macarretane in Mozambique that was damaged by the floods. This photograph was taken before the reconstruction work began. (Photo by Mission Personnel, August 2001)



Photograph of completed section of the EN1 road segment between the towns of Gorongosa and Inchope in Mozambique. (Photo by RIG/Pretoria, August 2002)

Overall, the road and bridge repair and reconstruction activities have taken longer than originally planned. For example, the original planned completion date for all road and bridge activities under the supplemental appropriations funding was September 30, 2002. As of September 9, 2002, only 82.6 kilometers (40 percent) of the 206 kilometers of roads planned to be rebuilt were complete up to the surfacing. (See Appendix III for the status of each road segment.) The delays were due primarily to (a) variation orders for additional work, and (b) poor performance by the construction contractor and engineer consulting firm on one of the road segments. Except for that one road segment (EN211), the other activities were progressing well and were expected to be completed by their respective revised completion dates.

With regard to road segment EN211, we believe that USAID/Mozambique needs to develop a plan, including a definitive revised completion date, to complete that road segment in a timely manner. We also believe that USAID/Mozambique should conduct and document performance reviews of the two engineering consulting firms contracted with supplemental appropriations funding. These issues are discussed in greater detail below.

USAID/Mozambique Needs to Develop a Plan for Timely Completion of EN211 Road Segment

The original planned completion date for the EN211 road segment was August 19, 2002. As of September 9, 2002, none of the 47 kilometers of road had been completed, and much of the base work was of poor quality. This was due, among other reasons, to slow mobilization by the construction contractor and poor performance by the construction contractor and the engineering consulting firm. USAID/Mozambique took actions to mitigate these problems, but those actions were not sufficient to avoid the resultant delays. As a result, although a functional temporary road had been restored for local residents affected by the floods, those residents may not benefit from a permanent road until March or April 2003. At the time of the audit, USAID/Mozambique had not developed a plan of action to complete the project in a timely manner.

One of the activities to be financed, in part, by supplemental appropriations for the southern Africa floods of 2000, was the repair and reconstruction of 47 kilometers of road along the EN211 roadway between the EN1 road segment and the town of Nova Mambone on the eastern coast of Mozambique. To accomplish this, USAID/Mozambique agreed to help finance a host-country contract between the Mozambique's Administacao Nacional das Estradas (ANE) and a construction contractor. The contract was a fixed-price contract

⁵ For example, two variation orders were submitted under the reconstruction contract for the EN205 road segment which changed the pavement design life from 3 to 15 years and extended the planned completion date by eight months.

that included the reconstruction of the EN211 road segment and the repair of the Save River Bridge.

USAID/Mozambique agreed to provide 94 percent of the total construction contract funding. Based on that percentage, USAID/Mozambique's share of the EN211 road segment amounted to \$6.8 million. Construction management services were to be provided by an engineering consulting firm contracted directly by USAID/Mozambique to supervise the work of the construction contractor. The reconstruction of the road segment was to begin on June 26, 2001 and to be completed by August 19, 2002.

At the conclusion of audit fieldwork on September 9, 2002, the auditors found that none of the 47 kilometers on the EN211 road segment had been completed up to the surfacing. Although the construction contractor had completed the base level for 13 of the 47 kilometers, the surfacing of the road had not been started. Also, the quality of the base work was questionable and most had been rejected by the engineering consulting firm's resident engineer.

The reasons for the delays included additional work not included in the original contract (such as additional roadbed preparation), slow mobilization and poor performance by the construction contractor, and abnormal rainfall. Another factor was poor performance on the part of the engineering consulting firm's resident engineer. Because of these delays, the construction contractor submitted a revised work program in March 2002 that projected the completion date of the EN211 road segment to October 15, 2002. USAID/Mozambique later requested that the construction contractor complete its work no later than December 31, 2002. However, USAID/Mozambique's Activity Manager for the EN211 project estimated that the reconstruction work on this road segment might not actually be finished until March or April 2003. At the time of the audit, USAID/Mozambique had not formalized a definitive plan or timeframe for completing the road segment, even though the completion date under the host-country construction contract had expired.

USAID/Mozambique was aware of construction delays on EN211 as early as September 2001. In a trip report for that month, the CTO indicated that contractor mobilization was slow and could delay the completion date. Following are some of the actions USAID/Mozambique reported taking in response to the construction delays on the EN211 road segment.

• In November 2001, USAID/Mozambique reported meeting with officials from ANE and the engineering consulting firm to discuss terminating the construction contract due to slow construction contractor mobilization. According to USAID/Mozambique, those present decided not to terminate the contract because of contractor assurance of imminent mobilization, the fact that there was still ample time to complete the work, and expected additional delays of launching another procurement action.

- Also in November 2001, USAID/Mozambique reported meeting with the engineering consulting firm and construction contractor to impress upon them the emergency nature of the project and to stress that poor procurement planning by the construction contractor was not an acceptable reason for delays in the arrival of construction materials.
- In February 2002, USAID/Mozambique personnel met with officials from the engineering consulting firm to arrange for the replacement of its resident engineer. This replacement, which took effect in April 2002, was deemed necessary due to the resident engineer's weak performance with respect to reporting and overall technical supervision.
- In March 2002, USAID/Mozambique reported meeting with ANE's Chairman to address concerns under the host-country contract. According to USAID/Mozambique, both parties agreed to put pressure on the construction contractor and engineering consulting firm by stressing the need for compliance with work plans.
- In July 2002, USAID/Mozambique reported meeting with the directors of the engineering consulting firm. During the meeting, the Mission Director reiterated the need to complete construction of EN211 by December 31, 2002. According to USAID/Mozambique, assurances were received that this was still possible.

Despite USAID/Mozambique's reported actions, construction problems on this road segment persisted and resulted in substantial delays in the progress of the work, as well as its substandard quality. Such delays meant that, although a temporary functional road has been restored for local residents affected by the floods, those residents may not benefit from a permanent road until March or April 2003, more than six months later than originally planned.

At the conclusion of the audit, USAID/Mozambique had not formalized a definitive plan or timeframe for completing the road segment, even though the completion date under the host-country construction contract had expired. Therefore, we are making the following recommendation.

Recommendation No. 1: We recommend that USAID/Mozambique develop a plan of action to overcome known shortfalls in the reconstruction of the EN211 road segment and include in that plan a definitive timeframe for the timely completion of the road segment.

Evaluations of Contractors' Performance Need to Be Conducted and Documented

USAID/Mozambique did not conduct an annual evaluation of the contractors' performance, nor did it prepare annual contractor performance reports for the direct contracts awarded to two engineering consulting firms in accordance with USAID policy. This requirement, to evaluate and document the performance of the two firms, was overlooked by USAID/Mozambique officials. As a result, vital information on the contractors' performance had not been officially documented. This could result in the future selection of contractors with poor past performance.

According to ADS 202.3.4.1, *Assessing Performance of Contractors and Recipients*, preparing an annual Contractor Performance Report for contracts that have a value of more than \$100,000 and submitting them to the contracting officer is one of the Cognizant Technical Officer's responsibilities for monitoring contractor performance.

USAID/Mozambique awarded direct contracts to two engineering consulting firms to provide design and supervision services for the reconstruction of the road segments financed under the supplemental appropriations funding. The contracts were awarded in October 2000. Both contracts exceeded \$100,000. Based on USAID policy, annual performance evaluations for both firms were due in October 2001. As of September 2002, USAID/Mozambique had not conducted or documented performance evaluations for either of the two firms. USAID/Mozambique officials attributed this omission to the fact that the requirement to evaluate and document the performance of the two firms was overlooked.

Performance evaluation is an important management tool. It documents contractor performance in areas such as quality, cost control, timeliness and customer satisfaction. USAID should use these evaluations to support future award decisions. In the case of the activities audited, such documentation was of particular importance—given USAID/Mozambique's reported dissatisfaction with the performance of one of the two engineering consulting firms. To ensure that the performance, whether good or bad, of these two firms is documented in accordance with USAID policy, we are making the following recommendation.

Recommendation No. 2: We recommend that USAID/Mozambique conduct a current performance evaluation of the two engineering consulting firms contracted to provide design and supervision services for the repair and reconstruction of road segments and bridges funded under the Southern Africa Floods Supplemental Appropriations, and prepare a Contractor Performance Report documenting the results of the evaluations.

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⁶ ADS 202.3.4.1.

Management Comments and Our Evaluation

In its comments to our draft report, USAID/Mozambique provided additional information with regard to a November 2002 request from the Government of Mozambique's Administracao Nacional de Estradas (ANE) for an addendum to the host-country contract under which work on the EN211 road segment was being done. This addendum, which requested additional time and money, was based on additional work under that contract. USAID/Mozambique explained that this requested addendum was an indication that at least a portion of the delays experienced under the host-country contract for reconstruction of the EN211 road segment was due to additional work considered to be legitimate by the ANE and the engineering consulting firm.

USAID/Mozambique also suggested some changes to the text supporting the audit recommendations, but not to the actual recommendations. In fact, USAID/Mozambique indicated that, prior to receiving the draft audit report, the Mission had already taken definitive action to address both of the audit recommendations based on guidance and advice from the audit team. We consider this response to constitute acceptance of, and a management decision for, both recommendations.

With regard to USAID/Mozambique's suggested changes, we agreed with most of them and have incorporated those that we agreed with into this final report. Most of the suggested changes had to do with actions USAID/Mozambique reported taking in response to problems identified during the reconstruction of the EN211 road segment. We incorporated the following elements into the final report.

- Additional work, as evidenced by a variation order, was a contributing factor to delays on the EN211 road segment, as well as on some of the other reconstruction projects;
- A temporary functional road had been restored which provided local residents affected by the floods with access to transportation during the reconstruction of the EN211 road segment;
- USAID/Mozambique held a series of meetings, between November 2001 and July 2002, with officials from ANE, the engineering consulting firm, and the construction contractor to discuss ways of resolving construction problems and delays on the EN211 road segment. In those meetings, USAID/Mozambique reported:
 - discussing the possible termination of the construction contract;
 - impressing upon the engineering consulting firm and the construction contractor the emergency nature of the project and the need for successful completion;

- arranging for the replacement of the resident engineer due to poor performance; and
- putting pressure on the construction contractor and supervisory engineer by stressing the need for compliance with the work plans.

We did not incorporate certain of USAID/Mozambique's comments into our report that we felt were subjective in nature or unverified by our audit work. Such comments included:

- The actions taken by USAID/Mozambique in response to problems regarding the performance of the engineering consulting firm responsible for supervising the reconstruction of the EN211 segment were appropriate;
- In spite of the actions taken it was not possible to avoid the delay; and
- The actions taken by the Mission prevented further delays.

Nevertheless, we considered USAID/Mozambique's comments to be generally responsive to the concerns raised in the draft report and instrumental in developing a fair and accurate audit presentation.

USAID/Mozambique's comments are included verbatim as Appendix II. Attached to those comments was a large quantity of supporting documentation. While we reviewed the attached documents to verify that they provided reasonable support for USAID/Mozambique's comments, we did not consider them to be essential for gaining an understanding of those comments. Therefore, we did not include them in this report.

Scope and Methodology

Scope

We conducted a concurrent performance audit of USAID/Mozambique's monitoring of its road repair and reconstruction activities funded under the Southern Africa Floods Supplemental Appropriations. This audit was conducted in accordance with generally accepted government auditing standards. Audit fieldwork was conducted at USAID/Mozambique in Maputo from August 19 through September 9, 2002. In addition, we conducted site visits to the four road segments to observe progress and attended two regularly scheduled meetings with contractors.

We conducted the audit to determine (1) whether USAID/Mozambique had established plans and milestones to implement and monitor road construction activities financed under the supplemental appropriations, (2) which activities had begun, and (3) whether planned milestones had been achieved. In addition, the audit was conducted to determine whether USAID/Mozambique had established a monitoring system in compliance with ADS 202 and had effectively implemented the system.

The scope of our audit included \$35 million of supplemental appropriation funds that USAID/Mozambique had programmed to rehabilitate and reconstruct roads and bridges damaged by the floods. The \$35 million were divided into three principal budget categories:

	US \$(millions)
Design and Construction Management Services	3.6
Repair and Construction Costs	30.9
Project Management Services	5
Total	35.0

While our audit focused specifically on the repair and reconstruction services, we reviewed data for the other two categories as well. The audit covered the period of August 2000 to the end of our fieldwork on September 9, 2002.

Although we did not set a materiality threshold for this audit objective, we designed our audit to address concerns such as:

- inadequate oversight over reconstruction activities that increase the likelihood of contracting irregularities occurring;
- inaccurate reporting on the status of contract activities;
- lack of awareness of existing problems at the construction site; and
- payments made for services not rendered.

Methodology

In order to accomplish the audit objective, we evaluated management controls and documentation relating to USAID/Mozambique's monitoring of the road repair and reconstruction activities. In order to gain an understanding of the monitoring process, we held discussions with officials from the Mission, the Government of Mozambique, the engineering consulting firms, and the construction contractors

To accomplish the audit objective, we developed an audit program and performed the following tasks:

- Assessed the risk of USAID/Mozambique's system for monitoring the road repair and reconstruction to determine the likelihood of significant misuse of resources, failure to achieve program objectives, and non-compliance with laws and regulations, as well as management policies.
- Assessed the effectiveness of USAID/Mozambique's management controls to determine whether the controls were logical, reasonably complete, and likely to deter or detect possible misuse, failure, or errors. For example, we assessed the adequacy of USAID/Mozambique's controls to determine whether the Mission had (1) developed a monitoring plan for tracking inputs and outputs; (2) established and maintained a separate workfile for documents and correspondence related to the contracts; (3) conducted site visits to evaluate progress; (4) documented significant actions, meetings, or conversations with the contractors; (5) monitored funds closely and on a regular basis; and (6) ensured the accuracy of the reports submitted by the contractors.
- Reviewed the financial data, specifically, vouchers submitted by the construction contractors, to determine whether the USAID/Mozambique had reviewed them for accuracy and timely payment.
- Conducted site visits to the four road segments and the bridge to observe progress and interview engineering consulting firms and construction contractors.
- Gained an understanding of USAID/Mozambique's performance monitoring of road repair and reconstruction by reviewing and analyzing applicable documentation such as, but not limited to, direct contracts, host country contracts, workplans, trip reports, monthly progress reports, minutes of meetings, and financial reports.
- Reviewed financial audit reports of the engineering consulting firms and construction contractors that provided services for the road repair and reconstruction activities.

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Management Comments

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT USAID MISSION TO MOZAMBIQUE

MEMORANDUM

To : Jay Rollins

Regional Inspector General for Audit, USAID/Pretoria

From : David Hess /s/

Acting Mission Director, USAID/Mozambique

Date: December 18, 2002

Reference : USAID/600/02/em

Subject : Audit of USAID/Mozambique's Performance Monitoring of Road

Repair and Reconstruction funded by the Southern Africa Floods

Supplemental Appropriations.

Thank you for your memorandum of October 31, 2002 and for forwarding the subject draft audit report. The report highlights instances of inaction on one of the road segments by the Mission and makes two recommendations to USAID/ Mozambique.

We attach, for your perusal, information and inclusion in the final audit report, the Mission's Management Comments on the above draft audit report. Our suggested changes concern the text supporting the recommendations, and not the actual recommendations. In fact, prior to receipt of the draft report the Mission had taken definitive action to address both of the recommendations based on the guidance and advice of the audit team.

The Mission would also like to clarify that it shared with the auditors all relevant information, including verbal reports on meetings that took place for which no minutes were prepared. Finally, the Mission wishes to report that on November 27, it received a letter from the road authority, ANE, requesting Addendum No. 1 to the Save contract based on approval additional work under that contract. This means that at least a portion

of the delays experienced under this contract are due to additional works considered to be legitimate by ANE and the engineer (see attachment A).

In this regard, the following edits are intended to clarify some of the points made in the draft report and offer what we consider to be language that better characterizes the Mission's efforts to actively monitor the project.

- 1. Page 3, Summary of Results, para 4 would be replaced with: "The Save Bridge and three of the four road segments will be completed within the established time and budget limitations, and at the required quality standards. In spite of the Mission's action in response to problems identified with contractor performance on one road segment, however, reconstruction work on that segment was substantially delayed and the quality of the work performed was substandard. Consequently, although a functional road (see attachment B) has been restored for local residents affected by the floods, residents will not benefit from a fully paved road segment as soon as anticipated (see pages 8 and 9). The Mission is ensuring, however, that the final product for EN211 will meet the contract specifications."
- 2. Page 6, para 3 would be replaced with: "Overall, the activities have taken longer than originally planned. For example, the planned completion date of all road and bridge activities under the Supplemental Appropriations funding was September 30, 2002. As of September 9, 2002, 82.6 kilometers (40 percent) of the 206 kilometers of roads planned to be rebuilt were complete up to the surfacing (see Appendix III for the status of each road segment). The delays are due to (a) additional work on one of the road segments (see attachment C variation order 1 and 2 for Limpopo Contract) that resulted in a road that is built to a standard that extends the design life of the road from three to fifteen years, and (b) additional work and poor construction contractor performance on the EN 211 road segment (see attachment A Draft Addendum No.1 to the Save contract and attachment D minutes of progress meetings No.1 to 13). The Mission did not conduct annual performance reviews, as required by USAID, of the two engineering consultant firms contracted with Supplemental Appropriations funding. These issues are fully discussed below."
- 3. Page 8, para 1 would be replaced with the following: "USAID's policy encourages early action in response to problems identified through program monitoring. The actions taken by USAID/Mozambique in response to problems regarding the performance of the engineering consultant responsible for supervising the reconstruction of the EN211 segment were appropriate. In spite of the actions taken it was not possible to avoid the delay. Indeed, the actions taken by the Mission prevented further delays. The additional work (see attachment A) and the systematic failure by the construction contractor in complying with the work program is responsible for multiple delays in the rehabilitation of 47 kilometers of the damaged road segment as well as substandard quality of work." (see attachment D minutes of progress meeting No.1 to 13)

- 4. <u>Page 8</u>, <u>paras 3-4 would be replaced in their entirety and read as follows</u>: "The following points serve to illustrate the Mission's efforts to address problems identified with contractor performance on the EN211:
 - --From June 2001 (date of Contract signature) to March 2002 it was expected that contractor mobilization would follow shortly after contract signature. By November the contractor had not mobilized for the EN211 segment. In November 2001, the CTO met with the Activity Manager, the Engineer Black and Veatch and the ANE representative to discuss the option of terminating the contract with the construction company. After a long discussion it was decided by those present at the meeting that it would not be productive to terminate the contract. The option of contract termination was not pursued because of contractor assurance of imminent mobilization, the fact that there was still ample time to complete the work, and expected additional delays of launching another procurement action.
 - --- On November 7, 2001, the Deputy Mission Director and the Contracting Officer visited the site and attended progress meeting No.4 following the Activity Manager trip report made in October 2001 indicating that the work on the EN211 road was progressing slower than planned and could impact the completion date. The Deputy Mission Director and Contracting Officer impressed upon the engineering consultant and the construction contractor the emergency nature of the project and the need for successful completion by December 31, 2002. The Contracting Officer also stressed that poor procurement planning by the construction contractor would not be an acceptable excuse for delays in the arrival of construction materials at the site (see attachment E Trip report dated November 9, 2001).
 - ---On February 20, 2002, the CTO and the activity manager met the Black & Veatch project manager and project director at USAID's office and decided that the resident engineer did not possess the required attributes for the task. The slow progress of the construction contractor on EN211 road from November 2001 to February 2002 was due to the rainy season and late mobilization (lack of equipment on site). Consequently, the activities of the supervision team during this period of time were very limited. Even in a reduced activity environment, the performance of the resident engineer was considered weak, with respect to the preparation of interim payment certificates and overall technical supervision. Given the acceleration of construction activity expected with the beginning of the dry season, it was considered appropriate to replace the resident engineer with a stronger candidate (see attachment F Resident Engineer replacement). The effective date for this transition was established as April 1, 2002.
 - --- On March 26, 2002, a meeting was held between the CTO, the activity manager and the ANE's Chairman of the Board of Directors to address the concerns under the ER: BASE program, specifically, the Save host country contract. ANE and USAID agreed that the delay on EN211 was due to weak performance by the construction contractor. The ANE Chairman and USAID agreed to put pressure on the construction contractor and the supervisory engineer by stressing the need for

compliance with the work plans.

- --- On April 1, 2002, the new resident engineer for EN211 arrived on site. By April 2002, timely completion of the work was still expected by all parties involved (see attachment F Resident engineer replacement).
- --- On April 2, 2002, the CTO's memorandum to the Contracting Officer addresses the B&V performance under ER: BASE in general. In the draft audit report this memorandum is incorrectly dated as June 2002 and it seems to be grounds for recommendation No.1. However, the technical issues raised in the memorandum concerned the Limpopo work only. The only mention of the Save contract related to informing the Contracting Officer of the fact that the resident engineer had been replaced on April 1, 2002 (see attachment G Memorandum dated April 2, 2002).
- --- On July 31, 2002, the Mission Director, the Contracting Officer, and the Activity Manager met with the B&V Directors and addressed the problems of the Save host country contract. The Mission Director reiterated the need to complete construction of EN211 by December 31, 2002, and received assurances that this was still possible."
- 5. Page 9, paras 1-2 would be replaced by the following: "In spite of the Mission's actions as detailed above, construction problems on this road segment persisted and resulted in substantial delays in the progress of the work, as well as its substandard quality. For example, the original completion date for the road segment was August 19, 2002. As of September 9, 2002, none of the 47 kilometers of road had been completed. Although the construction contractor had completed the base level of 13 of the 47 kilometers, the surfacing of the road had not been started. Also, the quality of the base work was questionable and had not been fully accepted by the engineering consultant. According to the CTO, the road reconstruction work on this road segment may not be finished until March or April 2003. Such a delay will mean that although a functional road has been restored for local residents affected by the floods, residents will not benefit from a fully paved road segment as soon as anticipated. The Mission ensures however, that the final product for EN211 will meet the contract specifications. The Mission also ensures that every payment authorized under the Host Country Contract is only for work done as accepted by the engineering consultant."

We would greatly appreciate your taking Mission Management's Comments into consideration as you prepare the final report.

Status of Road and Bridge Repair and Reconstruction Projects

Table I Status of Completed Road Segments and Bridge

Road	Kilometers	Kilometers	Original	Revised
Segment/	to be	Completed	Planned	Planned
Project	Repaired	at Audit	Completion	Completion
EN205	25	6	February 2002	October 2002
EN208	60	30	August 2002	December 2002
EN1	74	46.6	October 2002	December 2002
EN211	47	0	August 2002	March/April 2003
Save River	N/A	N/A	June 2002	October 2002
Bridge				

EN205 Road Segment - At the time of our site visit, six of the 25 kilometers being repaired and reconstructed were complete.⁷ The original planned completion date for this road segment was February 20, 2002. Two variation orders were submitted, which changed the pavement design life from 3 to 15 years and extended the planned completion date to October 21, 2002. Progress on this road segment was going well, and completion was expected by the revised completion date.

EN208 Road Segment - At the time of our site visit, 30 of the 60 kilometers being repaired and reconstructed were complete. The original planned completion date for this road segment was August 19, 2002. One variation order was submitted, which changed the completion date to December 20, 2002. Progress on this road segment was going well, and completion was expected by the revised completion date.

EN1 Road Segment - At the time of our site visit, 46.6 of the 74 kilometers being repaired and reconstructed were complete. The original planned completion date for this road segment was October 21, 2002. The revised planned completion date was December 13, 2002. Progress on this road segment was going well, and completion was expected by the revised completion date.

EN211 Road Segment - At the time of our site visit, the original planned completion date of August 19, 2002 had passed, and none of the 47 kilometers of road to be repaired and reconstructed had been completed. Although the construction contractor had completed the base level of 13 of the 47 kilometers, the surfacing of the road had not been started. Also, the quality of

⁷The low number of kilometers reconstructed on this road was due to the sequence chosen by the contractor in which to construct the road.

the base work was questionable and most had been rejected by the engineering consulting firm. According to the CTO, the road reconstruction work on this road segment may not be finished until March or April 2003. Such a delay will mean that local residents affected by the floods will not be able to access the road as early as anticipated.

Save River Bridge - The original planned completion date was June 20, 2002. Despite earlier delays and slow progress, completion was expected by the revised completion date of October 2002.

Table II
Financial Data for the Repair and Construction Costs as of August 31, 2002

Road Segment/	Total Contract	USAID's Portion	Amount Expended
Project	Amount	(94%)	by USAID
EN205	\$5,632	\$5,294	\$2,817
EN208	6,592	6,197	3,540
EN1	8,671	8,151	3,401
EN211	7,295	6,858	2,382
Save Bridge	2,445	2,299	981
Total	\$30,665	\$28,799	\$13,121