

MAHALLA 824 SEWER COLLAPSE PROJECT
UNDER THE COMMANDER'S EMERGENCY RESPONSE PROGRAM
BAGHDAD, IRAQ



SIGIR PA-07-112
JANUARY 16, 2008



SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

January 16, 2008

MEMORANDUM FOR COMMANDING GENERAL, MULTI-NATIONAL FORCES-
IRAQ,
COMMANDER, JOINT CONTRACTING COMMAND-
IRAQ/AFGHANISTAN
COMMANDER, GULF REGION DIVISION, U.S. ARMY
CORPS OF ENGINEERS
DIRECTOR, IRAQ TRANSITION ASSISTANCE OFFICE

SUBJECT: Report on the Rehabilitation of the Mahalla 824 Sewer Collapse Project in
the Doura governorate of Baghdad, Iraq (Report Number SIGIR PA-07-112)

The Office of the Special Inspector General for Iraq Reconstruction is assessing projects funded under the Commander's Emergency Response Program to provide real-time relief and reconstruction information to interested parties to enable appropriate action, when warranted.

We are providing this report for your information and use. It addresses the current status of the Mahalla 824 Sewer Collapse Project in the Doura governorate of Baghdad, Iraq. The assessment was made to determine the progress of this ongoing project and whether the project is likely to remain operational in the future.

This report does not contain any negative findings or recommendations for corrective action. As a result, management comments are not required.

We appreciate the courtesies extended to our staff. If you have any questions please contact Mr. Brian Flynn at brian.flynn@iraq.centcom.mil or at DSN 318-343-9244. For public or congressional queries concerning this report, please contact SIGIR Congressional and Public Affairs at publicaffairs@sigir.mil or at (703) 428-1100.

Stuart W. Bowen, Jr.
Inspector General

Special Inspector General for Iraq Reconstruction

SIGIR PA-07-112

January 16, 2008

Mahalla 824 Sewer Collapse Project Under the Commander's Emergency Response Program Baghdad, Iraq

Synopsis

Introduction. The Office of the Special Inspector General for Iraq Reconstruction is assessing projects funded under the Commander's Emergency Response Program to provide real-time relief and reconstruction information to interested parties to enable appropriate action, when warranted.

Project Assessment Objectives. The objective of this project assessment was to provide real-time information about relief and reconstruction projects to interested parties to enable appropriate action, when warranted. We conducted this limited scope assessment in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency. The assessment team included an engineer/inspector and an auditor/inspector. Specifically, we determined whether:

1. Project components were adequately designed prior to construction or installation;
2. Construction or rehabilitation met the standards of the design;
3. The contractor's quality control plan and the United States government's quality assurance program were adequate;
4. Project sustainability was addressed; and
5. Project results were consistent with original objectives.

The objective of the Mahalla 824 Sewer Collapse Project was to tear down the existing sanitary sewer and replace it with a new sanitary sewer. In addition, the standing sewage was to be removed from the road, and a new storm drain was to be constructed.

Conclusions. The assessment determined that:

1. The contract did not require the contractor to provide a design. The existing design drawing provided typical details for the main and subsidiary sewer pipes. The contract required the contractor to replace the failed/collapsed and old, existing pipes. The new pipes were to match the existing diameter and slope of the current pipes and manholes. Therefore, the design drawing was adequate.
2. The construction appeared to be consistent with the intent of the project. Security conditions prevented the assessment team from visiting the project site and observing any on-site construction. Thus, our conclusions are based on a review of the contract files, including quality assurance reports and progress photos, as well as interviews with the United States Army Corps of Engineers staff, and aerial imagery. The United States Army Corps of Engineers Iraqi quality assurance representative identified and documented construction deficiencies as they occurred.

3. The contractor did not provide a quality control plan to effectively guide the contractor's quality management program. The contractor did not submit quality control reports, and the United States Army Corps of Engineers did not enforce requirements that the contractor to provide quality control reports. The quality control reports were to contain information such as work accomplished each day with the location, activity and by whom, test results, deficiencies and corrective actions, labor distribution, equipment utilized, and material received on site. In addition, the contractor did not maintain deficiency logs to document problems noted with construction activities.

The government quality assurance program was not effective in monitoring the contractor's quality control program for the Mahalla 824 sewer collapse project. However, the quality assurance activities were sufficiently documented. This condition occurred due to the efforts of the Iraqi quality assurance representative during the course of the project.

4. A review of the contract file disclosed no sustainability issues associated with the project. The contract did not require specialized equipment or maintenance manuals.
5. If the United States Army Corps of Engineers continues its current level of oversight, the Mahalla 824 Sewer Collapse Project, when completed, should meet and be consistent with the original contract objectives. The completed project should result in a functioning sewer line in the Doura governorate.

Recommendations and Management Comments. This report does not contain any negative findings or recommendations for corrective action. Therefore, management comments were not required. However, the United States Army Corps of Engineers, Gulf Region Central commented noting that the contract did not require the contractor to provide a quality control plan and that the government quality assurance plan was effective in monitoring contractor quality control because of the efforts of the Iraqi quality assurance representative.

Evaluation of Management Comments. We agree that the contract did not require the contractor to provide a quality control plan and that the Iraqi quality assurance representative of the United States Army Corps of Engineers was effective. However, the Special Inspector General for Iraq Reconstruction was informed by representatives of the United States Army Corps of Engineers that the Commander's Emergency Response Program projects overseen by the United States Army Corps of Engineers are to follow United States Army Corps of Engineers regulations for construction projects. Those regulations require that the contractor provide a quality control plan and quality control daily reports.

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Introduction

Objective of the Project Assessment

The objective of this project assessment was to provide real-time relief and reconstruction project information to interested parties to enable appropriate action, when warranted. We conducted this limited scope assessment in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency. The assessment team included an engineer/inspector and an auditor/inspector. Specifically, we determined whether:

1. Project components were adequately designed prior to construction or installation;
2. Construction or rehabilitation met the standards of the design;
3. The contractor's quality control (CQC) plan and the U.S. government's quality assurance (QA) program were adequate;
4. Sustainability was addressed; and
5. Project results were consistent with original objectives.

Pre-Site Assessment Background

Contract, Costs and Payments

Contract W917BG-05-C-0191 was awarded on 24 September 2005 to a local contractor. The contract was a firm-fixed-fee contract for the net amount of \$629,300. The contract, W917BG-05-C-0191, contained one modification.

Modification DFIWAT-06-M-0002 was awarded on 11 July 2006. The modification was a firm-fixed-fee contract using Development Funds for Iraq for the amount of \$95,050. The modification increased the diameter of sewer lines to be installed.

The total contract value was increased to \$724,350¹. Based on information provided by the United States Army Corps of Engineers (USACE), the contractor received the first Notice to Proceed (NTP) on 29 November 2005. The November 2005 NTP was rescinded, and a new NTP was issued on 27 June 2006. Then a final NTP was issued for the Mahalla 824 Sewer project on 12 July 2006.

Project Objective

The objective of the Mahalla 824 Sewer Collapse Project was to tear down the existing sanitary sewer and replace it with a new sanitary sewer. In addition, the standing sewage was to be removed from the road, and a new storm drain was to be constructed in order to provide a cleaner environment for the residents of the Doura Governorate.

¹ The Commander's Emergency Response Program contributed \$629,300, and the Development Funds for Iraq contributed \$95,050 for the Mahalla 824 Sewer project; therefore, the total contract value for the Mahalla 824 Sewer project was \$724,350.

Description of the Facility (Pre-Construction)

The description of the facility (pre-construction) was based on information obtained from the contract and the USACE project file. The Mahalla 824 Sewer Collapse Project is located in the Doura governorate of Baghdad, Iraq. The Doura area has been neglected for decades, and the collapsed sewer main created a huge pond of standing sewage. Figure 1 illustrates the Mahalla 824 Sewer project area, and Site Photos 1 and 2 show the pond of sewage.

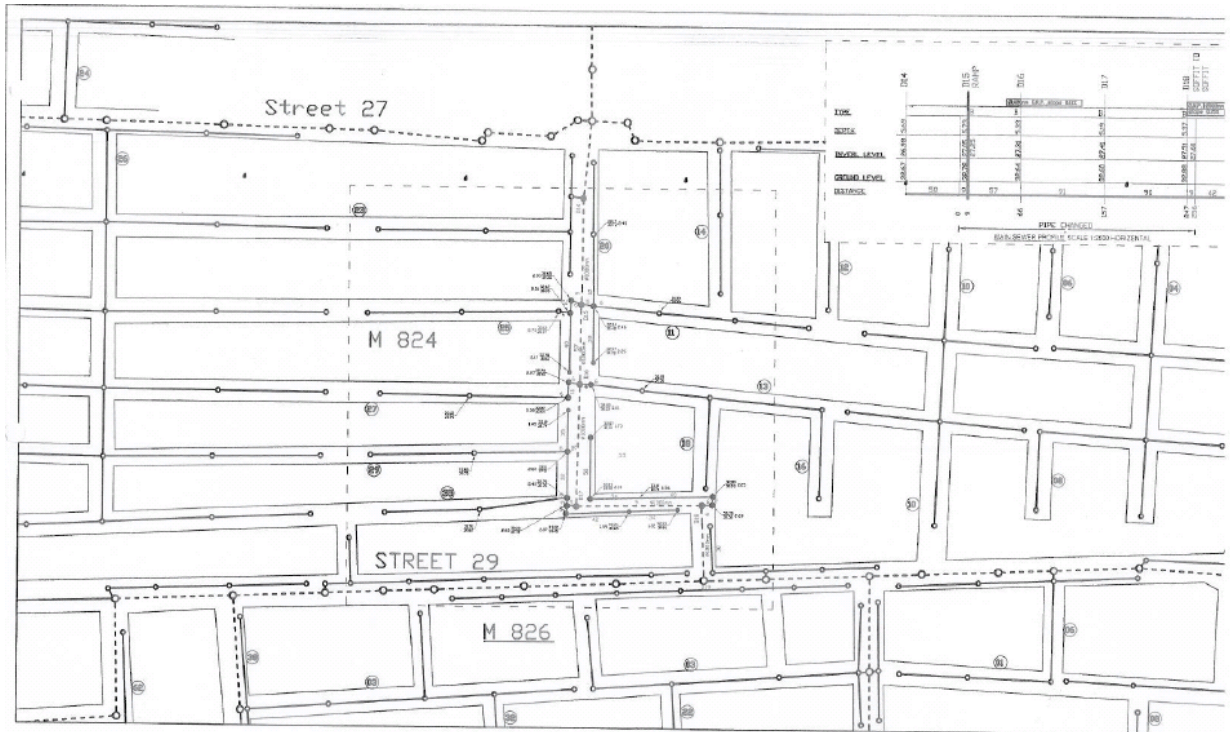


Figure 1: Mahalla 824 Sewer network layout (Courtesy of USACE)



Site Photo 1. Sewage pond (Photo courtesy of USACE)



Site Photo 2. Sewage pond (Photo courtesy of USACE)

Scope of Work of the Contract

Based on the contract Statement of Work (SOW), the major tasks for the Mahalla 824 Sewer Collapse Project included:

- demolishing and removing the existing pavement in trenching area
- removing and replacing contaminated soil from the sewage spill below pipe grade
- place bedding material; install new sewer line, and backfill trench
- removing and backfilling four existing manholes
- constructing four new manholes using reinforced concrete that has been surface treated
- provide and install four circular manhole covers and frames.
- repave area of pavement removed

Current Project Design and Specifications

The contract did not require the contractor to provide a design. The existing design drawing (Figure 2) provided typical details for the main and subsidiary sewer pipes.

The contract included a SOW or quantifying the material requirements on the project. The SOW consisted of requirements and quantities:

- supply materials for sewer line (1000 millimeter diameter sewer line)
- demolishing and removing the existing pavement in trenching area
- removing and replacing contaminated soil from the sewage spill below pipe grade
- place bedding material (broken pebble and 12% clean soil bedding and compact to 90%) in trench
- install new sewer line, and backfill trench

- removing to a 5-6 meter depth and backfilling the four existing manholes
- constructing four new manholes using reinforced concrete that has been surface treated
- provide and install four circular manhole covers (55 centimeters in diameter) and frames
- repave area of pavement removed

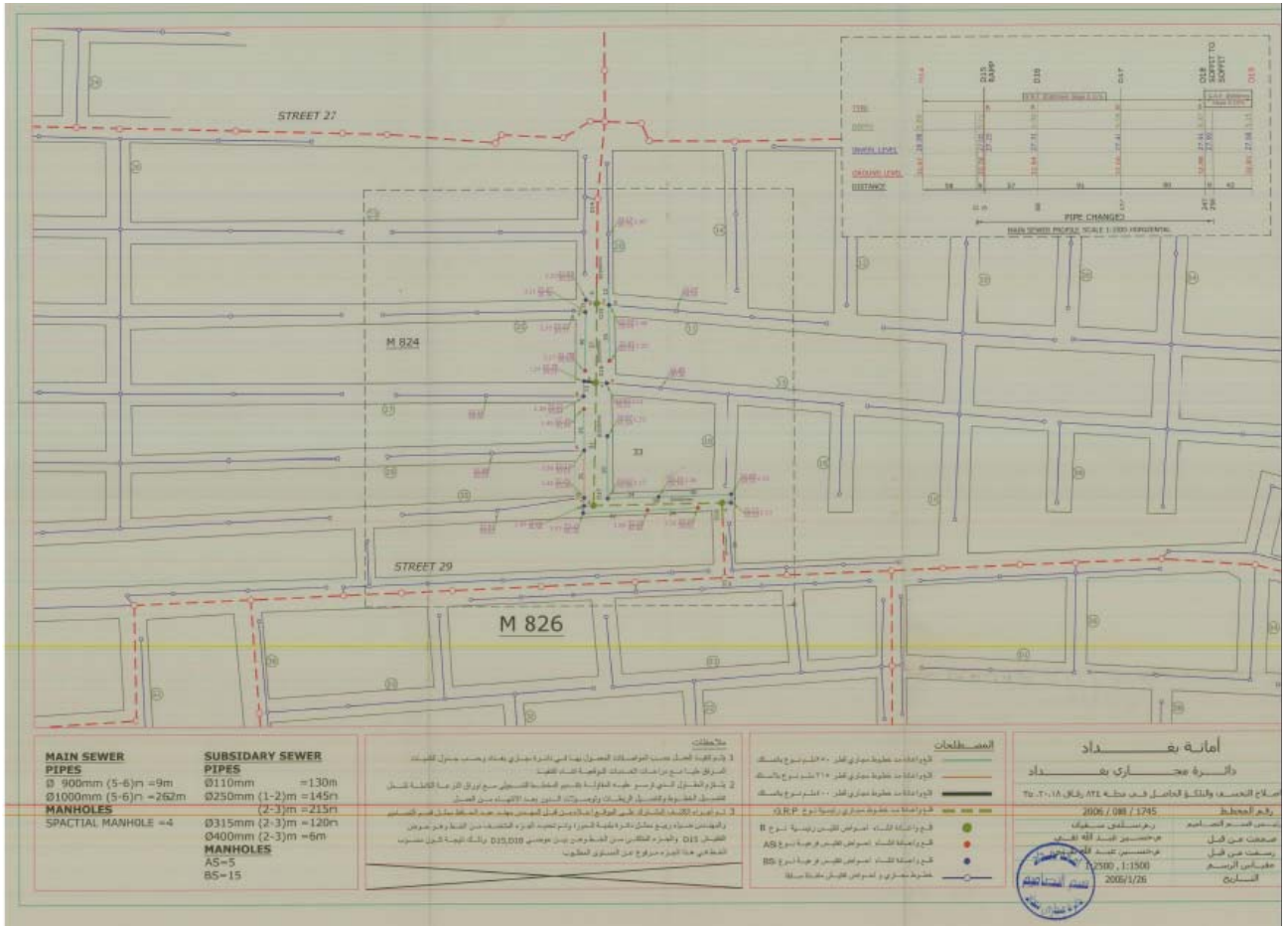


Figure 2: Mahalla 824 Sewer network and profile (Courtesy of USACE)

Site Assessment

At the time of our assessment, official security representatives could not escort the assessment team to the project site because of increased insurgent activity in the area. Therefore, our project assessment relied solely on information obtained from the contract files, emails with the USACE and aerial imagery (Aerial Image 1). Information contained in the contract files included the Contract, Contract documentation, contract modifications, Statements of Work, the design package (drawings and specifications), quality control reports, quality assurance reports, construction progress photos, safety plan, and invoices.

In assessing the Mahalla 824 Sewer Collapse Project, we focused on the completed installation of the new sewer pipes. According to the USACE, the project was approximately 84% complete as of 1 November 2007.



Aerial Image 1. Aerial overview denoting provided geo-coordinates of the Mahalla 824 Sewer.

Work Completed

According to the USACE, the contractor had removed the existing pavement in the areas to be trenched and removed and replaced the contaminated soil from the sewage spill below the pipe grade. Then the contractor placed bedding material in the trench, installed the new sewer line, and backfilled the trench. In addition, the four existing manholes were removed (Site Photo 3), and four new manholes were constructed (Site Photo 4).



Site Photo 3. Collapsed existing manhole (Photo courtesy of USACE)



Site Photo 4. Constructed new manhole (Photo courtesy of USACE)

Work in Progress

At the time of the assessment, the USACE stated that the contractor was completing the road. The contractor had filled in the trench, compacted the base material, and was in the pre-stages of paving the road (Site Photos 5 and 6).



Site Photo 5. Preparing base for asphalt concrete pavement (Photo courtesy of USACE)



Site Photo 6. Preparing base for asphalt concrete pavement (Photo courtesy of USACE)

Work Pending

The contractor still needs to complete the paving for the Mahalla 824 Sewer Project.

Project Quality Management

Contractor's Quality Control Program

Department of the Army Engineering Regulation (ER) 1180-1-6, dated 30 September 1995, provides general policy and guidance for establishing quality management procedures in the execution of construction contracts. According to ER 1180-1-6, "...obtaining quality construction is a combined responsibility of the construction contractor and the government."

We reviewed the contract files to determine the adequacy of the contractor's quality control (QC) reports. According to the documentation provided to the assessment team by the USACE, no QC reports were completed from 13 May 2006 (Figure 3) until 21 October 2007 (Figure 4). The USACE did not enforce the contractor to provide QC reports, which were supposed to contain information such as work accomplished each day with the location, activity and by whom, test results, deficiencies and corrective actions, labor distribution, equipment utilized, and material received on site. In addition, the contractor did not maintain deficiency logs to document problems noted with construction activities.

The contractor did not submit a QC plan. The QC plan should address: the QC organization, document control, design control, procurement control, control of subcontractors, special processes, inspection and testing, nonconforming items, and records, as addressed in Engineering Regulation 1180-1-6 (*Construction Quality Management*) or Project and Contracting Office (PCO) Standard Operating Procedure CN-103 (*Contractor Construction Quality Control Plan*). In addition, the contractor did not provide any progress photographs or test results for any of the work done for the Mahalla 824 Sewer project.

CONTRACTORS QUALITY CONTROL REPORT (QCR) DAILY LOG OF CONSTRUCTION - IRAQ		REPORT NUMBER 0	Page 1 of 1
		DATE 13 May 2006 - Saturday	
PROJECT WS/CERP5/Mahala 824 Sewer Collapse Proj		CONTRACT NUMBER W917BG-05-C-0191 NA	
CONTRACTOR Noor Al-Qaim Company	WEATHER Weather Not Entered		
QC NARRATIVES No QC Narratives were reported today			
PREP/INITIAL DATES (Preparatory and initial dates held and advance notice) No preparatory or initial inspections were held today			
ACTIVITY START/FINISH No activities were started or finished today			
QC REQUIREMENTS No QC requirements were completed today			
QA/QC PUNCH LIST (Describe QC Punch List items issued, Report QC and QA Punch List items corrected) No QC Punch List items were issued today No Punch List items were corrected today			
CONTRACTORS ON SITE (Report first and/or last day contractors were on site) No contractors had their first or last day on site today			
LABOR HOURS No labor hours were Reported today Total hours worked to date: 0.0			
EQUIPMENT HOURS No equipment hours were Reported today Total operating hours to date: 0.0			
ACCIDENT REPORTING (Describe accidents) No accidents reported today			
CONTRACTOR CERTIFICATION		On behalf of the contractor, I certify that this Report is complete and correct and all equipment and material used and work performed during this Reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.	
QC REPRESENTATIVE'S SIGNATURE	DATE	SUPERINTENDENT'S INITIALS	DATE

Figure 3. First QC daily report (Courtesy of USACE)

CONTRACTORS QUALITY CONTROL REPORT (QCR) DAILY LOG OF CONSTRUCTION - IRAQ		REPORT NUMBER 463	Page 1 of 1
PROJECT WS/CERP5/Mahala 824 Sewer Collapse Proj		DATE 21 Oct 2007 - Sunday	
CONTRACTOR Noor Al-Qaim Company		CONTRACT NUMBER W917BG-05-C-0191 NA	
		WEATHER Weather Not Entered	
QC NARRATIVES No QC Narratives were reported today			
PREP/INITIAL DATES (Preparatory and initial dates held and advance notice) No preparatory or initial inspections were held today			
ACTIVITY START/FINISH No activities were started or finished today			
QC REQUIREMENTS No QC requirements were completed today			
QA/QC PUNCH LIST (Describe QC Punch List items issued, Report QC and QA Punch List items corrected) No QC Punch List items were issued today No Punch List items were corrected today			
CONTRACTORS ON SITE (Report first and/or last day contractors were on site) No contractors had their first or last day on site today			
LABOR HOURS No labor hours were Reported today Total hours worked to date: 0.0			
EQUIPMENT HOURS No equipment hours were Reported today Total operating hours to date: 0.0			
ACCIDENT REPORTING (Describe accidents) No accidents reported today			
CONTRACTOR CERTIFICATION		On behalf of the contractor, I certify that this Report is complete and correct and all equipment and material used and work performed during this Reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.	
QC REPRESENTATIVE'S SIGNATURE	DATE	SUPERINTENDENT'S INITIALS	DATE

Figure 4. Last QC daily report (Courtesy of USACE)

Government Quality Assurance

USACE ER 1110-1-12 and the PCO Standard Operating Procedure (SOP) CN-100 specified requirements for a government QA program. Specifically, PCO SOP CN-100 provides guidance for the USACE's Gulf Region Division (GRD) staffs to "...ascertain if the contractor QC system is functioning and the specified level of construction quality is being attained." ER 1110-1-12 and PCO SOP CN-100 specify requirements for a government QA program. The USACE Iraqi quality assurance representative (QAR) maintained daily QA reports that documented any deficiencies noted at the site. Based on our review, we found the Iraqi QAR's reports to be sufficiently complete, accurate, and timely. In addition to containing project specific information to document construction progress and highlight deficiencies, the Iraqi QAR also supplemented them with detailed notes of insurgent activities. The Iraqi QAR was on site and managed the Mahalla 824 Sewer Project, and ensured that potential construction deficiencies were detected, evaluated, and corrected.

The government QA program was not effective in monitoring the CQC program for the Mahalla 824 Sewer collapse project. However, QA activities were sufficiently documented as a result of the efforts of the Iraqi QAR during the course of the project.

Project Sustainability

The contract stated that the "supplier shall provide the facility with a certified operational and maintenance manual." The operations and maintenance manual was to include maintenance instructions, drawings, specifications, and a list of spare parts required to maintain the equipment. A review of the contract file disclosed no sustainability issues associated with the project. There was no specialized equipment provided by the contract, nor was there a need for any maintenance manuals.

Warranties

The contract states that the contractor warrants shall continue for a one year period from the date of the final acceptance. If the government takes possession before the final acceptance, then the warranty continues for one year after the date of possession.

Conclusions

We reached the following conclusions for assessment objectives 1, 2, 3, 4, and 5. Appendix A provides details pertaining to Scope and Methodology and limitations of this project assessment due to the security conditions.

1. **Determine whether project components were adequately designed prior to construction or installation.**

The contract did not require the contractor to provide a design. The existing design drawing provided typical details for the main and subsidiary sewer pipes. The contract required the contractor to replace the failed/collapsed and old, existing pipes. The new pipes were to match the existing diameter and slope of the current pipes and manholes. Therefore, the design drawing was adequate.

2. Determine whether construction met the standards of the design.

The construction appeared to be consistent with the intent of the project. Security conditions prevented the assessment team from visiting the project site and observing any on-site construction. Thus, our conclusions are based on a review of the contract files, including quality assurance reports and progress photos, as well as interviews with the USACE staff, and aerial imagery. The USACE Iraqi QAR identified and documented construction deficiencies.

3. Determine whether the contractor's quality control plan and the government's quality assurance program were adequate.

The contractor did not provide a quality control plan to effectively guide the contractor's quality management program. The contractor did not submit QC reports, and the USACE did not enforce the contractor to provide QC reports. The QC reports were to contain information such as work accomplished each day with the location, activity and by whom, test results, deficiencies and corrective actions, labor distribution, equipment utilized, and material received on site. In addition, the contractor did not maintain deficiency logs to document problems noted with construction activities.

The government quality assurance program was not effective in monitoring the contractor's quality control program. The Iraqi QAR ensured that the deficiencies cited during QA inspections were corrected. The QAR also maintained daily QA reports containing project-specific information to document construction progress and highlight deficiencies. The QAR also supplemented the daily reports with detailed notes of insurgent activities. The USACE Iraqi QAR did not maintain a QA deficiency log.

4. Determine if project sustainability was addressed.

A review of the contract file disclosed no sustainability issues associated with the project. There was no specialized equipment provided by the contract, nor was there a need for any maintenance manuals.

5. Determine whether project results were consistent with original objectives.

If the current level of oversight continues by the USACE, the Mahalla 824 Sewer Collapse Project when completed should meet and be consistent with the original contract objectives. The completed project should result in a functioning sewer line in the Doura Governorate.

Recommendations and Management Comments

This report does not contain any negative findings or recommendations for corrective action. Therefore, management comments were not required. However, Gulf Region Central of USACE commented noting that the contract did not require the contractor to provide a quality control plan and that the government quality assurance plan was effective in monitoring contractor quality control because of the efforts of the Iraqi quality assurance representative.

Evaluation of Management Comments

SIGIR agrees that the contract did not require the contractor to provide a quality control plan and that the USACE Iraqi quality assurance representative was effective. However, SIGIR was informed by USACE representatives that CERP projects overseen by USACE are to follow USACE regulations for construction projects. Those regulations require that the contractor provide a quality control plan and quality control daily reports.

Appendix A. Scope and Methodology

We performed this project assessment from September through December 2007 in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency. The assessment team included an engineer/inspector and an auditor/inspector.

In performing this Project Assessment we:

- Reviewed contract documentation to include the following: Contract, Contract documentation, contract modifications, and Statements of Work;
- Reviewed the design package (drawings and specifications), quality control reports, quality assurance reports, construction progress photos, safety plan invoices, and aerial imagery;
- Conducted a briefing with the USACE Gulf Region Central on 10 September 2007; and
- Due to increased insurgent activity in the Doura district of Baghdad, both private security contractors and the U. S. Army denied the team's requests for escorts to the Mahalla 824 Sewer Project. Consequently, the assessment team was unable to perform a site assessment.

Appendix B. Acronyms

CQC	Contractor Quality Control
ER	Engineering Regulation
GRD	Gulf Region Division (of the United States Army Corps of Engineers)
NTP	Notice To Proceed
PCO	Project and Contracting Office
QAR	Quality Assurance Representative
QA	Quality Assurance
QC	Quality Control
SOP	Standard Operating Procedure
SOW	Statement of Work
USACE	United States Army Corps of Engineers

Appendix C. Report Distribution

Department of State

Secretary of State

Senior Advisor to the Secretary and Coordinator for Iraq

Director of U.S. Foreign Assistance/Administrator, U.S. Agency for
International Development

Director, Office of Iraq Reconstruction

Assistant Secretary for Resource Management/Chief Financial Officer,
Bureau of Resource Management

U.S. Ambassador to Iraq

Director, Iraq Transition Assistance Office

Mission Director-Iraq, U.S. Agency for International Development

Inspector General, Department of State

Department of Defense

Secretary of Defense

Deputy Secretary of Defense

Under Secretary of Defense (Comptroller)/Chief Financial Officer

Deputy Chief Financial Officer

Deputy Comptroller (Program/Budget)

Deputy Assistant Secretary of Defense-Middle East, Office of Policy/International
Security Affairs

Inspector General, Department of Defense

Director, Defense Contract Audit Agency

Director, Defense Finance and Accounting Service

Director, Defense Contract Management Agency

Department of the Army

Assistant Secretary of the Army for Acquisition, Logistics, and Technology

Principal Deputy to the Assistant Secretary of the Army for Acquisition,
Logistics, and Technology

Deputy Assistant Secretary of the Army (Policy and Procurement)

Commanding General, Joint Contracting Command-Iraq/Afghanistan

Assistant Secretary of the Army for Financial Management and Comptroller

Chief of Engineers and Commander, U.S. Army Corps of Engineers

Commanding General, Gulf Region Division

Chief Financial Officer, U.S. Army Corps of Engineers

Auditor General of the Army

U.S. Central Command

Commanding General, Multi-National Force-Iraq

Commanding General, Multi-National Corps-Iraq

Commanding General, Multi-National Security Transition Command-Iraq

Commander, Joint Area Support Group-Central

Other Federal Government Organizations

Director, Office of Management and Budget
Comptroller General of the United States
Inspector General, Department of the Treasury
Inspector General, Department of Commerce
Inspector General, Department of Health and Human Services
Inspector General, U.S. Agency for International Development
President, Overseas Private Investment Corporation
President, U.S. Institute for Peace

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

U.S. Senate

Senate Committee on Appropriations
 Subcommittee on Defense
 Subcommittee on State, Foreign Operations, and Related Programs
Senate Committee on Armed Services
Senate Committee on Foreign Relations
 Subcommittee on International Development and Foreign Assistance, Economic Affairs, and International Environmental Protection
 Subcommittee on International Operations and Organizations, Democracy and Human Rights
 Subcommittee on Near Eastern and South and Central Asian Affairs
Senate Committee on Homeland Security and Governmental Affairs
 Subcommittee on Federal Financial Management, Government Information, Federal Services, and International Security
 Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia
Permanent Subcommittee on Investigations

U.S. House of Representatives

House Committee on Appropriations
 Subcommittee on Defense
 Subcommittee on State, Foreign Operations, and Related Programs
House Committee on Armed Services
 Subcommittee on Oversight and Investigations
House Committee on Oversight and Government Reform
 Subcommittee on Government Management, Organization, and Procurement
 Subcommittee on National Security and Foreign Affairs
House Committee on Foreign Affairs
 Subcommittee on International Organizations, Human Rights, and Oversight
 Subcommittee on the Middle East and South Asia

Appendix D. Project Assessment Team Members

The Office of the Assistant Inspector General for Inspections, Office of the Special Inspector General for Iraq Reconstruction, prepared this report. The principal staff members who contributed to the report were:

Angelina Johnston

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