

OPERATIONS CENTER & SECURITY
FACILITIES CONSTRUCTION
UMM QASR, IRAQ

SIGIR PA-05-026
JANUARY 26, 2006



SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

Baghdad, Iraq

January 26, 2006

MEMORANDUM FOR COMMANDER, GULF REGION DIVISION, U.S. ARMY
CORPS OF ENGINEERS AND DIRECTOR, PROJECT
AND CONTRACTING OFFICE
COMMANDER, JOINT CONTRACTING COMMAND-
IRAQ/AFGHANISTAN
DIRECTOR, IRAQ RECONSTRUCTION MANAGEMENT
OFFICE

SUBJECT: Report on Project Assessment of the Operations Center and Security Facilities
Construction, Umm Qasr, Iraq (Report Number SIGIR-PA-05-026)

We are providing this project assessment report for your information and use. We assessed the in-process construction work being performed at the Operations Center and Security Facilities Construction in Umm Qasr, Iraq to determine its status and whether intended objectives will be achieved. This assessment was made to provide you and other interested parties with real-time information on a relief and reconstruction project underway and in order to enable appropriate action to be taken if warranted. The assessment team included an engineer and an auditor.

We discussed the results of this project assessment with representatives of the Project and Contracting Office, Gulf Region Division of the U.S. Army Corps of Engineers, and Joint Contracting Command-Iraq/Afghanistan who concurred with our conclusions. This report includes no recommendations that required management comments.

We appreciate the courtesies extended to our staff. This letter does not require a formal response. If you have any questions please contact Mr. Brian Flynn at (703) 343-9149 or brian.flynn@iraq.centcom.mil or Mr. Michael Stanka, P.E., at (703) 343-9149 or michael.stanka@iraq.centcom.mil.

Stuart W. Bowen, Jr.
Inspector General

Special Inspector General for Iraq Reconstruction

SIGIR-PA-05-026

January 26, 2006

Project Assessment of the Operations Center and Securities Facilities Umm Qasr, Iraq

Synopsis

Introduction. This project assessment was initiated as part of our continuing assessments of selected sector reconstruction activities for electricity, oil, and public works and water. The overall objectives were to determine whether selected sector reconstruction contractors complied with the terms of their contracts or task orders and to evaluate the effectiveness of the monitoring and controls exercised by administrative quality assurance and contract officers. This project assessment was conducted in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency. The assessment team included an engineer and an auditor.

Project Assessment Objectives. The objective of this project assessment was to provide real-time relief and reconstruction project information to interested parties in order to enable appropriate action, when warranted. Specifically, we determined whether:

1. Project results will be consistent with original objectives;
2. Project components were adequately designed prior to construction or installation;
3. Construction or rehabilitation met the standards of the design;
4. Contractor's Quality Control plan and the U.S. Government's Quality Assurance program were adequate; and
5. Project sustainability and operational effectiveness were addressed.

Conclusions. The assessment determined that:

1. The completed project should meet and be consistent with original contract objectives, if current construction methods are continued until remaining deficiencies are resolved. Corrective action and management comments were not requested.
2. The scope of work was completed and approved prior to construction and appeared specific enough to construct the project. Modification P00004 corrected the bill of quantity; however, the scope of work remained the same. Corrective action and management comments were not requested.
3. The construction of the Operations Center should meet the standards of the design. We determined that Quality Assurance personnel and supervisors were engaged daily in construction activities to ensure construction quality. As a

result, construction conformity should adhere to contract specifications and the project should meet the standards of the design. Corrective action and management comments were not requested.

4. The Umm Qasr Operations Center and Security Facilities Construction contract did not specify a requirement for a Contractor Quality Control plan, Contractor Quality Control daily reports, or Contractor Quality Control deficiency tracking log. The Quality Assurance program was adequate due to the U.S. Army Corps of Engineers Quality Assurance representative being on-site during rehabilitation and construction events, monitoring field activities, and completing daily Quality Assurance Representative reports. In addition, the U.S. Army Corps of Engineer Quality Assurance Representative reports were sufficiently complete, and included project specific or detailed photographs that reinforced the narrative information provided in the reports.
5. Sustainability and operational effectiveness were adequately addressed in the contract's scope of work. A review of the contract file, the site visit, and discussions with the U.S. Army Corps of Engineers Gulf Region South Resident Engineer and Area Engineer disclosed that the U.S. Government does not plan to maintain or operate the operations center after turnover to the Iraqi Port Authority. The scope of work requires a one year unlimited warranty for all workmanship and mechanical equipment provided. If current practices implemented by the Quality Assurance office continue, the operations center and security upgrades project should be completely turned over to the Iraqi government and be fully functional and meet the objective of this project. Corrective action and management comments were not requested.

Recommendations. No adverse conditions were noted during this assessment and, as a result, this report does not contain recommendations. Therefore, written response to this report was not required.

Management Comments. Although not required, the Commander, Gulf Region Division responded concurring with the report without comment.

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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 in order to enable appropriate action, when warranted. Specifically, we determined whether:

1. Project results will be consistent with original objectives;
2. Project components were adequately designed prior to construction or installation;
3. Construction or rehabilitation met the standards of the design;
4. Contractor's quality control plan and the U.S. Government's quality assurance program were adequate; and
5. Sustainability and operational effectiveness were addressed.

Pre-Site Assessment Background

Contract, Task Order, and Costs

The Umm Qasr Operations Center and Security Facility Construction project will be completed under Contract W914NS-05-C-0017, dated 30 November 2004, a firm fixed contract, for \$1,175,040. The contract was between the Project and Contracting Office (PCO) and Al Salmoor LTD. Contract 914NS-05-C-0017 called for renovation of the existing Umm Qasr Port Operations Center Building, located in Umm Qasr, Iraq.

There were five modifications to the original contract:

- Modification #P00001, issued 4 December 2004, delegated the Federal Acquisition Regulation (FAR) Part 42 duties to the Administrative Contracting Officer (ACO).
- Modification #P00002, issued 23 February 2005, changed the Government contracting office's name from the Project and Contracting Office – Contracting Activity to the Joint Contracting Command – Iraq. In addition, the contract price was reduced by \$666,564 to \$508,476 because the prime contractor was novated and the statement of work (SOW) changed. Further, the prime contractor's retention of \$166,641 was released to the Government. The Contractor may invoice for the former retained amount at the end of the construction effort, after acceptance by the Government.
- Modification #P00003, management could not locate this modification.
- Modification #P00004, issued 22 July 2005, corrected the Bill of Quantity (BOQ), increased the funding by \$500,000 from \$508,476 to \$1,008,476, increased the Period of Performance by 90 days from 13 July 2005 to 11 October 2005, and provided the Notice to Proceed for this task.
- Modification #P00005, issued 15 August 2005, deobligated \$91,567 from \$500,000 to \$408,433, to reflect the total amount in the BOQ.

Project Objective

The SOW describes the objective of this project as the renovation of the existing Operations Center and Security Facilities at the Port of Umm Qasr, Iraq. The general objective of this project was for the renovation of the operations center building and the administration kiosk area at the Port of Umm Qasr.

Description of Facility (preconstruction)

The description of the facility (preconstruction) was based upon information obtained from the contract and the U.S. Army Corps of Engineers (USACE) project file. The Umm Qasr Port Operations Center building is located approximately 350 miles southeast of Baghdad, Iraq, at the Port of Umm Qasr, near the Kuwait border.

Scope of Work of the Task Order

The contract's SOW was the result of modification P00004. The contract's SOW stated that this work consists of all construction services for the renovation of the operations building with security upgrades and kiosk repair. The major tasks to be accomplished include:

- Civil Work
- Construct Perimeter Fence and Vehicle Gate
- Roofing
- Utilities
- Interior Work – Doors, Windows, Walls, Floors and Ceilings
- Special Requirements

Current Project Design and Specifications

The contract's SOW included a requirement for the submittal and approval of an electrical design for the facility. The USACE Gulf Region South (GRS) engineer was to approve the electrical design prior to the installation of any electrical items. The contractor submitted an electrical design to the USACE GRS Resident Engineer; however, it is unclear if this design was approved. Aside from the electrical design, the contract's SOW did not require project design submittals and approvals. Requirements for all construction work included adherence to "International or Iraqi Code," as specified. Specific international or Iraqi codes were not identified in the contract.

Reported Project Work Completed and Pending

Prior to the site visit, we determined the project's status through discussions with the USACE Resident Engineer and Quality Assurance Representative (QAR), as well as a review of the contract. The PCO database listed the overall project as 93% completed on 29 October 2005, with an anticipated completion date of 30 November 2005.

Project site work reported completed:

- Civil Work
- Construct Perimeter Fence and Vehicle Gate
- Roofing
- Utilities
- Interior Work – Doors, Windows, Walls, Floors and Ceilings
- Special Requirements

Project site work reported in progress:

- The USACE GRS Resident Engineer and QAR developed a list of pending items to complete the contract and submitted the list to the contractor prior to the assessment. The list of items included specific repairs or reworking of concerns and the final testing and commissioning of the air conditioning and electrical systems.

Project site work pending:

- All significant work has either been completed or is underway.

Site Assessment

The assessment team performed an on-site assessment of the Umm Qasr Port Operations Center building renovation and reconstruction project on 19 November 2005. The assessment team performed a walk through inspection of the operations center with the USACE GRS Resident Engineer and Area Engineer.

Work completed:

Significant field work had been accomplished prior to the site visit. The kiosk area had already received a final inspection and had been turned over to the Iraqi Port Authority (IPA) prior to the assessment.

Civil Work

All of the earth work had been completed at the time of the assessment. The areas included in the contract's SOW appeared level, with proper drainage. The concrete and tiles required for sidewalks, curbs, and parking areas had been poured or placed. Expansion control joints were present in the concrete as required by the contract. Review of the photographs in the QAR's daily reports showed the process of soil compaction and the reinforcement bars that had since been covered with concrete. Marble sidewalk, treads and risers at the building entrance appeared to be newly replaced and were in very good condition (Site Photo 1). The brick sidewalk was level and in good condition (Site Photo 2). At the time of the assessment, the civil work appeared consistent with the SOW.



Site Photo 1. Marble Sidewalk at the Building Entrance



Site Photo 2. Brick Sidewalk in front of Kiosk (Photograph Courtesy of the USACE GRS Resident Engineer)

Construct Perimeter Fence and Vehicle Gate

The contract's SOW required the construction of a chain-link mesh perimeter fence with 6 strands of barbed wire configured in a V-shape with concertina placed in the V. During the site visit, we identified a perimeter fence with concrete footings. The fence appeared to meet contract requirements as it was constructed of galvanized steel with a two inch mesh size, six strands of galvanized barbed wire on a V shaped outrigger strung along the top of the fence topped with concertina wire (Site Photo 3). The fence was observed to be approximately seven feet tall. The project assessment and the USACE QAR's daily reports showed the installation of the wire mesh fence and the tiger teeth vehicle gate (Site Photo 4). The gates appeared to be fully operational and meet the contract requirements.



Site Photo 3. Perimeter Fence with Concertina Wire



Site Photo 4. Tiger Teeth Vehicle Gate courtesy of the USACE

Roofing

The SOW required the installation of a complete roof system of approximately 1600 meters squared. The roof system required a flint coat layer, tar layer, dry soil layer, sand layer, and concrete tiles with mastic. Specifically, the concrete tiles were to be sloped to provide positive drainage toward the roof drains. The roof drains were to be installed at locations suitable with the slope of the roof to prevent standing water. During the site assessment, we inspected the roof (Site Photo 5) which appeared to meet the requirements of the contract. Examination of the Quality Assurance (QA) reports showed the progression of the roof installation. A recent rain event tested the water tight seals on the roof. Discussions with the USACE GRS Resident Engineer and QAR indicated that no leaks were discovered inside the building, but leaks were observed around the down spouts (Site Photo 6). This deficiency was reported by the USACE GRS Resident Engineer to the contractor for corrective action. The USACE GRS QAR's daily report photographs showed the placement and layering of roofing materials which appear to meet contract requirements.



Site Photo 5. Section of the Roof



Site Photo 6. Example of Down Spout. A recent rain resulted in a leak in this area.

Utilities

Plumbing, electrical, and septic work were combined in this section for brevity. The contract's SOW and BOQ required the supply and installation of the following: 4 Western toilets, 4 Oriental toilets, 15 sinks, 4 electrical water heaters (120 liters), 2 showers, 12 inch exhaust fans, 6 electric hand dryers, fluorescent lights, 2 ton "split" wall mounted air conditioning (A/C) units, and a telecommunications system. For an illustration of bathroom sinks, exhaust fans, ceramic tiles, exhaust fans, fluorescent lights and an electric hand dryer, see Site Photo 7; for new toilets, see Site Photo 8; for the A/C unit, see Site Photo 9. In addition, the assessment team identified new wiring, cables, switches and circuit breakers (Site Photo 10). The electrical and water systems appeared functional and installed in accordance with the SOW.

The USACE GRS Resident Engineer stated he provided the contractor with a list of deficiencies which need to be corrected prior to final payment being made.



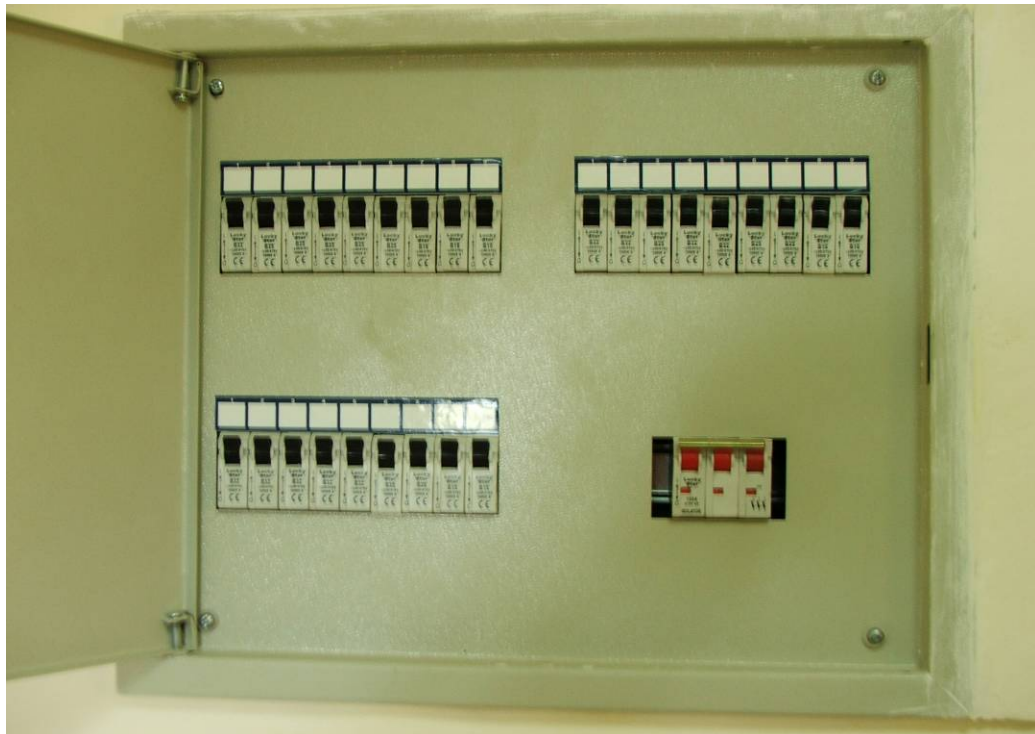
Site Photo 7. Bathroom Sinks, Exhaust Fans, and an Electric Hand Dryer



Site Photo 8. New “Western Style” Bathroom Toilets



Site Photo 9. Interior wall mounted part of split A/C Unit



Site Photo 10. Circuit Breaker Panel

Interior Work (Doors, Windows, Walls, Floors, and Ceilings)

The contract's BOQ required the removal and repair of damaged tiles and the installation of new mosaic tiles for 1,550 square meters. The assessment team

verified that new ceramic tile had been properly installed throughout the floor area of the operations center building (Site Photo 11). Further, the SOW required the repair of interior wooden doors, replacement of hardware and varnish, installation of new window security bars, and the removal and replacement of stucco from the exterior walls. Interior walls required repair, re-plastering and painting. During the site assessment, we confirmed that the exterior walls had been covered with stucco and painted, wooden doors had been refinished, interior walls had been repaired and painted, and window glass, screens, and security bars appeared to be in good condition and in accordance with the SOW. For an illustration of the window security bars, see Site Photo 12.



Site Photo 11. New Ceramic Tile throughout the Operations Center Building



Site Photo 12. Window Security Bars

Special Requirements

The SOW required the contractor to design and install vehicle parking sheds, supply and install a complete operating security surveillance system, mirrors, cameras, sidewalk, and the installation of media boards. During the site visit, we observed a reinforced concrete driveway with covered parking (Site Photo 13). The USACE GRS Resident Engineer was quite satisfied with the quality of the driveway and covered parking. The steel reinforcement bar was clearly shown in the USACE GRS QAR's daily reports during construction of the driveway. The security surveillance system was nearly complete; the wiring was installed (Site Photo 14) and the equipment was purchased but not yet connected. Mirrors and media boards were present in the operations center and appeared to be consistent with the SOW.



Site Photo 13. Concrete Driveway with Covered Parking



Site Photo 14. Wiring for the Security Surveillance System

Work in progress:

No work was in progress at the time of the assessment. The USACE Resident Engineer and QAR developed and submitted a list of pending items to complete the contract. The list had been submitted to the contractor prior to the assessment. The USACE Resident Engineer was concerned with the condition of the bathrooms and indoor painting. Specifically, the bathrooms needed to be cleaned up and completed (Site Photo 15) and paint removed from the moldings (Site Photo 16). The USACE Resident Engineer invoked the clause within the SOW stating that work which is unacceptable to the USACE GRS engineer will be required to be corrected at no additional cost. The USACE Resident Engineer advised the contractor that final payment will not be made until the list items have been completed to his satisfaction.

During the site assessment, we did not evaluate the list of pending items.



Site Photo 15. Bathroom with Additional Repairs Required



Site Photo 16. Paint and Molding in Need of Correction

Work pending:

Prior to our site visit, the USACE Resident Engineer contacted the contractor and provided a list of deficiencies that needed to be completed prior to the issuance of the final payment. The final project inspection and closeout was expected to occur shortly. Any mechanical equipment or workmanship issues identified with this project within one year are subject to the contract warranty.

Project Quality Management

The Umm Qasr Operations Center and Security Facilities Construction contract did not specify requirements for a Contractor Quality Control (CQC) plan, CQC daily reports, or a CQC deficiency-tracking log, and the contractor completed none.

The USACE Engineering Regulation (ER) 1110-1-12 and PCO Standard Operating Procedure (SOP) CN-100 specify requirements for a Government QA program. The USACE QA program was adequate. The USACE QARs were on-site during rehabilitation and construction events. The USACE QARs monitored field activities and completed daily QAR reports, which the QAR forwarded to the USACE Resident Engineer for review and verification of progress for payment approval. The QAR reports were sufficiently complete, accurate, and timely. Furthermore, the QAR reports included project specific or detailed photographs that reinforced the narrative information provided in the QAR's daily reports. The USACE QARs also maintained the QA deficiency logs. The procedures in-place ensured that potential construction deficiencies were detected, evaluated, and properly corrected, if necessary, in a timely manner.

Project Sustainability and Operational Effectiveness

Sustainability

A review of the contract file, the site visit, and discussions with the USACE GRS Resident Engineer and Area Engineer disclosed that the U.S. Government does not plan to maintain or operate the operations center after commissioning and turnover to the IPA. The SOW requires a one year unlimited warranty for all workmanship and mechanical equipment provided.

Operational Effectiveness

If current practices implemented by the USACE QA office continue, the operations center and security upgrades project should be completely turned over to the Iraqi government and be fully functional and meet the objective of this project.

Conclusions

Based on the fieldwork performed during this assessment, we reached the following conclusions for assessment objectives 1, 2, 3, 4, and 5. Appendix A provides details pertaining to Scope and Methodology.

1. Determine whether project results will be consistent with original objectives.

The completed project should meet and be consistent with original contract objectives, if current construction methods are continued until remaining deficiencies are resolved. Corrective action and management comments were not requested.

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

The SOW was completed and approved prior to construction and appeared specific enough to construct the project. Modification P00004 corrected the BOQ; however, the SOW remained the same. Corrective action and management comments were not requested.

3. Determine whether construction or rehabilitation met the standards of the design.

The construction of the Operations Center should meet the standards of the design. We determined that QA personnel and supervisors were engaged daily in construction activities to ensure construction quality. As a result, construction conformity should adhere to contract specifications and the project should meet the standards of the design. Corrective action and management comments were not requested.

4. Determine whether the Contractor's Quality Control plan and the Government quality assurance program were adequate.

The Umm Qasr Operations Center and Security Facilities Construction contract did not specify a requirement for a CQC plan, CQC daily reports, or CQC deficiency tracking log, and none were completed. The USACE ER 1110-1-12 and PCO SOP CN-100 specify requirements for a Government QA program. The QAR program was adequate due to the QARs being on-site during rehabilitation and reconstruction events, monitoring field activities, and completing daily QA reports. The procedures in-place ensured that potential construction deficiencies were detected, evaluated, and properly corrected. In addition, the QARs' reports were sufficiently complete, and included project specific or detailed photographs that reinforced the narrative information provided in the reports. Corrective action and management comments pertaining to this non-finding were not required.

5. Determine if project sustainability and operational effectiveness were addressed.

Sustainability and operational effectiveness were adequately addressed in the contract's SOW and construction. A review of the contract file, the site visit, and discussions with the USACE GRS Resident Engineer and Area Engineer disclosed that the U.S. Government does not plan to maintain or operate the operations center

after turnover to the IPA. The SOW requires a one year unlimited warranty for all workmanship and mechanical equipment provided. If current practices implemented by the QA office continue, the operations center and security upgrades project should be completely turned over to the Iraqi government and be fully functional and meet the objective of this project. Corrective action and management comments were not requested.

Recommendations.

No adverse conditions were noted during this assessment and as a result, this report does not contain recommendations. Therefore, written response to this report was not required.

Management Comments.

Although not required, the Commander, Gulf Region Division responded concurring with the report without comment.

Appendix A. Scope and Methodology

We performed this project assessment in November 2005 to January 2006, in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency. The assessment team included an engineer and an auditor.

In performing this Project Assessment we:

- Reviewed contract documentation, including the Scope of Work, Bill of Quantities, Contract, and the contract modifications that were provided.
- Reviewed the design package (scope of work and bill of quantities), Quality Assurance Plan, and Quality Assurance Representative reports.
- Interviewed the U.S. Army Corps of Engineers' Area Engineer, Resident Engineer, and Quality Assurance Representative.
- Conducted an on-site assessment of the Umm Qasr Operations Center and Security Facilities and documented the results.

Appendix B. Acronyms

A/C	Air Conditioning
ACO	Administrative Contracting Officer
BOQ	Bill of Quantity
CQC	Contractor Quality Control
ER	Engineering Regulation
FAR	Federal Acquisition Regulation
GRS	Gulf Region South
IPA	Iraqi Port Authority
PCO	Project and Contracting Office
QA	Quality Assurance
QAR	Quality Assurance Representative
SOP	Standard Operating Procedure
SOW	Statement of Work
USACE	U.S. Army Corps of Engineers

Appendix C. Report Distribution

Director, Project and Contracting Office
Commander, Joint Contracting Command – Iraq/Afghanistan
Commander, Gulf Region Division
Director, Iraq Reconstruction Management Office

Department of State

Secretary of State
Senior Advisor to the Secretary and Coordinator for Iraq
U.S. Ambassador to Iraq
Director, Iraq Reconstruction Management Office
Inspector General, Department of State

Department of Defense

Deputy Secretary of Defense
Director, Defense Reconstruction Support Office
Under Secretary of Defense (Comptroller)/Chief Financial Officer
Deputy Chief Financial Officer
Deputy Comptroller (Program/Budget)
Inspector General, Department of Defense

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)
Director, Project and Contracting Office
Commanding General, Joint Contracting Command – Iraq/Afghanistan
Assistant Secretary of the Army for Financial Management and Comptroller
Auditor General of the Army

U.S. Central Command

Commanding General, Multi-National Force – I Iraq
Commanding General, Multi-National Corps – Iraq
Commanding General, Multi-National Security Transition Command – Iraq
Commander, Joint Area Support Group – Central

Other Defense Organizations

Director, Defense Contract Audit Agency

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, Health and Human Services
Inspector General, U.S. Agency for International Development

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

U.S. Senate

Senate Committee on Appropriations
 Subcommittee on Defense
 Subcommittee on Foreign Operations
Senate Committee on Armed Services
Senate Committee on Foreign Relations
 Subcommittee on Near Eastern and South Asian Affairs
 Subcommittee on International Operations and Terrorism
Senate Committee on Homeland Security and Governmental Affairs
 Subcommittee on Government Efficiency and Financial Management
 Subcommittee on Financial Management, the Budget, and International Security

U.S. House of Representatives

House Committee on Appropriations
 Subcommittee on Defense
 Subcommittee on Foreign Operations, Export Financing and Related Programs
House Committee on Armed Services
House Committee on International Relations
 Subcommittee on Middle East and Central Asia
House Committee on Government Reform
 Subcommittee on Government Efficiency and Financial Management
 Subcommittee on National Security, Emerging Threats and International Relations

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:

Randall Nida

Kevin O'Connor