

SUMMARY REPORT
GROUND PROJECT SURVEYS
FOR THE QUARTER ENDED
MARCH 31, 2006

SIGIR PA-06-052
JULY 31, 2006



SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

July 31, 2006

MEMORANDUM FOR COMMANDING GENERAL, MULTI-NATIONAL FORCES -
IRAQ
COMMANDING GENERAL, GULF REGION DIVISION,
U.S. ARMY CORPS OF ENGINEERS
DIRECTOR, IRAQ RECONSTRUCTION MANAGEMENT
OFFICE

SUBJECT: Summary Report Ground Projects Surveys for the Quarter Ended
March 21, 2006 (Report Number SIGIR-PA-06-052)

We are providing this project assessment report for your information and use. We conducted 41 ground project surveys between November 19, 2005 and February 21, 2006, as part of our continuing assessment of selected sector reconstruction activities. These surveys focused on the Facilities and Transportation sectors, to include border control, electrical, medical, public safety, and transportation projects. We documented site conditions using our Quality Control and Quality Assessment teams. A team comprised of an engineer and auditor reviewed and analyzed reports and photographs provided by the Quality Control and Quality Assessment teams. The review of those reports, as well as contracting documents, provides the basis for the conclusions presented in this report.

The comments received from the Commander, Gulf Region Division, U.S. Army Corps of Engineers in response to a draft of this report addressed the issues raised. Comments have not been received from the Commanding General, Multi-National Security Transition Command - Iraq. As a result, comments on this final report are required from the Commanding General, Multi-National Security Transition Command - Iraq.

We appreciate the courtesies extended to our staff. If you have any questions please contact Mr. Brian Flynn at (703) 604-0969 or brian.flynn@sigir.mil or Mr. Andrew Griffith, P.E., at (703) 343-9149 or andrew.griffith@iraq.centcom.mil.

Stuart W. Bowen, Jr.
Inspector General

Special Inspector General for Iraq Reconstruction

SIGIR PA-06-052

July 31, 2006

Summary Report of Ground Project Surveys for the Quarter Ending March 31, 2006

Synopsis

Introduction. We conducted 41 ground project surveys between November 19, 2005 and February 21, 2006 as part of our continuing assessments of selected sector reconstruction activities. These surveys focused on border control, electricity, medical and public safety facilities, as well as roads and railways. We documented site conditions using our Quality Control/Quality Assessment teams. A team comprised of an engineer and auditor reviewed and analyzed reports and photographs provided by the Quality Control/Quality Assessment teams. The review of those reports, as well as contracting documents, provides the basis for the conclusions presented in this report.

Objectives, Site Selection Rationale and Survey Process. The overall objectives of the ground project surveys are to provide summary information on overall progress of selected projects and identify deviations from contract requirements. We selected projects from the Iraq Reconstruction Management System database to cover new structures, roads, and high dollar refurbishment projects in the various Governorates of Iraq, which were located within Gulf Region Division, United States Army Corps of Engineers northern and southern districts. We selected projects based on their accessibility, percentage of completion, dollar value, and availability of grid coordinates.

We assigned the sites to Quality Control/Quality Assessment teams familiar with the local area. We provided the teams with the project title and grid coordinates for locating the project. If the Quality Control/Quality Assessment teams could not locate the project at the provided grid coordinates, the teams determined the location by interviewing local residents. The Quality Control/Quality Assessment teams then visited the sites, obtained Global Positioning System coordinates, completed photo documentation, and interviewed available on-site personnel. The teams provided brief summary reports for each project visited to a SIGIR engineer and auditor for review and compilation into this report.

Conclusions. The purpose of the ground project surveys was to verify reported project locations and to determine compliance with contract requirements. The following are general conclusions resulting from our review of the 41 ground surveys.

Project Locations. Thirty-five of the 41 projects were located within 300 meters of their reported locations. Two projects were located between 1 kilometer and 3 kilometers and four projects were greater than three kilometers from their reported locations. The grid coordinates provided by the U.S. Army Corps of Engineers, Gulf Region Division/Project and Contracting Office for the projects surveyed were not always accurate, although the project locations were substantially more accurate than presented in the previous SIGIR ground survey report.

Contract Documentation and Data. Multi-National Security Transition Command-Iraq could not account for nine border post projects, valued at \$1,643,750 included in our site surveys. US Army Corps of Engineers, Gulf Region Division/Project and Contracting

Office was unable to provide the task order associated with the \$2,371,395 Al Hasheme Substation project. In addition, the data contained in the Iraq Reconstruction Management System database was inaccurate and incomplete for 11 projects surveyed.

Deficiencies and Warranty Coverage. Common deficiencies noted in our project surveys consisted of plumbing, electrical, and finishing work. A review of the contracts determined that construction warranties covered 31 of the 41 projects surveyed. Although the warranties for each project differed in coverage, in general, coverage amounted to a period of at least one year. Most of the projects surveyed were beyond their covered warranty period. As such, projects listed in the Iraq Reconstruction Management System database as being 100 percent complete, would benefit by follow up procedures to ensure the correction of noted deficiencies prior to warranty expiration.

Recommendations. We recommend that the Commanding General, Multi-National Security Transition Command – Iraq:

1. Require Major Subordinate Commands responsible for maintaining contract documents to locate and provide to the Special Inspector General for Iraq Reconstruction the nine unaccounted for contract documents related to border posts that are addressed in this report.
2. Assess the accuracy and completeness of the data in the Iraq Reconstruction Management System database relating to Multi National Security Transition Command-Iraq projects and make the necessary changes and updates to ensure the accuracy and completeness of the database.

Management Comments. The Commander, Gulf Region Division (GRD), of the U.S. Army Corps of Engineers provided comments to the draft report. No comments were received from the Commanding General Multi-National Security Transition Command – Iraq. The Commander GRD did not agree with all the conclusions contained in the draft report. He stated that warranty inspections would not have corrected many of the deficiencies noted. Only defective work resulting from performance of the contract Scope of Work was covered by the warranty and no pre-existing structural defects, improper use, or lack of maintenance qualifies as a warranty issue. In addition, he stated that project surveys did not always take into account existing conditions and improper user operation and maintenance of facilities, although the Commander did agree that better follow-up warranty inspections will help to correct items such as the peeling paint. Additional comments included corrections to specific sections of the report.

Evaluation of Management Comments. The management comments from the Commander addressed the issues raised in our report as they applied to his organization. SIGIR concurs that better follow-up warranty inspection will help to correct warranty covered discrepancies. In addition, we acknowledge that some of the deficiencies could be attributed to improper maintenance and use. Comments recommended to correct the specific sections of the report were evaluated and incorporated into this report, as appropriate. No comments were received from the Commanding General Multi-National Security Transition Command – Iraq, and thus did not address the issues raised in our report.

Table of Contents

Synopsis	i
Introduction	
Objective, Site Selection Rationale and Survey Process	1
Reported Project Locations	3
Border Control Facilities Projects	
Project Objective	4
Scope of Work of the Task Order	4
Current Project Design and Specifications	4
Warranties	5
Ground Surveys	5
Conclusions	21
Electric Facility Project	
Ground Surveys	22
Conclusions	23
Medical Facilities Projects	
Project Objective	24
Scope of Work of the Task Order	25
Current Project Design and Specifications	25
Warranties	25
Ground Surveys	26
Conclusions	30
Public Safety Facilities Projects	
Project Objective	31
Scope of Work of the Task Order	32
Warranties	32
Ground Surveys	32
Conclusions	40
Transportation Projects	
Project Objective	41
Scope of Work of the Task Order	41
Current Project Design and Specifications	41
Warranties	42
Ground Surveys	42
Conclusions	43

Summary Conclusions	
Project Locations	43
Contract Documentation and Data	43
Deficiencies and Warranty Coverage	44
Recommendations	44
Management Comments	44
Evaluation of Management Comments	44
Appendixes	
A. Scope and Methodology	45
B. Acronyms	46
C. Report Distribution	47
D. Assessment Team Members	49

Introduction

We conducted 41 ground project surveys between November 19, 2005 and February 21, 2006 as part of our continuing assessments of selected sector reconstruction activities. These surveys focused on border control, electricity, medical and public safety facilities, as well as roads and railways. We documented site conditions using our Quality Control/Quality Assessment teams (QC/QA). A team comprised of a professional engineer and auditor reviewed and analyzed reports and photographs provided by the QC/QA teams. The review of those reports, as well as contracting documents, provides the basis for the conclusions presented in this report.

Objective, Site Selection Rationale and Survey Process

The overall objectives of the ground project surveys are to provide summary information on overall progress of selected projects and identify deviations from contract requirements. We selected projects from the Iraq Reconstruction Management System (IRMS) database, to cover new structures, roads, and high dollar refurbishment projects in the various Governorates of Iraq, which were located within Gulf Region Division (GRD), United States Army Corps of Engineers northern and southern districts. We selected projects based on their accessibility, percentage of completion, dollar value, and availability of grid coordinates.

We assigned the sites to QC/QA teams familiar with the local area. We provided the teams with the project title and grid coordinates for locating the project. If the QC/QA teams could not locate the project at the provided grid coordinates, the teams determined the location by interviewing local residents. The QC/QA teams then visited the sites, obtained Global Positioning System (GPS) coordinates, completed photo documentation, and interviewed available on-site personnel. The teams provided brief summary reports for each project visited to one of our engineers and an auditor for review and compilation into this report.

We planned the ground project surveys to be a short cursory look at projects in the field. This differs from the more comprehensive SIGIR project assessments in which the SIGIR auditors and engineers review contract files and perform the on-site inspection fieldwork directly.

Table 1 lists the 41 ground project surveys sites by category and total cost. Figure 1 illustrates the locations of the 41 projects throughout Iraq.

Table 1: Sites by category and costs

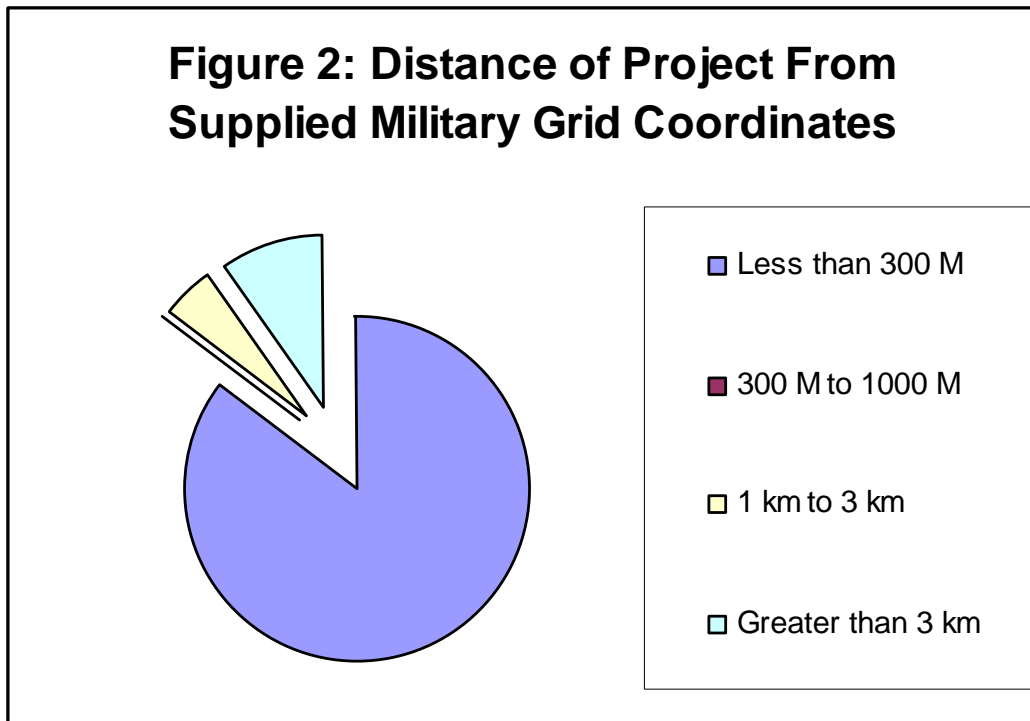
Project Type	Number of Projects	Cost of Projects
Border Posts Construction and Renovation	21	\$8,666,156
Electrical Substation	1	\$2,371,395
Hospital Renovation	3	\$9,369,464
New Clinic Construction	1	\$513,520
Police Station Renovation	12	\$2,523,432
Police Checkpoint Construction	1	\$142,851
New Road Construction	1	\$439,200
Railway Station Rehabilitation	1	\$414,896
Total	41	\$24,440,914.00

Figure 1: Iraq map indicating selected ground project survey sites



Reported Project Locations

As previously indicated, QC/QA teams obtained GPS location coordinates during their site visits. We compared the project locations submitted to us by GRD/Project and Contracting Office (PCO) with the actual location, as determined by our QC/QA teams during site visits. Of the 41 GRD/PCO submitted location sites, 35 were within 300 meters (m) of the actual site location, whereas 0 were between 300 and 1000 m, 2 were between 1 and 3 kilometers (km), and 4 were greater than 3 km from the actual location. GRD/PCO officials acknowledged there are errors in their grid coordinate database. Figure 2 shows a pie chart representation of the distance between the recorded project location and the GRD/PCO supplied project location.



Border Control Facilities Projects

We conducted ground project surveys of 21 border posts located in Wassit¹ and Sulaymaniyah,² Iraq, along the Iraq-Iran border. Of the 21 border post projects surveyed, 12 were or will be completed under Contract W914NS-04-D-0009, a design-build, indefinite delivery/indefinite quantity contract, awarded to Parsons Delaware Inc., Pasadena, California. The Coalition Provisional Authority (CPA) awarded the contract on March 26, 2004. The border posts under this contract will be completed under two separate Task Orders, 0034 and 0036. The following table lists the border post projects associated with Contract W914NS-04-D-0009, as well as the cost per project. The Iraq

¹ Due to the various spellings for Governorates, Districts, and cities in Iraq, and in an effort to achieve standardization in SIGIR reports, Wasit, as noted in project documentation will henceforth be referred to as Wassit.

² Ibid. As Sulaymaniyah, as noted in project documentation will henceforth be referred to as Sulaymaniyah.

Reconstruction Management System (IRMS) database showed the remaining nine border posts projects were the responsibility of Multi National Security Transition Command-Iraq (MNSTC-I) and are presented later in this section.

Table 2. Border Forts in the Wassit and Sulaymaniyah Governorates

Border Post	Project ID	Task Order Number	Actual or Estimated Completion Date	Construction Cost	GRD Region
Border Post Sulaymaniyah ² #06	12786	0036	1-Feb-06	\$604,240	North
Border Post Sulaymaniyah #12	12807	0036	10-Feb-06	\$604,240	North
Border Post Sulaymaniyah #32	12809	0036	28-Jan-06	\$604,240	North
Border Post Wassit ¹ #06	12826	0034	6-Sep-05	\$375,766	South
Border Post Sulaymaniyah #16	12827	0036	26-Dec-05	\$604,240	North
Border Post Sulaymaniyah #17	12831	0036	23-Jan-06	\$604,240	North
Border Post Sulaymaniyah #34	12834	0036	4-Feb-06	\$604,240	North
Border Post Sulaymaniyah #18	12835	0036	27-Dec-05	\$604,240	North
Border Post Sulaymaniyah #19	12836	0036	23-Jan-06	\$604,240	North
Border Post Sulaymaniyah #22	12850	0036	13-Mar-06	\$604,240	North
Border Post Sulaymaniyah #23	12855	0036	14-Mar-06	\$604,240	North
Border Post Sulaymaniyah #26	12884	0036	22-Mar-06	\$604,240	North

Project Objective

The overall objective of the project’s Scope of Work (SOW) under Contract W914NS-04-D-0009, Task Orders 0034 and 0036 was to build 100 new border denial points along the Iraq-Iran border.

Scope of Work of the Task Order

The border denial posts are to include an exterior compound wall with vehicle gate, four elevated guard posts, one watch tower, perimeter lighting, one operations building (with three offices, secured arms room, communications room, toilet/shower room and kitchen/dining area), electrical generator, water storage and a septic system.

Current Project Design and Specifications

The SOW for Contract W914NS-04-D-0009, Task Orders 0034 and 0036 lists the following codes and standards, although the task orders state, “Significant deviations from the following codes are anticipated. Material used in this project is to be that which are currently found on the local Iraqi market.”

- International Building Code (IBC)
- International Electrotechnical Commission (IEC)
- International Existing Building Code (IEBC)
- International Fire Code (IFC)
- International Mechanical Code (IMC)
- International Plumbing Code (IPC)
- National Fire Protection Association (NFPA)
- Sheet Metal and Air Conditioning Contractor’s National Association (SMACNA)
- Underwriter’s Laboratories (UL)

ASTM³ International Standards
American Society Mechanical Engineers (ASME)
American Society of Heating, Refrigerating, and Air-Conditioning Engineers Inc.
Standard 52 (ASHRAE 52)

Warranties

The contract required the provision and certification of warranties for all equipment, to include any mechanical, electrical and/or electronic devices, and all operations for 12-months after occupancy by the Iraq Border Police. The contractor was also to provide any other commonly offered extended warranties found in Iraq for equipment and machinery purchased.

Ground Surveys

Task Order 0034 Project

Project 12826: Border Post – Wassit #06 – Muhammad Al Kasim

A review of the report and photos provided by the QC/QA teams determined that overall, the site associated with Task Order 0034, Project 12826, appeared to be complete and consistent with contract requirements. A perimeter berm surrounded the post and a gate was located at the entrance. Site Photo 1 shows the perimeter security berm and entrance gate. The site also contained the border post, jail facility, two electrical generators and fuel tank mounted on a concrete pad, covered parking area, and water tanks set on a concrete base. Site Photo 2 shows the exterior side of the border post.



Site Photo 1: Perimeter security berm and entrance gate (Project 12826)



Site Photo 2: Exterior side of border post (Project 12826)

³ There is no longer a definition for this acronym. The ASTM in an open forum for the development of high-quality, market relevant international standards used around the globe.

Task Order 0036 Projects

We assessed 11 border post projects under Task Order 0036. A review of the reports and photos provided by the QC/QA teams determined that overall the sites associated with Task Order 0036 appeared to be complete and generally consistent with contract requirements. During the site visit, the QC/QA teams observed constructed main border posts and jail facilities, as well as installed electrical generators, water supply, and septic tanks. The border posts all shared common security features such as installed window bars, air conditioner grates, and generator cages. The electrical work, specifically the breaker boxes, appeared new and to be installed correctly. All 11 border posts surveyed lacked perimeter security requirements. We noted the following observations:

Project 12786: Border Post - Sulaymaniyah #06 - Siamewa

- No perimeter security fences or gates were present. Site Photo 3 shows the exterior view of the border post.
- Structural steel retrofit required due to deflection of I-beams was in-progress. Site Photo 4 shows the structural steel retrofit.
- Spot welds on generator roofing appeared to be of poor quality.
- Potable water was reported trucked in for use and users reported they are concerned about the quality and quantity of the water. No filtration or sterilization (except boiling) of the water was available.
- The access road was difficult to use, especially during the rainy and snowy seasons.



Site Photo 3: Front view of border post (Project 12786)



Site Photo 4: On-going structural retrofit (Project 12786)

Project 12807: Border Post - Sulaymaniyah #12 - Narin Jalaas

- No perimeter security fences or gates were present. Fuel tanks are located adjacent to the fort, creating a security risk because of the lack of perimeter security.

- The structural steel retrofit required due to deflection of I-beams was complete. Site Photo 5 shows the structural steel retrofit.
- Potable water was reported trucked in for use from adjacent village and users reported they are concerned about the quality and quantity of the water. No filtration or sterilization (except boiling) of the water was available.
- Spot welds on the generator roofing appeared to be of poor quality.
- The facility is located approximately 20 feet up gradient from a steep slope. Retaining walls were not installed to stabilize the slope and signs of lateral movement were observed. Site Photo 6 shows the steep slope.
- Numerous cracks in the sidewalks and 45-degree cracks in the border post interior and exterior walls were observed “almost everywhere”. The 45-degree cracks could be shear cracks caused by differential settling. Site Photos 7 and 8 show examples of cracks in the sidewalks and walls.



Site Photo 5: Completed structural retrofit (Project 12807)



Site Photo 6: Down gradient slope with signs of lateral movement (Project 12807)



Site Photo 7: Cracks in sidewalk (Project 12807)



Site Photo 8: 45 degree crack in exterior walls (Project 12807)

Project 12809: Border Post - Sulaymaniyah #32 - Yalanpe

- No perimeter security fences or gates were present.
- The road to the border post was reported as difficult to access during the rainy or snowy seasons. Site Photo 9 shows the access road to the border post.
- The structural steel retrofit required due to deflection of I-beams was in-progress. Steel angle supports mounted to block walls were observed to be of poor construction.
- Potable water was reported trucked in for use and users reported they are concerned about the quality and quantity of the water. No filtration or sterilization (except boiling) of the water was available.
- Spot welds on the generator roofing appeared to be of poor quality.
- One water tank and associated piping was reported “lost with the wind” and blown to the bottom of the mountain.
- Numerous cracks in the sidewalks and interior walls were observed. Site Photo 10 shows cracks in the sidewalks.
- Cracks could be due to poor quality workmanship or differential settling. Base plates for generators and fuel tanks were not properly secured.



Site Photo 9: Access road (Project 12809)



Site Photo 10: Cracks in sidewalks (Project 12809)

Project 12827: Border Post - Sulaymaniyah #16 - Halalawa

- No perimeter security fences or gates were present.
- The road to the border post was reported as difficult to access during the rainy or snowy seasons. Site Photo 11 shows the access road to the border post.
- The structural steel retrofit required due to deflection of I-beams was in-progress. Steel angle supports mounted to block walls were observed to be of poor construction.
- Potable water was reported trucked in for use and users reported they are concerned about the quality and quantity of the water. No filtration or sterilization (except boiling) of the water was available.

- The area behind the jail facility is a cut bank without a retaining wall, making it susceptible to erosion. Site Photo 12 shows the cut bank behind the jail facility.
- Numerous areas of poor finishing of exterior walls, interior walls, and roof tiles were reported.



Site Photo 11: Access road (Project 12827)



Site Photo 12: Cut bank behind jail facility (Project 12827)

Project 12831: Border Post - Sulaymaniyah #17 - Kula Boz (Near Tartula)

- No perimeter security fences or gates were present. Site Photo 13 shows the exterior front of the fort.
- The road to the border post was reported as difficult to access during the rainy or snowy seasons.
- The structural steel retrofit required due to the deflection of I-beams was in-progress. Steel angle supports mounted to block walls were observed to be of poor construction.
- Potable water was reported trucked in for use and users reported they are concerned about the quality and quantity of the water. No filtration or sterilization (except boiling) of the water was available.
- Spot welds on the generator roofing appeared to be poor quality.
- Insufficient mastic in voids between roof tiles was noted.
- Surface of exterior walls was not straight (inward curvature) and poor finishing was observed. Site Photo 14 shows the exterior wall with a straight-line superimposed on the picture.



Site Photo 13: Front exterior view (Project 12831)



Site Photo 14: Front exterior view showing inward curvature of wall (Project 12831)

Project 12834: Border Post - Sulaymaniyah #34 - Soskan

- No perimeter security fences or gates were present.
- Potable water was reported trucked in for use and users reported they are concerned about the quality and quantity of the water. No filtration or sterilization (except boiling) of the water was available.
- Spot welds on the generator roofing appeared to be of poor quality.
- Surface of exterior walls were not straight (inward curvature) and poor finishing was observed.
- 45-degree cracks in the border post exterior walls were observed. 45-degree cracks could be shear cracks caused by differential settling of the building foundation. Site Photo 15 shows an example of the cracks observed in the exterior walls of the border post.
- The sidewalks around the border post showed numerous cracks. More importantly, there were cracks between the border post and sidewalks that could be signs of lateral movement of the sidewalks. Within several feet of the border post is a steep down gradient bank with no retaining walls constructed. With no retaining walls to support the soil, failure of the bank could negatively impact the structural integrity of the buildings foundation. Site Photo 16 shows the sidewalk and down gradient bank.



Site Photo 15: 45 degree cracks in exterior wall (Project 12834)



Site Photo 16: Steep down gradient bank within several feet of sidewalk (Project 12834)

Project 12835: Border Post - Sulaymaniyah #18 - Kuna Washka

- No perimeter security fences or gates were present.
- The road to the border post was reported as difficult to access during the rainy or snowy seasons.
- The area behind the generator is a cut bank without a retaining wall. Site Photo 17 shows the cut bank behind the jail facility.
- Potable water was brought up to the border post from a nearby spring using plastic containers. No filtration or sterilization (except boiling) of the water was available.
- Spot welds on the generator roofing appeared to be of poor quality.
- Surface of exterior walls was not straight (inward curvature) and poor finishing was observed. Cracks were observed on the exterior wall below the parapets. Site Photo 18 shows the cracks in the exterior wall below the parapets.



Site Photo 17: Cut bank behind generator without retaining wall (Project 12835)



Site Photo 18: Cracks on exterior wall (Project 12835)

Project 12836: Border Post - Sulaymaniyah #19 - Bosken (2)

- In general, the quality of construction of this border post was noticeably better than the other border posts inspected. Exterior finishing and welding showed no discrepancies. Site Photo 19 shows the exterior view of the border post.
- No perimeter security fences or gates were present.
- The road to the border post was reported as difficult to access during the rainy or snowy seasons.
- Potable water was reported trucked in for use and users reported that they are concerned about the quality and quantity of the water. No filtration or sterilization (except boiling) of the water was available.



Site Photo 19: Exterior view of border post – Project 12836

Project 12850: Border Post - Sulaymaniyah #22-Shirah-Esawee

- No perimeter security fences or gates were present.
- The road to the border post was reported as difficult to access during the rainy or snowy seasons.
- The structural steel retrofit required due to the deflection of I-beams was in-progress. Steel angle supports mounted to block walls were observed to be of poor construction. Site Photo 20 shows the structural steel retrofit in progress.
- No filtration or sterilization (except boiling) of the water was available.
- Spot welds on the generator roofing appeared to be poor quality.
- The generator was not anchored to the concrete base. Site Photo 21 shows the generator and concrete base.
- Surface of exterior walls was not straight (inward curvature) and poor finishing was observed.



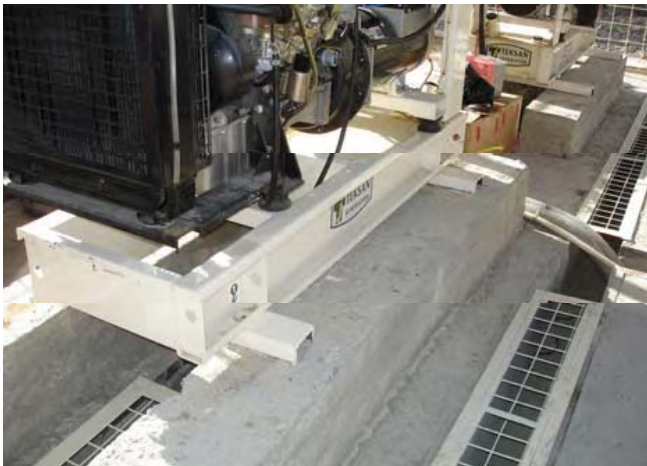
Site Photo 20: Steel retrofit in progress (Project 12850)



Site Photo 21: Generator on concrete base (Project 12850)

Project 12855: Border Post- Sulaymaniyah #23-Bargurd

- No perimeter security fences or gates were present.
- The generator was not anchored to the concrete base. Site Photo 22 shows the generator and concrete base.
- Spot welds on the generator roofing appeared to be of poor quality.
- Poor finishing and broken concrete was observed at the septic tank cover.
- Roof water tanks base girders were not fastened to the concrete foundation. Site Photo 23 shows the water tank base.



Site Photo 22: Generator mounted on concrete base (Project 12855)



Site Photo 23: Roof mounted water tank base (Project 12855)

Project 12884: Border Post – Sulaymaniyah #26- Hana DN

- No perimeter security fences or gates were present. Site Photo 24 shows the exterior of the border fort.
- The generator was not anchored to the concrete base.

- Spot welds on the generator roofing appeared to be of poor quality.
- Structural steel retrofit required due to the deflection of I-beams was in-progress.
- The road to border post was reported as difficult to access during the rainy or snowy seasons. Site Photo 25 shows the access road.
- Potable water was reported trucked in for use and users reported that they are concerned about the quality and quantity of the water. No filtration or sterilization (except boiling) of the water was available.



Site Photo 24: Front exterior of border post (Project 12884)



Site Photo 25: Access road (Project 12884)

MNSTC-I Border Posts

MNSTC-I could not account for nine border post projects, valued at \$1,643,750, included in our site surveys. According to MNSTC-I officials, local contracting officers at the Major Subordinate Command (MSC), which in the case of the nine border post projects in our survey was the 101st Airborne Division, would negotiate and manage the individual projects. The MSC would then be responsible for maintaining contractor records and contracts. The IRMS database showed the contractor, as well as the contract number, was yet to be determined. However, the database showed the same nine projects as being 100 percent complete. We requested copies of contract documents from MNSTC-I; however, they were unable to identify or locate the contract(s) for these projects. As such, we were unable to determine the project objectives, SOW, or design specifications. Table 3 lists the border post projects associated with the unidentified contract(s), as well as the cost per project.

Table 3. MNSTC-I border posts assessed by SIGIR

Border Posts	Project ID	Task Order Number	Actual or Estimated Completion Date	Construction Cost	GRD Region
Border Post - Sulaymaniyah #48	20558	MST-014	27-Oct-04	\$393,750	North
Border Post - Sulaymaniyah #40	20570	MST-014	27-Oct-04	\$125,000	North
Border Post - Sulaymaniyah #49	20571	MST-014	27-Oct-04	\$125,000	North
Border Post - Sulaymaniyah #59	20572	MST-014	27-Oct-04	\$125,000	North
Border Post - Sulaymaniyah #62	20573	MST-014	27-Oct-04	\$125,000	North
Border Post - Sulaymaniyah #43	20574	MST-014	27-Oct-04	\$125,000	North
Border Post - Sulaymaniyah #41	20575	MST-014	27-Oct-04	\$125,000	North
Border Post - Sulaymaniyah #54	20576	MST-014	27-Oct-04	\$250,000	North
Border Post - Sulaymaniyah #61	20577	MST-014	27-Oct-04	\$250,000	North

The QC/QA team noted the following observations during the site visit:

Project 20558: Border Post - Sulaymaniyah #48 - Golklan

- The site had an old “inoperable” 12 kilovolt-ampere KVA generator. Currently the post obtains electricity from a village generator with reported electricity of seven hours per day.
- The septic tank was reported full and there were no plans for cleaning. Additionally, the sewer is backing up near the kitchen area, producing a noticeable smell and “unhealthy” conditions.
- Cracks in the concrete were observed extensively throughout the exterior of the three buildings, possibly due to differential settling of the foundation and/or poor construction. Site Photo 26 shows exterior wall cracks.
- Finishing of interior walls was extremely poor, showing cracks, staining, and peeling of plaster.
- Electrical installation was extremely poor with numerous areas of exposed wiring. Site Photo 27 shows exposed electrical wiring for ceiling fan.
- The facility lacked security fences.
- The facility showed a lack of any recent maintenance or remodeling.



Site Photo 26: Cracks in exterior walls (Project 20558)



Site Photo 27: Ceiling fan with exposed wiring (20558)

Project 20570: Border Post - Sulaymaniyah #40 - Barei/Gawra

- Electrical generator was not on site and there was no other source of electricity. It was reported that a 12 KVA generator was previously on site, but sent off site to be repaired.
- Cracks in the concrete were observed extensively throughout the exterior of the buildings, possibly due to differential settling of the foundation and/or poor construction.
- Finishing of interior walls was extremely poor: showing cracks, staining, and peeling of plaster. Water leakage from the roof resulted in ceiling plaster falling. Site Photo 28 shows an example of the damaged ceiling plaster.
- No ventilation existed in the kitchen area. It was reported that the guards made a hole in the roof and wall for ventilation. Site Photo 29 shows the kitchen area.
- The facility lacked security fences.
- The facility showed a lack of any recent maintenance or remodeling.



Site Photo 28: Damaged ceiling plaster (Project 20570)



Site Photo 29: Holes in wall of kitchen area (Project 20570)

Project 20571: Border Post - Sulaymaniyah #49 - Golle

- Site Photo 30 shows an exterior view of the front of the border post.
- Electricity is supplied by a 12 KVA generator.
- The water well was reported to have dried up, and a small creek, with “dirt and worms” was the only current source of water.
- Road access to the site was reported to be difficult.
- The septic tank was reported almost full, with no plans for cleaning.
- The interior ceiling showed signs of water damage and ceiling plaster was deteriorating (Site Photo 31).
- The facility lacked security fences.
- The facility showed a lack of any recent maintenance or remodeling.



Site Photo 30: Front exterior of border post (Project 20571)



Site Photo 31: Deteriorating plaster ceiling (Project 20571)

Project 20572: Border Post - Sulaymaniyah #59 - Sayranban

- Electricity is supplied by a 12 KVA generator, which is reportedly broken. At the time of the visit, a temporary generator was being used.
- No septic system was available and waste water was observed piped directly to the surface behind the border post. Site Photo 32 shows the sewer outfall.
- Cracks in the concrete were observed extensively throughout the exterior of the buildings, possibly due to differential settling of the foundation and/or poor construction. Site Photo 33 shows exterior wall cracks.
- Electrical wiring was exposed throughout the facility.
- The interior ceiling showed signs of water damage and ceiling plaster deterioration was extensive.
- Security fences were observed. This border fort is located adjacent to a recently constructed facility reported to be for “customs”.
- The facility showed a lack of any recent maintenance or remodeling.



Site Photo 32: Sewer outfall behind border post (Project 20572)



Site Photo 33: Cracks in exterior wall (Project 20572)

Project 20573: Border Post – Sulaymaniyah #62- Totman/Nawe

- Site Photo 34 shows the exterior to the border post.

- Electricity is supplied by a 15 KVA generator.
- Septic system was not present. The waste water is directed downhill through pipes ending in a surface outfall approximately 200 feet from the building.
- Source of water is an up-gradient spring, which is delivered to the post through a plastic pipe. The water in the pipe was frozen at the time of the visit.
- Cracks in the concrete were observed extensively throughout the exterior of the buildings, possibly due to differential settling of the foundation and/or poor construction. Site Photo 35 shows exterior wall cracks.
- Road access was reported to be difficult.
- Repair of the roof and skirting along the lower portion of the border post exterior walls were observed to have been completed recently.



Site Photo 34: Exterior view of border post (Project 20573)



Site Photo 35: Cracks in exterior wall (Project 20573)

Project 20574: Border Post - Sulaymaniyah #43 -Benowa Suta

- The border post was reported to be surrounded by a mine field and access was deemed too dangerous to approach. Site Photo 36 shows the exterior of the border post. It could not be determined if renovation of the facility was completed or to what quality the renovation was accomplished.



Site Photo 36: Exterior view of border post - Project 20574

Project 20575: Border Post - Sulaymaniyah #41 - Bashmakh

- Electricity is supplied by a 15 KVA generator.
- Two septic systems were observed on site. One of the tanks was reported to have collapsed shortly after delivery to the site and the other one was full. The full septic tank is overflowing sewage close to the building. Site Photo 37 shows the location of overflowed sewage (border post in top right corner of photo).
- Cracks in the concrete were observed extensively throughout the exterior of the buildings and sidewalks, possibly due to differential settling of the foundation and/or poor construction.
- Security fences were not present.
- The electrical system and wiring had numerous exposed wires and uncovered panels. Site Photo 38 shows an electrical panel in the kitchen area.
- The facility showed a lack of any recent maintenance or remodeling.



Site Photo 37: Sewage overflow area (Project 20575)



Site Photo 38: Electrical panel (Project 20575)

Project 20576: Border Post - Sulaymaniyah #54 - Mishalla

- Site Photo 39 shows the exterior front of the border post.
- Electricity is supplied by a 12 KVA generator. The generator was reportedly broken and was not on site. The border post did not have electricity at the time of the visit.
- Source of water is a spring close to the site. The spring is uncovered and water is transferred to the site through plastic water pipes. No filtration or sterilization existed and the water quantity was not enough for the requirements of the border post.
- Cracks in the concrete were observed extensively throughout the interior and exterior of the buildings, possibly due to differential settling of the foundation and/or poor construction.
- The heater used on site is an “old gasoline heater”. It was reported that the night before the visit, two female guards were hospitalized for carbon monoxide poisoning. It was also reported that this was not the first incident of carbon monoxide poisoning.
- The electrical system had exposed wires. Site Photo 40 shows an example of exterior wiring.
- The ceilings showed staining, an indication of roof leaks.
- Security fences were not present.



Site Photo 39: Exterior front of border post



Site Photo 40: Exterior electrical wiring

Project 20577: Border Post - Sulaymaniyah #61 - Tawella

- Site Photo 41 shows the exterior of the border post.
- A 12 KVA generator was on-site, although reportedly broken. Electricity was obtained from a village generator located nearby.
- Source of water is a water spring close to the site. The spring is uncovered and water is transferred to the site through plastic water pipes. No filtration or sterilization existed and the water quantity was not enough for the requirements of the border post.
- Numerous cracks were observed in the exterior walls.
- The electrical system had exposed wires and uncovered panels. Site Photo 42 shows an example of the electrical wiring.
- Security fences were not present.



Site Photo 41: Exterior front of border post (Project 20577)



Site Photo 42: Interior electrical panel (Project 20577)

Conclusions

Contract W914NS-04-D-0009 Border Posts

In general, the 12 border posts inspected were complete or near complete and functional. Only one of the 12 border posts had perimeter security systems, gates, berms, or walls installed. Concrete quality was sometimes poor, probably due to hand mixing and improper curing techniques. Inconsistent surfaces in concrete and plaster finishing was common in the buildings and other structures. Due to the mountainous location of the border posts, site leveling required soil excavation; however, several sites lacked retaining walls to prevent degradation of the embankments. Several of the border posts showed signs of differential foundation settling, which could be an indication of more serious foundation problems.

Based on discussions with local border post personnel at the time of the site visits, we found the day-to-day users, the border police, were unaware of a plan for maintenance and logistical support for the border posts. In addition, they received little if any training in maintaining the generator and septic systems. Logistical requirements, such as water delivery, were lacking at some border posts. It was reported that due to the limited quantity of water on-hand, personnel were not authorized to use the shower facilities during their 15-day shifts. Access to most of the sites was difficult, especially when

roadways were wet or covered with snow. All 12 border posts were covered under contract warranties.

MNSTC-I Contracted Border Posts

MNSTC-I could not account for nine border post projects, valued at \$1,643,750, included in our site surveys. Those border posts were all of poor quality construction and showed no signs of any recent maintenance. Electrical, plumbing, and heating systems were of low quality and mostly not operational, creating dangerous conditions for personnel. The majority of the locations obtained their water from local streams or springs of unknown quality with no means of sterilization, except for boiling the water. Septic systems were either full or overflowing, creating an additional health hazard. A gasoline heater was used at one border post and it was reported that two post personnel needed emergency medical services because of carbon monoxide poisoning. In addition, one of the border posts was reported to be surrounded by a minefield, which prohibited access to the post.

Electric Facility Project

We conducted a ground project survey of one electric substation located in the Wassit Governorate. The electrical project surveyed was or will be completed under Contract W914NS-04-D-0010, a cost plus, fixed fee contract awarded to the Washington Group International. U.S. Air Force Materiel Command awarded the contract on May 19, 2004. GRD/PCO was unable to provide the task order associated with the \$2,371,395 Al Hasheme Substation project. As such, we were unable to determine the project objective, SOW or design and specifications for the project. USACE did provide contract information after they reviewed the draft of this report. The following table lists the electrical project associated with Contract W914NS-04-D-0010, as well as the construction cost.

Electric Substation	Project ID	Task Order Number	Actual/Estimated Completion Date	Construction Cost	GRD Region
Al Hasheme Substation	1861	ED-006	18-Mar-06	\$2,371,395	South

Ground Survey

Project 1861: Al Hasheme Substation

- The site visit verified new construction of the main building, sidewalks, perimeter security and guardhouse, entrance gate, and the generator shed. Site Photo 43 shows the front entrance gate.
- Two exterior located transformers (assumed 33 kilovolt (kV) / 11 kV) were observed mounted on concrete pads. A firewall was located between the transformers. Site Photo 44 shows the main transformers.
- Switchgears (assumed incoming and outgoing) were observed inside the main building. Site Photo 45 shows the switchgears.
- Thirteen split air conditioning condensing units were mounted on the roof of the main building. Site Photo 46 shows the roof mounted air conditioning condensing units.
- Exterior light poles were located throughout the facility.
- No discrepancies were reported at this location.



Site Photo 43: Front entrance gate (Project 1861)



Site Photo 44: Transformer (Project 1861)



Site Photo 45: Switchgears (Project 1861)



Site Photo 46: Roof mounted AC Units (Project 1861)

Conclusions

Although the contract and Scope of Work for this project was not available for review, the project is similar to other electrical projects assessed previously by SIGIR. No deficiencies were noted during the site survey and the project appeared to be consistent with similar electrical substation projects awarded through PCO.

Medical Facilities Projects

We conducted ground project surveys of four medical facilities located in the Governorate of Najaf⁴. The maternity and pediatric hospital, clinic, and phase I of the teaching hospital projects surveyed were or will be completed under two separate Task Orders, 0006 and 0012, under Contract W914NS-04-D-0006, a design-build, indefinite delivery/indefinite quantity contract, awarded to Parsons Delaware Inc., Pasadena, California. The CPA Contracting Office awarded the contract on March 25, 2004. The Najaf Maternity & Pediatric Hospital and the Najaf Teaching Hospital Phase I, were or will be completed under Task Order 0006; the Najaf Al Uroba clinic was or will be completed under Task Order 0012. The Najaf Teaching Hospital Phase II was or will be completed under Contract W917BK-05-P-0049. The GRD-Southern District awarded the contract to an Iraqi contractor on March 8, 2005. Table 4 lists the medical facilities projects surveyed and includes the cost per project.

Table 4. Hospital Projects Assessed by SIGIR

Medical Facility	Project ID	Task Order Number	Actual/Estimated Completion Date	Construction Cost	GRD Region
Maternity and Pediatric Hospital (Najaf ⁴)	10309	0006	17-Mar-06	\$8,171,031	South
Construct clinic in Najaf - Al Uroba	11913	0012	11-Feb-06	\$513,520	South
Najaf Teaching Hospital Phase I Parsons	16124	0006	14-Feb-05	\$698,433	South
Najaf Teaching Hospital Phase II	19873	BH-014	18-Apr-05	\$57,935	South

Project Objective

Contract W914NS-04-D-0006

Task Order 0006: The overall objective of the project's SOW was to modernize maternity and pediatric hospitals in the southern Governorates of Iraq. Specifically, to provide new, repair, or replace prioritized building systems, as identified in property assessment surveys, and to provide new authorized equipment.

Task Order 0012: The overall objective of the project's SOW was to provide for the design and construction of 60 primary health care centers. There was to be a standard model, with two variations, the first being a clinic with teaching facilities and the second a clinic with emergency and labor facilities.

Contract W917BK-05-P-0049

Although we requested all contract documentation, to include the SOW, Bill of Materials, and all modifications to the contract, GRD/PCO was unable to provide the SOW for the contract. As such, we were unable to determine the project objectives, or review the SOW or design specifications. In addition, at the time of our site visit, the IRMS

⁴ Due to the various spellings for Governorates, Districts and cities in Iraq, and in an effort to achieve standardization in SIGIR reports, An Najaf, as noted in project documentation will henceforth be referred to as Najaf.

database showed the contract costs as \$500,000; however, a review of the contract documents showed the costs to be only \$57,935. GRD/PCO officials explained the discrepancy as a data entry error in the IRMS database.

Scope of Work of the Task Order

Task Order 0006: The SOW for the Maternity & Pediatric Hospital at Nasiriyah included the installation of a water purification system, the repair or replacement of the sewer/septic system, heating and air conditioning system, electrical and plumbing systems, plumbing fixtures, water storage tanks, lift stations and water coolers, windows, doors, elevators, and roof. The SOW also called for the repair and/or refinishing work of walls, floors, and perimeter fence. In addition, the SOW requires the design, procurement and installation of a reliable central fire detection and fire alarm system.

Task Order 0012: The SOW for the Al Uroba Clinic included the design of sidewalks, parking, fencing, lighting, roads, sewer/septic, electrical distribution and a water supply system. The SOW also included the architectural design, which specified a design and construction that would provide a life expectancy of 40 years and consider the needs of security and disabled access.

Current Project Design and Specifications

Task Order 0006: The SOW states that all new and renovated work must comply with the following codes and standards to the extent practical. The publications considered should be those of the most recent editions. The contractor may propose equipment, material, and works that meet the intent of the publications listed below if the contractors provide documented justification requesting such alternates and receives approval from the Sector Program Management Office.

- International Building Code (IBC)
- International Electrotechnical Commission (IEC)
- International Health Code Standards
- International Mechanical Code (IMC)
- International Plumbing Code (IPC)
- National Fire Protection Association (NFPA)
- Sheet Metal and Air Conditioning Contractor's National Association (SMACNA).

Task Order 0012: The SOW states all work under the contract must comply with the applicable IBC, and the equipment and finishes are to be of basic style, neutral color and durable quality.

Warranties

Task Order 0006: The contract requires the provision and certification of manufacture warranty(s) for all equipment, to include any mechanical, electrical and/or electronic devices, and all operations for 24 months after issuance of the Taking-Over-Certificate to the Construction Manager. In addition, the contractor is required to provide a 24 month contractor-certified construction warranty for all building equipment, construction and components, and a 20 year construction warranty for new roofing systems.

Task Order 0012: The contract requires the provision and certification of warranties for all equipment, to include any mechanical, electrical and/or electronic devices, and all operations for 12 months after issuance of the Taking-Over-Certificate. In addition, the contractor is to provide any other commonly offered extended warranties for equipment and machinery purchased.

Contract W917BK-05-P-0049

The contract requires all repairs on pumps, air handling units, chillers, and cooling towers shall be warranted for 4 months or until the follow-up contractor has worked on the same equipment. Warranty shall cover parts and materials repaired or replaced in this contract except for servicing parts (belts, oil etc).

Ground Surveys

Hospitals

Project 10309: Hospital, Maternity & Pediatric (Najaf)

This building appeared to be an existing structure with renovations ongoing at the time of the site visit. Based on the site visit, work included finishing work, electrical work, sanitation work, and mechanical work. Finishing work consisted of painting, replacement of the drop ceiling, repair of doors and windows, installation of floor tile, replacement of roof tiles, and repair of counters in the laboratory. Electrical work consisted of the replacement of fluorescent lights, replacement of outlets, installation of a 1.0 megavolt ampere (MVA) generator, installation of an uninterrupt power supply system, and installation of a public address system and fire alarms. Mechanical work included installation of three-360 ton chillers, repair of heating and boiler systems, and repair and/or replacement of three elevators. Observations during the site visit were:

- No significant discrepancies were noted during the visit. Site Photo 47 shows an area of tile replacement, Site Photo 48 shows replaced ceiling tiles, Site Photo 49 shows renovated counter tops, and Site Photo 50 shows new electrical lighting.



Site Photo 47: Renovated hallway floor tiles (Project 10309)



Site Photo 48: Suspended ceiling (Project 10309)



Site Photo 49: Renovated counter tops (Project 10309)



Site Photo 50: Lighting system (Project 10309)

Project 16124: Hospital - Najaf Teaching Hospital - Phase I

During the site visit, it appeared Phase I work was complete and Phase II work was underway. Phase II work is summarized in the following section of this report. Phase I work included finishing work, electrical work, sanitation work, rehabilitation of the doctor's house, and mechanical work. Finishing work included painting walls, replacement of suspending ceilings, repair of old doors, and replacement of floor tiles. Electrical work included replacement and installation of fluorescent lights and electric outlets. Sanitation work included replacement of water pipes and cleaning of manholes and pipes. Mechanical work included repairs of the elevators, HVAC systems and pumps. The hospital staff sited there were many disagreements between the engineering staff of the hospital and the contractor regarding the quality of work performed. USACE stated that the work described under Phase I of this section is actually Phase III work being completed at the same location. Discrepancies noted during the visit included the following:

- Suspended ceiling showed signs of water damage, reportedly from leaking pipes. Site Photo 51 shows an example of a water damaged suspended ceiling tile.
- Standing water was observed adjacent to the exterior of the building from water pipe leaks.
- Painted walls were blistering, possibly due to improper preparation and/or low quality paint.
- The bathrooms showed signs of water leakage and tile damage. Site Photo 52 shows a bathroom with water leaks and tile damage.
- Water pipes in the basement were leaking, causing water to accumulate on the concrete floor. Site Photo 53 shows water accumulated in the hospital basement.
- Doors and locks were reported to be of low quality.



Site Photo 51: Water damaged suspended ceiling (Project 16124)



Site Photo 52: Damaged tile in bathroom (Project 16124)



Site Photo 53: Water leaking in hospital basement (Project 16124)

Project 19873: Najaf Teaching Hospital Phase II

It was reported, “all works of rehabilitation in the Najaf Teaching Hospital building that were carried out by the previous contractor will be redone by a new company because the work was very bad.” Reported work included finishing work, electrical work, sanitation work, and mechanical work. Finishing work consisted of replacement of the suspended ceiling and repair of damaged tile in the walkway. Electrical work included the replacement of fluorescent lights and replacement of electrical outlets. Sanitation work included repair of PVC pipes and cleaning of manholes and the piping system. Mechanical work included repair of the heating and cooling system, repair of pumps, and repair of elevator systems. The renovation of the hospital was on going at the time of the visit and 50 workers were reported on site. USACE stated that the work described under Phase II of this section is actually Phase III work being completed at the same location.

- The quality of this project was reported better than the previous contractor’s work.
- No significant discrepancies were noted. Site Photo 54 shows renovated hallway lighting repairs and Site Photo 55 shows repair of the sidewalks at the time of the site visit.



Site Photo 54: Lighting system (Project 19873)



Site Photo 55: Sidewalk repairs (Project 19873)

Clinic

Project 11913: Clinic in Najaf - Al Uroba

New construction was in progress at the time of the site visit and 87 construction workers were reported on site. The building was constructed with the majority of the windows, electrical, heating and air conditioning units, and septic systems in place. Remaining work included mostly finishing including completing the electrical, installation of doors and windows, installation of walkways, and painting. No significant discrepancies were noted during the site visit. Site Photo 56 shows the front exterior of the clinic and Site Photo 57 shows electrical control panels. Site Photo 58 and 59 show interior finishing underway.



Site Photo 56: Exterior of Clinic (Project 11913)



Site Photo 57: Electrical controls (Project 11913)



Site Photo 58: Suspended ceilings (Project 11913)



Site Photo 59: Interior room (Project 11913)

Conclusions

We conducted site visits at two hospitals and one primary health care clinic. All projects were in progress at the time of the site visit. No significant deficiencies were noted at the primary health care clinic (new construction) or the Maternity and Pediatric Hospital. The Najaf Teaching Hospital included Phase I and II. Numerous renovation issues were identified in the Najaf Teaching Hospital Phase I work, although the hospital staff and the site survey team noted the Phase II work was considerably better quality. USACE reported that work reported in this report as Phase I and II work are actually Phase III work being completed at the same location. Contract warranties cover both hospitals and the clinic.

Public Safety Facilities Projects

We conducted ground project surveys of 13 police stations/checkpoints located in the Governorates of Qadissiya⁵ and Wassit. The 13 public safety facilities projects surveyed were, or will be completed under various contracts awarded to Iraqi contractors. The GRD-Southern District and Project and Contracting Office awarded the contracts related to the public safety facilities projects. Table 5 provides a list of these projects.

Table 5. Public safety facilities assessed by SIGIR

Public Safety Facility	Project ID	Actual or Estimated Completion Date	Construction Cost	Contract Number	GRD Region
Police Station Jamhuri Q075	18334	27-Jul-05	\$227,620	W917BK-05-C-0017	South
Police Station Kut ⁶ HQ	18362	23-Feb-05	\$52,258	W914NS-05-C-8201	South
Police Station Al Uropa W020	19111	30-Aug-05	\$273,859	W917BK-05-C-0030	South
Police Station Attika Jail Q125	19117	16-May-05	\$171,810	W917BK-05-C-0026	South
Police Station Al Hayferiyah W005	19175	11-Apr-05	\$214,980	W914NS-05-C-8207	South
Police Station Kut Emergency Swat	19179	2-Apr-05	\$402,605	W914NS-05-C-8205	South
Police Station Checkpoint HQ Khanzarah	19181	12-Apr-05	\$142,851	W914NS-05-C-8224	South
Police Station Kut Traffic Police HQ	19187	26-Mar-05	\$171,190	W914NS-05-C-8212	South
Police Station Kut	19189	6-Mar-05	\$225,300	W914NS-05-C-8219	South
Police Station Al Hayy HQ W015	19227	31-May-05	\$169,790	W914NS-05-C-8228	South
Police Station Bashier W047	19230	31-May-05	\$194,500	W914NS-05-C-8226	South
Police Station Qadissiya ⁵ HQ Q117	19779	30-May-05	\$217,090	W917BK-05-C-0020	South
Police Station Babail Special Missions Units Q128	20324	15-Sep-05	\$202,430	W917BK-05-C-0031	South

Project Objective

The overall objective of the projects' SOW under the contracts associated with the police station projects was to renovate the existing police station facility or construct a new police station facility.

⁵ Due to the various spellings for Governorates, Districts and cities in Iraq, and in an effort to achieve standardization in SIGIR reports, Al Qadisiyah, as noted in project documentation will henceforth be referred to as Qadissiya.

⁶ Due to the various spellings for Governorates, Districts and cities in Iraq, and in an effort to achieve standardization in SIGIR reports, Al Kut, as noted in project documentation will henceforth be referred to as Kut.

Scope of Work of the Task Order

The SOW under contracts for 12 police station projects included construction services for the new construction or renovation of building(s) and/or facilities located on an existing/new site in Iraq. The construction includes a masonry security wall around the compound, berms, vehicle and personnel gates, guard towers, driveways and a parking area, sidewalks, plumbing, electrical and mechanical work, roof, ceiling, door, windows, walls, floors, and interior and exterior painting, as well as the purchase and installation of a diesel powered back-up generator.

The SOW for one police station included the design/construction of a new electrical power distribution system, sanitary sewer system, new plumbing, structural reinforced concrete frame, and the construction of a new building with bricks and cement.

Warranties

All of the 13 public safety contracts reviewed contained warranty clauses. Twelve contracts covered workmanship and mechanical equipment for a period of at least one year, and one contract provided for warranties on all new utility and construction components and materials to include manufacturer and installers warranty and on site service for 2 years.

Ground Surveys

Project 18334: Police Station - Jamhuri - Q075

The IRMS database listed the project as 100 percent complete on 27 July 2005. The project included new construction of four guard towers, a parking lot, and an officer's room and renovation work. Site Photo 60 shows one of the corner guard posts. A new 63 KVA generator with two fuel tanks was on site. Discrepancies noted during the site visit included electrical and plumbing systems. Electrical panels were exposed, and an electrical outlet showed possible signs of recent fire damage. Site Photo 61 shows the fire damaged electrical outlet.



Site Photo 60: Perimeter security walls and corner guard (Project 18334)



Site Photo 61: Fire damaged electrical outlet (Project 18334)

Project 18362: Police Station - Kut - HQ

The IRMS database listed the project as 100 percent complete on February 23, 2005. Work was reported to include new construction and renovation. Work was reported complete and included painting of walls, installation of electrical systems, replacement of doors and windows, installation of air conditioning units, replacement of roof tiles, replacement of floor tiles and installation of exterior lighting. No significant discrepancies were noted during the visit.

Project 19111: Police Station - Al Uropa - W020

The IRMS database listed the project as 100 percent complete on 30 August - 2005. The project was new construction and included perimeter security walls, entrance gates, guard towers, and a nine-room building. Site Photo 62 shows the exterior of the building. A generator and covered parking area were also located within the perimeter walls. A crack was observed in the perimeter wall, although no other discrepancies were noted. Site Photo 63 shows the crack in the exterior perimeter wall.



Site Photo 62: Exterior of Police Station building (Project 19111)



Site Photo 63: Crack in perimeter wall (Project 19111)

Project 19117: Police Station Attika Jail - Q125

The IRMS database listed the project as 100 percent complete on 16 May 2005. The project consisted of the renovation of existing structures and new construction. Perimeter security walls topped with concertina wire, entrance gates, and corner guard posts were complete at the time of the visit. Contract line item 10 (d) included \$12,000 for a generator. It was reported the contractor did not supply new generators because the Police Headquarters supplied the facility with generators. Discrepancies noted during the visit included numerous cracks in interior walls. Site Photo 64 and 65 show examples of cracks in the walls.



Site Photo 64: Cracks in interior wall (Project 19117)



Site Photo 65: Wall cracks below window (Project 19117)

Project 19175: Police Station - Al Hayferiyah - W005

The IRMS database listed the project as 100 percent complete on 11 April 2005. This project included renovation of existing buildings and new construction. Most of the work observed during the site visit appeared to be of low quality. The following discrepancies were noted during the visit:

- Electrical systems had exposed wiring, broken fixtures, improper connections, and missing electrical covers throughout the entire police station. Site Photo 66 and 67 show examples of the electrical systems
- Interior and exterior paint was peeling due probably to low quality paint and/or improper preparation of the walls before painting. Site Photo 68 shows an interior wall with peeling paint.
- Numerous cracks were visible in the interior walls.
- Exterior walls were not completely finished, with exposed concrete block present.
- Roof tiles were not properly repaired and installed. Site Photo 69 shows an example of the damaged roof tiles.



Site Photo 66: Electrical wall switches (Project 19175)



Site Photo 67: Electrical circuit breaker panel (Project 19175)



Site Photo 68: Interior wall with peeling paint (Project 19175)



Site Photo 69: Damaged roof tiles (Project 19175)

Project 19179: Police Station - Kut - Emergency SWAT

The IRMS database listed the project as 100 percent complete on 2 April 2005. The project included construction of perimeter security walls and corner guard posts, entrance gates, sidewalks, security lighting, and a parking area. Site Photo 70 shows one of the corner guard posts and Site Photo 71 shows a concrete sidewalk. In addition, the contract required renovation of the electrical and pumping systems, roof and ceilings, windows, doors and walls. Construction activities were complete at the time of the visit. Noted discrepancies included rough surfaces and cracks in the concrete parking area and

improper electrical connections. Site Photo 72 shows exterior electrical wiring located on the ground surface and Site Photo 73 shows interior lights with possible fire damage.



Site Photo 70: Corner guard post and perimeter walls (Project 19179)



Site Photo 71: Concrete sidewalk (Project 19179)



Site Photo 72: Exposed electrical wirings (Project 19179)



Site Photo 73: Interior electrical light with smoke damage (Project 19179)

Project 19181: Police Station Checkpoint HQ - Khanzarah

The IRMS database listed the project as 100 percent complete on 12 April 2005. This project included renovation of existing buildings and new construction. Most of the work observed during the site visit appeared to be of low quality. The contract line item 10d required the installation of a new generator on a reinforced concrete pad with a line item price of \$15,000. It was reported the police station had an existing generator on-site, and the new generator supplied by the contractor was a small portable 4.0 KVA generator. The following discrepancies were also noted during the visit:

- Electrical systems had exposed wiring, broken fixtures, improper connections, and missing electrical covers throughout the entire police station. Site Photos 74 and 75 show examples of the electrical system deficiencies.

- Interior paint was peeling, due probably to low quality paint and/or improper preparation of the walls before painting.
- Interior ceilings showed signs of peeling and staining, probably from water leaks through the roof system.



Site Photo 74: Exposed electrical wirings (Project 19181)



Site Photo 75: Interior electrical light with exposed wiring (Project 19181)

Project 19187: Police Station - Kut - Traffic Police HQ

The IRMS database listed the project as 100 percent complete on 26 March 2005. The project included the rehabilitation of electrical systems, painting interior walls, replacement of windows and doors, installation of new window air conditioning units, repair of roof tiles, repair of floor tiles, and replacement of plumbing systems. No significant discrepancies were noted at this location, and finishing and electrical work appeared to have been completed at a higher quality than other projects presented in this section.

Project 19189: Police Station - Kut

The IRMS database listed the project as 100 percent complete on 6 March 2005. This project included repair and painting of interior walls, installation of new air conditioners, replacement of roof tiles, replacement of floor tiles, installation of a 35 KVA generator, and construction of four corner guard towers. Deficiencies noted included the following:

- Electrical systems had exposed wiring and improper connections at numerous locations in the police station. Site Photo 76 shows an example of the electrical wiring.
- Interior walls and ceilings had rough surfaces and inconsistent finishing. Site Photo 77 shows the surface of an interior ceiling.



Site Photo 76: Exposed electrical wirings (Project 19189)



Site Photo 77: Roof and inconsistent ceiling texture (Project 19189)

Project 19227: Police Station - Al Hayy - HQ - W015

The IRMS database listed the project as 100 percent complete on 31 May 2005. This project included repair and painting of interior walls, installation of new air conditioners, replacement of roof tiles, replacement of floor tiles, installation of an electrical generator, and construction of four corner guard towers and perimeter security fences. Deficiencies noted included the following:

- Cracks and peeling paint on the interior walls and ceilings. Site Photo 78 shows the interior walls of the police station with cracks and peeling paint.
- A large crack was noted in the perimeter security fence. Site Photo 79 shows the crack in the perimeter security fence.
- Roof tiles were not installed evenly.



Site Photo 78: Cracks and peeling paint in walls and ceiling (Project 19227)



Site Photo 79: Crack in perimeter wall (Project 19227)

Project 19230: Police - Bashier - W047

The IRMS database listed the project as 100 percent complete on 31 May 2005. The project included renovation of the police station to include installation of air conditioning units, replacement of doors, construction of corner guard towers, a perimeter security fence and exterior security lighting, installation of an electrical generator, and the renovation of electrical, water, and sewer systems. Discrepancies noted included the following:

- Cracks were noted in the concrete sidewalks.
- Large cracks were observed in exterior walls. Site Photo 80 shows an image of cracks in the exterior walls.
- Interior wall and ceiling paint was peeling due probably to low quality paint and/or improper preparation of the walls before painting. Site Photo 81 shows interior wall with peeling paint.



Site Photo 80: Cracks in exterior walls (Project 19230)



Site Photo 81: Peeling paint in interior walls (Project 19230)

Project 19779: Police Station - Qadissiyah - HQ - Q117

The IRMS database listed the project as 100 percent complete on 30 May 2005. The project consisted primarily of renovation of the electrical, mechanical, water, and wastewater systems, replacement of roof tiles and floor tiles, and construction of four guard towers with security lighting. In addition, contract line item 10d required the installation of a 30 KVA (minimum size) generator on a reinforced concrete pad. Existing 150 and 250 KVA generators were on site, although a new 30 KVA generator could not be located.

Project 20324: Police Station - Babil - Special Missions Units - Q128

The IRMS database listed the project as 100 percent complete on 15 September 2005. The project consisted primarily of renovation of the electrical, mechanical, water, and wastewater systems, replacement of roof tiles and floor tiles, replacement of doors and windows and construction of 4 guard towers with security lighting. Discrepancies noted during the site visit included the following.

- Bathrooms had pooled water on the floor, reportedly due to clogged wastewater lines. Site Photo 82 shows pooled water on the bathroom floors.

- Peeling interior paint was observed at numerous locations in the police station.
- Interior doors and locks were broken. Site Photo 83 shows a broken handle on one of the interior doors.



Site Photo 82: Pooled water on bathroom floor (Project 20324)



Site Photo 83: Broken door handle (Project 20324)

Conclusions

We assessed 13 public safety projects. The IRMS database listed all of the projects as 100 percent complete at the time of the site visits. We observed completed renovation and/or new construction work at all the locations surveyed. Our assessment determined that the quality of electrical, plumbing, and finishing work at a majority of the projects surveyed was deficient. Several locations required electrical generators but results of the site surveys revealed the generators were not on site and may not have been supplied by the contractor. Although contract warranties covered all of the 13 public safety projects reviewed, most of those warranties had expired at the time of this report.

Transportation Projects

We conducted ground project surveys of a road construction project in Basrah and railway station rehabilitation in the Thi-Qar Governorate under our surveys of transportation projects. PCO awarded Iraqi contractors two separate contracts, W914NS-05-C-0038 and W914NS-05-C-0011, to accomplish the work on the projects surveyed.

On 29 November 2004, PCO awarded a firm fixed price contract, Contract W914NS-05-C-0038, for the Basrah Village Road project.

On 30 November 2004, PCO awarded a firm fixed price contract, Contract W914NS-05-C-0011 for the rehabilitation of the Thi-Qar Railway Station. However, the U.S. Government terminated the contract for convenience on 23 October 2005. The following table lists the transportation projects associated with Contracts W914NS-05-C-0038 and W914NS-05-C-0011, as well as the cost per project.

Table 6. Transportation Projects Assessed by SIGIR

Transportation	Project ID	Actual or Estimated Completion Date	Construction Cost	Contract Number	GRD Region
Basrah Village Roads Al Haweer	17789	12-Oct-05	\$439,200	W914NS-05-C-0038	South
Thi-Qar Railway Station Rehabilitation (Nassriya ⁷)	21263	1-Feb-06	\$414,896	W914NS-05-C-0011	South

Project Objective

The overall objective of the project’s SOW under Contract W914NS-05-C-0038 was to complete 19 kilometers (km) of paved rural village roads located throughout the Governorate of Basrah, for everyday use by the local population. The 19 km of paved road encompassed five locations throughout the Governorate; however, our ground project survey looked at only a 3.3 km section from Al Haweer to Al Sada.

The overall objective of the project’s SOW under Contract W914NS-05-C-0011 is to rehabilitate six rural railway stations and one municipal railway station (Basrah) in the Governorate of Basrah; and nine rural railway stations, and one municipal railway station (Nassriya⁸) in the Governorate of Thi-Qar.

Scope of Work of the Task Order

The SOW states the Basrah Village Roads project is to include a review of the existing design, making revisions or completing the design as necessary. Using the completed design, the contractor is to construct a two-lane bituminous roadway, with each lane being 3.0 meters (m) wide, and a 1.75 m wide soil shoulder on each side of the highway. The sub-base is to be comprised of crushed aggregate, with a thickness of 30 centimeter (cm) and a 6.5 m width. The base course is to be comprised of asphalt concrete, with a total compacted thickness of 10 cm, with a 6 m width. The SOW also required the completion of structural excavations to accommodate concrete works for bedding and surrounding headwalls for the installation of reinforced double concrete pipe culverts, measuring 0.75 m.

The primary Scope of Work (SOW) for the Thi-Qar Railway Station rehabilitation project focuses on repairing or replacing sanitary and storm sewer systems, potable water and plumbing systems, mechanical and electrical systems, the facility structure and security features, as well as cleaning and cosmetic renovation.

Current Project Design and Specifications

The SOW for Contract W914NS-05-C-0038 requires that the design conform to the specifications in the design criteria manual “Republic of Iraq; Ministry of Housing & Construction; State Organization of Roads & Bridges; Highway Design Manual; 1982

⁷ Due to the various spellings for Governorates, Districts and cities in Iraq, and in an effort to achieve standardization in SIGIR reports, Nasiriyah, as noted in project documentation will henceforth be referred to as Nassriya.

Design & Study Department; Road & Traffic Division.” The SOW also requires that the design conform to standard Iraqi specifications found in the publication “Republic of Iraq; Ministry of Housing & Construction; State Organization of Roads & Bridges; Standard Specifications for Roads & Bridges; Department of Design & Studies, 1983.”

The SOW for Contract W914NS-05-C-0011 required the contractor to assess and evaluate the need for repairs at each location, based on the following criteria:

- The International Building Code (IBC) for the general building
- The International Plumbing Code (IPC) for plumbing
- The International Mechanical Code (IMC) for mechanical
- International Electrotechnical Commission (IEC) for electrical

Warranties

The contract covering Project 17789 contained a warranty of construction clause.

The contract covering Project 21263 required the provision and certification of warranties in the name of the appropriate Ministry, for all equipment, which includes any mechanical, electrical and/or electronic devices, and all operations for 12 months after issuance of the Taking-Over-Certificate. In addition, the contract required the contractor to provide any other commonly offered extended warranties for equipment and machinery purchased.

Ground Surveys

Project 17789: Basrah Village Roads Segment 5 Al Haweer

The majority of the project was completed at the time of the site visit. 2,050 linear meters of paved surface was inspected. No significant discrepancies relating to the construction were noted, although a lack of curbs on the side of the roads caused mud to cover the roadways after rain events. It was noted that the villagers in the area are “very appreciative for the efforts, because it made a big impact on their daily life after it was paved.”

Project 21263: Thi-Qar Railway Station Rehabilitation (Nassriya)

The renovation project was not complete at the time of the survey site visit and work was stopped by the contractor, although the reason was not noted. The Railway Station Manager stated the only defects were the delay and stopping of the work. Additionally, he said the Scope of Work should be increased to include new generators, sunshades, new water tanks, service roads, fencing, outdoors lights and seats for waiting passengers. No discrepancies were noted. Site Photo 84 shows the front entrance of the train station and Site Photo 85 shows the renovated hallway to include suspended ceiling and electrical lighting.



Site Photo 84: Front entrance of train station (Project 21263)



Site Photo 85: Interior hallway (Project 21263)

Conclusions

No significant discrepancies were noted at either the Basrah Road project or the Thi-Qar Railway Station project. It was reported that the villagers in the area of the Basrah road project were very appreciative of the effort and it positively affected their daily lives.

Summary Conclusions

Our ground survey teams visited 41 sites between November 2005 and February 2006. The purpose of the ground surveys was to verify reported project locations and to determine compliance with contract requirements. The following are general conclusions resulting from our review of the 41 ground surveys.

Project locations

Thirty-five of the 41 projects were located within 300 meters of their reported locations. Two projects were located between 1 kilometer and 3 kilometers and four projects were greater than 3 kilometers from their reported locations. The grid coordinates provided by GRD/PCO for the projects surveyed were not always accurate, although the project locations were substantially more accurate than presented in the previous SIGIR ground survey report last quarter.

Contract Documentation and Data

MNSTC-I could not account for nine border post projects, valued at \$1,643,750 included in our site surveys. GRD/PCO, US Army Corps of Engineers was unable to provide the task order associated with the \$2,371,395 Al Hasheme Substation project. In addition, the data contained in the IRMS database was inaccurate and incomplete for 11 projects surveyed.

Deficiencies and Warranty Coverage

Common deficiencies noted in our project surveys consisted of plumbing, electrical, and finishing work. A review of the contracts determined construction warranties covered 31 of the 41 projects surveyed. Although the warranties for each project differed in coverage, in general, coverage amounted to a period of at least one year. Most of the projects surveyed were beyond their covered warranty period. As such, projects listed in the IRMS database as being 100 percent complete would benefit by follow-up procedures to ensure the correction of noted deficiencies prior to warranty expiration. Most of the projects surveyed were beyond their covered warranty period.

Recommendations

We recommend the Commanding General, Multi-National Security Transition Command-Iraq should:

1. Require the Major Subordinate Commands responsible for maintaining contract documents to locate and provide to the Special Inspector General for Iraq Reconstruction the nine unaccounted for contract documents related to border posts as addressed in this report.
2. Assess the accuracy and completeness of the data in the Iraq Reconstruction Management System database, relating to Multi National Security Transition Command-Iraq projects, and make the necessary changes and updates to ensure the accuracy and completeness of the database.

Management Comments

The Commander, Gulf Region Division (GRD), of the U.S. Army Corps of Engineers provided comments to the draft report. No comments were received from the Commanding General Multi-National Security Transition Command – Iraq. The Commander GRD did not agree with all the conclusions contained in the draft report. He stated that warranty inspections would not have corrected many of the deficiencies noted. Only defective work resulting from performance of the contract Scope of Work is covered by the warranty and no pre-existing structural defects, improper use, or lack of maintenance qualifies as a warranty issue. In addition, he stated that project surveys did not always take into account existing conditions and improper user operation and maintenance of facilities, although the Commander did agree that better follow-up warranty inspections will help to correct items such as the peeling paint. Additional comments included corrections to specific sections of the report.

Evaluation of Management Comments

The management comments from the Commander addressed the issues raised in our report as they applied to his organization. SIGIR concurs that better follow-up warranty inspections will help to correct warranty covered discrepancies. In addition, we acknowledge that some of the deficiencies could be attributed to improper maintenance and use. Comments recommended to correct the specific sections of the report were evaluated and incorporated into this report, as appropriate. No comments were received from the Commanding General Multi-National Security Transition Command – Iraq, and thus did not address the issues raised in our report.

Appendix A. Scope and Methodology

We performed 41 ground project surveys between 19 November 2005 and 21 February 2006, in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency. We conducted these surveys as part of our continuing assessments of selected sector reconstruction activities. These surveys focused on the Facilities and Transportation sectors, to include border control, electrical, medical, and public safety facilities, as well as roads and railways. We documented site conditions using our Quality Control/Quality Assessment (QC/QA) teams. A team comprised of a SIGIR engineer and an auditor reviewed and analyzed reports and photographs provided by the QCQA teams.

We eliminated five of the sites selected for ground project surveys from this report because we could not confirm that the projects visited by our QCQA teams were actually the projects selected due to differences between the projects encountered and the statements of work in contracting documents. We plan to follow-up on the five projects eliminated by completing more comprehensive project assessments.

The 41 ground project surveys summarized in this report consist of: 21 border posts located in Sulaymaniyah and Wassit, Iraq, along the Iraq-Iran border, 1 electric substation located in the Governorate of Wassit, 4 medical facilities located in the Governorate of Najaf, 13 police stations/checkpoints located in the Governorates of Qadissiya and Wassit, 1 road construction project in Basrah, and 1 railway station rehabilitation in Thi-Qar.

In addition to reviewing the site assessment reports, the assessment team obtained and reviewed contract documentation, including the contract and/or task order, contract modifications, and Scope of Work (SOW) for 30 of the 41 projects surveyed. Multi-National Security Transition Command-Iraq (MNSTC-I) was unable to identify or locate the contract documents for nine of the projects surveyed. Gulf Region Division/Project and Contracting Office, US Army Corps of Engineers was unable to identify or locate the contract documents for one of the projects surveyed, and was unable to provide the SOW for a second contract.

Appendix B. Acronyms

cm	Centimeter
CPA	Coalition Provisional Authority
GPS	Global Positioning System
GRD	Gulf Region Division
IBC	International Building Code
IRMS	Iraq Reconstruction Management System
km	Kilometer
kV	Kilovolt
kVA	Kilo-Volt-Amp
m	Meter
MNSTC-I	Multi National Security Transition Command-Iraq
PCO	Project and Contracting Office
QCQA	Quality Control Quality Assessment
SIGIR	Special Inspector General for Iraq Reconstruction
SOW	Scope of Work

Appendix C. Report Distribution

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

Commander, Gulf Region Division, U.S. Army Corps of Engineers

Assistant Secretary of the Army for Financial Management and Comptroller

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 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:

Michael Stanka, PE

Lynne M. Champion