

**PLUMBING REPAIRS AT THE
BAGHDAD POLICE COLLEGE
BAGHDAD, IRAQ**

SUSTAINMENT ASSESSMENT

**SIGIR PA-08-154
SIGIR PA-08-155
SIGIR PA-08-156**

JANUARY 22, 2009

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Plumbing Repairs at the Baghdad Police College

Summary of Report: PA-08-154 to 156

Why SIGIR Did This Study

SIGIR performed this assessment to determine the status of actions taken to address previously identified plumbing deficiencies in the cadet barracks at the Baghdad Police College. The objective of the projects was to provide plumbing repairs and additional new construction required to provide latrine facilities for up to 3,200 cadets at the Baghdad Police College. SIGIR accomplished this sustainment assessment to determine if the projects were operating at full capability or capacity when transferred to the Government of Iraq.

MNSTC-I Actions Taken

As a result of the experience with the Baghdad Police College, the Multi-National Security Transition Command – Iraq (MNSTC-I) has implemented a number of lessons learned on subsequent contracting actions that SIGIR finds appropriate:

- Plumbing is no longer installed in barracks. All plumbing is included in single-story stand-alone latrine buildings.
- Separate latrine buildings are constructed for each building or unit occupying a building.
- Gravity-fed water systems are used, not water-pressure systems. Gravity-fed water systems pump water up to roof-top storage tanks when electricity is available. Water is then available when power is off, which is often the case in Iraq.

Although management comments were not required, MNSTC-I representatives reviewed the draft report and provided additional information and informal comments for clarity and accuracy. The final report was revised as appropriate.

What SIGIR Found

The objective of the three projects was to repair and replace latrine facilities in eight cadet barracks. On 25 November 2008 SIGIR performed an on-site assessment of the plumbing repairs at the Baghdad Police College. The facility was operating at full capability when accepted by the U.S. government and when transferred to Iraqi operators. However, because of vandalism, theft, and a lack of routine maintenance the latrine facilities were in a state of disrepair.

The deficient plumbing, previously constructed by Parsons Delaware, Inc., resulted in contaminated water leaking from the third floor to the second floor and from the second floor to the ground floor. After unsuccessful attempts to repair the plumbing, the decision was made to de-commission the bathrooms on the top two floors of the eight cadet barracks to prevent further damage. The deficient plumbing in these buildings was the focus of two previous SIGIR reports: PA-06-078.1 & 079.1, “Quick Reaction Report on the Baghdad Police College, Baghdad, Iraq,” issued in September 2006 and PA-06-078.2 & 079.2 “Baghdad Police College, Baghdad, Iraq,” issued in January 2007.

The repairs were completed and on 12 May 2008 the new latrine buildings, constructed by Laguna Construction Company, Inc., were turned over to the Government of Iraq. According to transfer documents, MNSTC-I and Government of Iraq representatives inspected the latrine buildings and signed turnover documents stating that the buildings were inspected and noting only minor deficiencies in each of the buildings. However, six months later, during a site inspection on 25 November 2008, SIGIR observed significant vandalism; widespread apparent theft of plumbing, heating, and ventilating equipment; lack of repairs; and generally poor maintenance of the latrine buildings. The areas had become potential health hazards.

MNSTC-I and the Air Force Center for Engineering and the Environment executed a successful quality management plan with regular, well documented, weekly meetings of the contractor’s quality control and the U.S. government’s quality assurance staffs overseeing work at Baghdad Police College. This cooperative working relationship ensured that the construction and repair work performed was satisfactory.





SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

January 22, 2009

MEMORANDUM FOR COMMANDING GENERAL, UNITED STATES CENTRAL
COMMAND
COMMANDING GENERAL, MULTI-NATIONAL FORCE-
IRAQ
COMMANDING GENERAL, MULTI-NATIONAL CORPS-
IRAQ
COMMANDING GENERAL, MULTI-NATIONAL
SECURITY TRANSITION COMMAND-IRAQ
COMMANDING GENERAL, JOINT CONTRACTING
COMMAND-IRAQ/AFGHANISTAN
DIRECTOR, IRAQ TRANSITION ASSISTANCE OFFICE

SUBJECT: Report on Plumbing Repairs at the Baghdad Police College, Baghdad, Iraq
(SIGIR Report Numbers PA-08-154, PA-08-155, and PA-08-156)

We are providing this report for your information and use. It addresses the current status of Plumbing Repairs at the Baghdad Police College, Baghdad, Iraq. The assessment was made to determine whether the project was operating at the capacity stated in the original contract.

This report contained no findings or recommendations for corrective action. Although management comments were not required, MNSTC-I representatives reviewed the draft report and provided additional information and informal comments for clarity and accuracy. We revised the final report as appropriate. As a result, comments to this final report are not required.

We appreciate the courtesies extended to our staff. If you have any questions please contact Mr. Brian Flynn via e-mail at brian.flynn@iraq.centcom.mil or at DSN 318-239-2485. For public affairs queries concerning this report, please contact SIGIR Public Affairs at publicaffairs@sigir.mil or at 703-428-1100.

Stuart W. Bowen, Jr.
Inspector General

Special Inspector General for Iraq Reconstruction

SIGIR-PA-08-154
SIGIR-PA-08-155
SIGIR-PA-08-156

January 22, 2009

Sustainment Assessment of Plumbing Repairs at the Baghdad Police College, Baghdad, Iraq

Synopsis

Introduction. The Office of the Special Inspector General for Iraq Reconstruction performed sustainment assessments of actions taken to address previously identified plumbing deficiencies in the cadet barracks at the Baghdad Police College. These assessments were performed to provide real-time relief and reconstruction information to interested parties to enable appropriate action, when warranted. The plumbing deficiencies were addressed under three contracting actions funded by the Iraq Relief and Reconstruction Fund and the Iraq Security Forces Fund.

Project Assessment Objective. The objective of the three project assessments was to determine whether the projects were operating at the capacity provided for in their task orders. To accomplish the objective, SIGIR determined whether the projects were operating at full capability or capacity when accepted by the U.S. government, when transferred to Iraqi operators, and during the site inspection on 25 November 2008. SIGIR conducted these limited scope assessments in accordance with the Quality Standards for Inspections issued by the Council of the Inspectors General on Integrity and Efficiency. The assessment team comprised an engineer/inspector and an auditor/inspector.

Project Objective. The overall objective of the projects was to repair and replace latrine facilities in eight cadet barracks built in 2006 at the Baghdad Police College¹ by Parsons Delaware, Inc. under the administration of the Gulf Region Division of the U.S. Army Corps of Engineers. The deficient plumbing previously constructed by Parsons Delaware, Inc. and their subcontractors resulted in contaminated water leaking from the third floor to the second floor and from the second floor to the ground floor. After unsuccessful attempts to repair the plumbing, the decision was made to de-commission the bathrooms on the top two floors of the eight cadet barracks to prevent further damage. The deficient plumbing in these buildings was the focus of previous reports:

- SIGIR report, PA-06-078.1 & 079.1, “Quick Reaction Report on the Baghdad Police College, Baghdad, Iraq” issued in September 2006
- SIGIR report, PA-06-078.2 & 079.2 “Baghdad Police College, Baghdad, Iraq” issued in January 2007

¹ The Baghdad Police College is also referred to in various documents related to it as the Baghdad Police Academy, Baghdad Public Safety Training Academy, and Baghdad Police Training Academy. For consistency within this report, unless used in a verbatim quotation, it is referred to as the Baghdad Police College.

These assessments evaluate the current status of the plumbing repairs and additional new construction required to provide latrine facilities for up to 3,200 cadets at the Baghdad Police College. The contract costs for the actions taken to address previously identified plumbing deficiencies in the cadet barracks at the Baghdad Police College totaled \$3,182,659. Contract FA8903-04-D-8690, Task Order 15, Modification 10 was funded by the Iraq Security Forces Fund. Contract FA8903-04-D-8690 Task Order 15 Modification 12 was funded by both the Iraq Security Forces Fund and the Iraq Relief and Reconstruction Fund.

The two newly constructed latrine buildings and plumbing repairs analyzed under these assessments were done as modifications to a then-ongoing contract for other work at the Baghdad Police College by Laguna Construction Company, Inc. Sole-source justification for the contract modifications to Laguna Construction Company, Inc., was made on the basis of their proven success working with the local Iraq sub-contractors, the quality of work already done at the site on other ongoing contracts with the Air Force Center for Engineering and the Environment at Baghdad Police College.

Conclusion. The facility was operating at full capability when accepted by the U.S. government and when transferred to Iraqi operators. The contract called for the design and construction of a new one-level latrine facility to accommodate 3,200 men. A work change request further delineated that it would involve the construction of 160 eastern-style toilets in individual stalls, 160 individual shower stalls, and 80 hand-and-foot washing stations in a concrete trough. These proposed quantities are consistent with the Sand Book Standards that are used for the U.S. military, and it was decided that the same standards would be used for the Iraqis. Because the space available for the two new latrine buildings was designed to accommodate only 142 toilets, 121 showers, and 105 hand-and-foot washing stations a decision was made to install 8 ablution (latrine) trailers near the new latrine buildings to make up the difference. The eight latrine trailers were added in another modification to the contract.

The Multi-National Security Transition Command – Iraq and Air Force Center for Engineering and the Environment executed a successful quality management plan with regular, well-documented, weekly meetings between the contractor’s quality control and the U.S. government’s quality assurance staffs overseeing work at the Baghdad Police College. The resulting close and cooperative working relationship ensured that the quality of construction and repair work performed was satisfactory. Oversight of the construction and repair work was maintained, and significant construction problems were avoided.

On 12 May 2008 the new latrine buildings, constructed by Laguna Construction Company, Inc. were turned over to the Government of Iraq. According to transfer documents, representatives of the Multi-National Security Transition Command – Iraq and the Government of Iraq inspected the latrine buildings and signed turnover documents stating that they had inspected the two latrine buildings and noted only minor deficiencies. Nevertheless, six months later during a site inspection on 25 November 2008, SIGIR observed significant vandalism; the widespread apparent theft of plumbing, heating, and ventilation equipment; a lack of repairs; and generally an unsatisfactory level of maintenance performed on the latrine buildings. SIGIR inspection of representative barracks confirmed that the buildings were well maintained and the barracks plumbing on the first floors had been repaired and was generally in good shape.

The Government of Iraq did not repair the damage caused by vandalism or replace the items that had been removed by apparent theft from the new latrines. As a result, only

portions of the two new latrine buildings and none of the eight latrine trailers appeared usable. The eight latrine trailers were particularly filthy thereby creating a health hazard.

Although some vandalism has occurred at the facility, Multi-National Security Transition Command – Iraq has reported that there are or have been eight major construction projects totaling nearly \$128 million, and that these projects are supporting thousands of students in facilities that are fully operational today and are well-utilized by the Iraqi Police Forces.

Actions Taken by the Multi National Security Transition Command – Iraq. The Multi National Security Transition Command – Iraq has implemented a number of lessons learned on subsequent contracting actions as a result of the experience with the Baghdad Police College that SIGIR finds appropriate:

1. Plumbing is no longer installed in barracks. All plumbing is included in single-story stand-alone latrine buildings. The particularly hard use of institutional buildings such as barracks by large numbers of personnel and frequent turnover requires particularly robust plumbing. This is best accommodated in single-story stand alone latrine buildings that are specifically constructed for the rugged use that they will undergo.
2. Separate latrine buildings are constructed for each building or unit occupying a building. When a unit is assigned a building, it takes a proprietary ownership interest and maintenance reflects the fact that the unit is in control of the building. On the other hand, when multiple units use two latrine buildings, as was the case here, no single unit can take proprietary ownership and in fact no proprietary ownership was evident.
3. Gravity-fed water systems are used, not water pressure systems. With gravity-fed water systems, water is pumped up to roof-top storage tanks when electricity is available. Gravity-fed water is then available when power is off, as is frequently the case in Iraq.

Recommendations. This report does not contain any findings or recommendations for corrective action. Therefore, management comments were not required.

Management Comments. Although management comments were not required, the appropriate Multi National Security Transition Command – Iraq representatives reviewed the draft report and provided additional information and informal comments for clarity and accuracy. The final report was revised as appropriate.

Table of Contents

Synopsis	i
Introduction	
Objective of the Project Assessment	1
Pre-Site Assessment Background	1
Contract, Costs and Statements of Work	2
Project Design	3
Warranties	4
Site Assessment	7
Conclusions	11
Recommendations	12
Management Comments	12
Appendices	
A. Scope and Methodology	13
B. Acronyms	14
C. Report Distribution	15
D. Project Assessment Team Members	17

Introduction

Objective of the Project Assessment

The Office of the Special Inspector General for Iraq Reconstruction (SIGIR) performed sustainment assessments of actions taken to address previously identified plumbing deficiencies in the cadet barracks to provide real-time relief and reconstruction information to interested parties to enable appropriate action, when warranted. The plumbing deficiencies were addressed under three contracting actions funded by the Iraq Relief and Reconstruction Fund (IRRF) and the Iraq Security Forces Fund (ISSF). The objective of these three project assessments was to determine whether the projects were operating at the capacity stated in the task orders. To accomplish the objective, SIGIR determined whether the projects were at full capability or capacity when accepted by the U.S. government, when transferred to Iraqi operators, and during the site inspection on 25 November 2008.

Pre-Site Assessment Background

The overall objective of the projects was to repair and replace latrine facilities in eight cadet barracks, originally built in 2006, at the Baghdad Police College² by Parsons Delaware, Inc. under the administration of the Gulf Region Division (GRD) of the U.S. Army Corps of Engineers (USACE). The deficient plumbing previously identified which was constructed by Parsons Delaware, Inc. and their subcontractors resulted in contaminated water leaking from the third floor to the second floor and from the second floor to the ground floor. After unsuccessful attempts to repair the plumbing, the decision was made to de-commission the bathrooms on the top two floors of the eight cadet barracks to prevent further damage. The deficient plumbing in these buildings was the focus of previous reports: SIGIR report, PA-06-078.1 & 079.1, “Quick Reaction Report on the Baghdad Police College, Baghdad, Iraq” issued in September 2006 and SIGIR report, PA-06-078.2 & 079.2 “Baghdad Police College, Baghdad, Iraq” issued in January 2007.

These assessments evaluate the current status of the plumbing repairs and additional new construction required to provide latrine facilities for up to 3,200 cadets at the Baghdad Police College.

The contract with Parsons Delaware, Inc. for construction and rehabilitation of the Baghdad Police College was terminated for convenience by the U.S. government in May 2006. The Multi-National Security Transition Command – Iraq (MNSTC-I) transferred administration of the project from GRD to the Air Force Center for Engineering and the Environment (AFCEE), which was managing other construction work on the Baghdad Police College campus that was being completed by Laguna Construction Company, Inc.

The two newly constructed latrine buildings and plumbing repairs, reviewed under this assessment, were done under modifications to a then-ongoing Task Order 15 of contract FA8903-04-D-8690 for other work at the Baghdad Police College by Laguna

² The Baghdad Police College is also referred to in various documents related to it as the Baghdad Police Academy, Baghdad Public Safety Training Academy, and Baghdad Police Training Academy. For consistency within this report, unless used in a verbatim quotation, it is referred to as the Baghdad Police College.

Construction Company Inc. Sole source justification for the contract modifications to Laguna Construction Company, Inc. was made on the basis of their proven success working with the local Iraq sub-contractors, the quality of work already done at the site on other ongoing contracts with AFCEE at Baghdad Police College.

MNSTC-I and AFCEE executed a successful quality management plan that included regular, well documented, weekly meetings between the contractor’s quality control and the U.S. government’s quality assurance staffs overseeing work at the Baghdad Police College. The resulting close and cooperative working relationship ensured that the quality of construction and repair work performed was satisfactory. The construction and repair work had adequate oversight which resulted in the avoidance of significant construction problems.

On 12 May 2008 the new latrine buildings constructed by Laguna Construction Company, Inc. were turned over to the Government of Iraq (GOI). According to transfer documents, the latrine buildings were inspected by the MNSTC-I and GOI representatives. The turnover documents, signed by MNSTC-I and GOI representatives, stated that the buildings were inspected with only minor deficiencies noted. However, six months later during a site inspection on 25 November 2008, SIGIR observed significant vandalism damage; widespread apparent theft of plumbing, heating and ventilation equipment; a lack of repairs; and generally unsatisfactory maintenance of the latrine buildings. SIGIR inspection of representative barracks confirmed that the buildings were well maintained and the barracks plumbing on the first floors had been repaired and was generally in good shape.

The GOI did not repair the damage caused by vandalism or replace items removed by apparent theft. As a result, only portions of the two new latrine buildings and none of the eight latrine trailers appeared usable. The eight latrine trailers were particularly filthy, thereby creating a health hazard.

Contract, Costs and Statements of Work

The contract, costs, and Statements of Work (SOW) for the specific items addressed in this assessment report total \$3,182,659 and are detailed below. Contract FA8903-04-D-8690, Task Order 15, Modification 10 was funded by the Iraq Security Forces Fund. Contract FA8903-04-D-8690 Task Order 15 Modification 12 was funded by both the Iraq Security Forces Fund and the Iraq Relief and Reconstruction Fund.

Contract FA8903-04-D-8690, Task Order 15, Modification 10

Item	List of Items within Scope	Total Price
13	<u>Quad Cadet Barracks</u> – Design and construct a new one level Latrine Facility building to accommodate 3,200 men. Fit the building in to a space 16m wide x 60m long. Construct 160 eastern type WC’s [Water Closets – a room or booth containing a toilet] in individual stalls, 160 individual shower stalls, and 80 hand & foot washing stations in a concrete trough. All fixtures to be industrial type durability.	\$1,655,168
18	<u>Quad Cadet Barracks</u> – Repair, clean and repaint all damaged walls and ceilings.	\$ 247,800
Total		\$ 1,902,968

Contract FA8903-04-D-8690 Task Order 15 Modification 12

Item	List of Items within Scope	Total Price
28	<u>Quad Cadet Barracks</u> – Assess, identify and repair of existing plumbing and drainage problems on ground floor WC’s of all 8 buildings.	\$ 638,844
29	<u>Quad Cadet Barracks</u> – Cut off water supply and drains on the middle and top floors. Remove all latrine fixtures, partitions, suspended ceilings & grid; plug all water supply lines and drains at all 8 buildings. Utilize space for storage.	\$ 640,847
Total		\$ 1,279,691

Project Design

The contract called for the design and construction of two new one-level latrine facilities to accommodate 3,200 men (Figure 1). A work change request further delineated that it would involve the construction of 160 eastern-style toilets in individual stalls, 160 individual shower stalls, and 80 hand-and-foot washing stations in a concrete trough. These proposed quantities are consistent with the Sand Book Standards that are used for the U.S. military, and it was decided that the same standards would be used for the Iraqis.

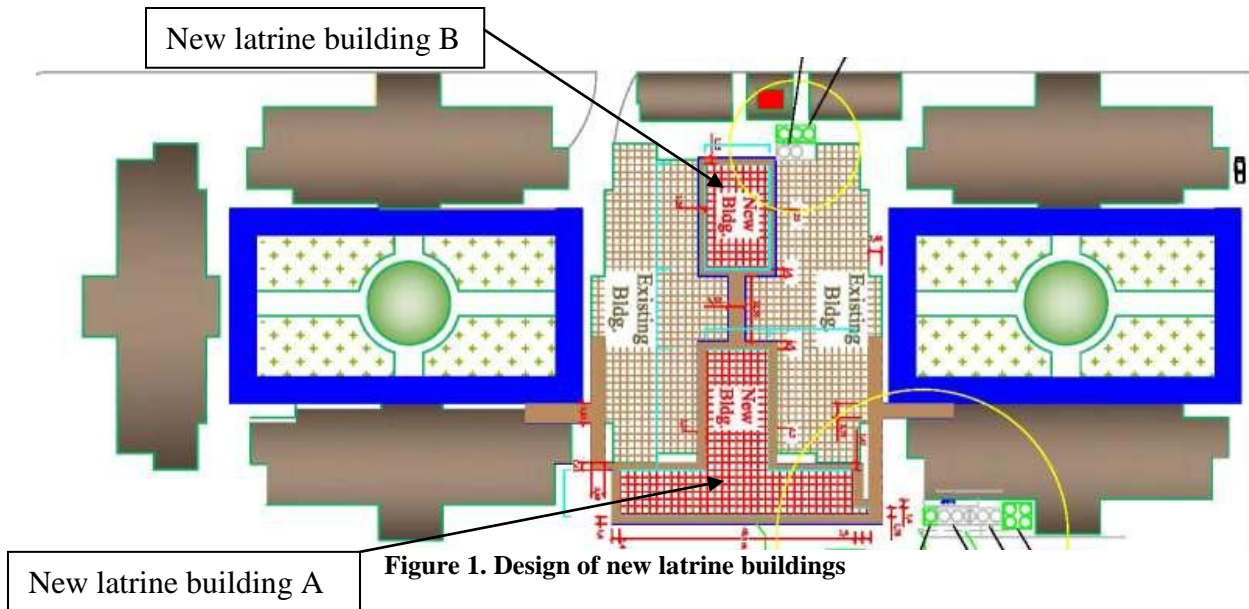


Figure 1. Design of new latrine buildings

The contract required compliance with, “Iraqi Construction Standards; and where feasible, the International Building Code (IBC)”. MNSTC-I provided the following documents: 6 architectural drawings, 17 electrical drawings, 5 mechanical drawings, 6 plumbing drawings, 6 sewer network drawings, and 15 steel drawings.

SIGIR’s review of architectural drawings confirmed that latrine building A would provide 116 eastern-style toilets, 81 showers, and 85 hand-and-foot washing stations. Latrine building B would provide 26 eastern-style toilets, 40 showers, and 20 hand-and-foot washing stations.

The two building facilities would provide a total of 142 eastern-style toilets, 121 showers, and 105 hand-and-foot washing stations. Since the available space was not sufficient to provide the required 160 toilets and 160 showers, a decision was made to install 8 ablution (latrine) trailers near the new latrine buildings to make up the difference. The eight latrine trailers were added in another modification to the contract.

SIGIR's review of the project submittals considered the task order requirements. The overall design took into consideration the sequencing of work and the relationship to other task order work. The design also took into account local availability of materials and labor skills. However, SIGIR believes that the adequacy of design would have been further assured and any future design issues facilitated if design calculations, drawings to scale, and testing documentation were readily available for review.

Warranties

As previously noted, the latrine buildings were turned over to the GOI in May 2008 (Site Photo 1). MNSTC-I and GOI representatives inspected the latrine buildings and found only minor deficiencies. The Assets Recognition Deficiency Report documenting the inspections was issued in Arabic and was translated into English. The deficiencies noted included a broken faucet, a broken toilet siphon, broken water heaters, and touch up work in latrine building A and only touch up work in latrine building B. No other deficiencies were noted.

The contract warranty clause provides that, "The Contractor shall also provide one-month of classroom and on the job training for all onsite equipment, and warranty and operations and maintenance oversight for a period of twelve months." However, the extensive vandalism damage and the widespread apparent theft of plumbing, heating, and ventilation equipment has rendered warranty provisions for the two new latrine buildings unenforceable (Site Photo 2).



Site Photo 1. Latrine building A - May 2008 at turnover to GOI (Photo courtesy of MNSTC-I)



Site Photo 2. Latrine building A – November 2008 during SIGIR site inspection

The latrine trailers were new when delivered and installed. Site Photo 3 shows a latrine trailer at the time it was delivered and installed. Site photo 4 shows a latrine trailer at the time of the site inspection on 25 November 2008.



Site Photo 3. Ablution trailer at turnover to GOI (Photo courtesy of MNSTC-I)



Site Photo 4. Latrine trailer at the time of the SIGIR site inspection on 25 November 2008.

Site Assessment

On 25 November 2008, the SIGIR inspection team performed an on-site assessment of plumbing repairs at the Baghdad Police College. SIGIR inspection of representative barracks confirmed that the buildings were well maintained and the barracks plumbing on the first floors had been repaired and was generally in good shape. In accordance with the terms of the task orders, the second and third floor toilets, showers, and hand-and-foot washing stations of the cadet barracks were removed and the plumbing lines were filled with cement.

In order to provide sufficient toilets, showers, and hand-and-foot washing stations for the occupants of the eight cadet barracks, two new single-story latrine buildings were constructed. The newly constructed latrine buildings were placed in the center of the two quads formed by the eight cadet barracks. Site Photo 5 shows latrine building A. Site Photo 6 shows latrine building B.

SIGIR found that portions of the two new latrine buildings were unusable and that no portions of the eight latrine trailers appeared usable. The eight latrine trailers were particularly filthy, thereby creating a health hazard.



Site Photo 5. Latrine building A and its water heaters placed between cadet barracks



Site Photo 6. Latrine building B, between cadet barracks

In the latrine buildings, there was extensive vandalism and theft of fixtures including exhaust fans torn out of the windows (Site Photo 7), shower pipes bent beyond use (Site Photos 8), faucets removed from hand-and-foot washing stations and capped off (Site Photo 2), and toilet flush tanks torn off the walls. Site Photo 9 shows toilets at the time of turn over to the Government of Iraq (GOI) in May 2008. Site Photo 10 shows a toilet at the time of the site inspection on 25 November 2008. In a number of instances, the shower stalls in the newly built latrine buildings had shower head piping bent over in an

unusable condition. The inside of the building had missing, or extensive damage to the plumbing fixtures.



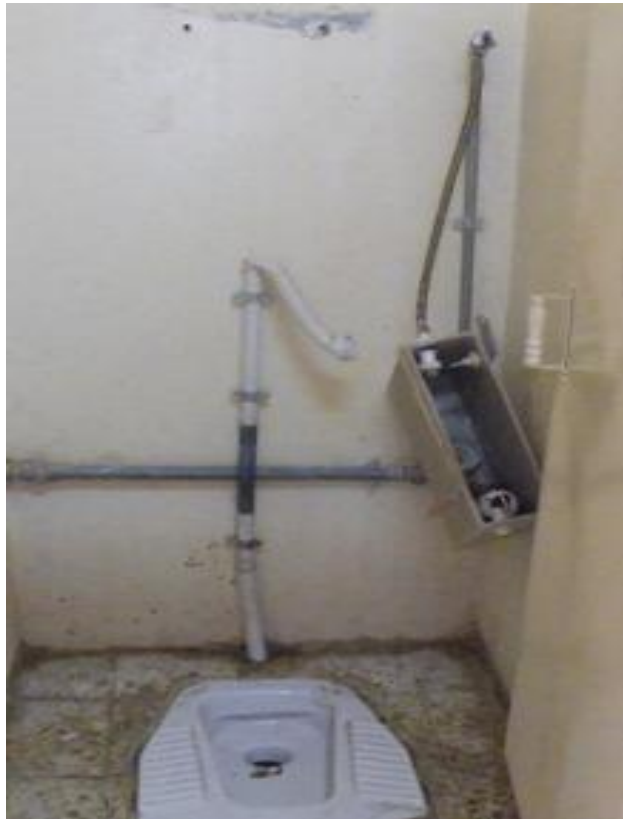
Site Photo 7. Exhaust fans were removed from new latrine buildings



Site Photo 8. Vandalized showers - latrine building B



**Site Photo 9. Toilet in new latrine building at turnover to GOI in May 2008
(Photo courtesy of MNSTC-I)**



Site Photo 10. Toilet in the new latrine building during the SIGIR site inspection (11-25-08)

The bathrooms of the first floor cadet barracks were repaired under Modification 10 of contract 8904-07-D-8690 for \$638,844. There were 9 toilets, 5 showers, and 9 hand-and-foot washing stations in each building. SIGIR observed that the latrine facilities on the first floor of the cadet barracks were in generally good condition, though there were instances in which a shower pan and floor drain had been poorly repaired and a flush tank had been disconnected from its pipe.

SIGIR inspectors observed the latrine trailers during the inspection on 25 November 2008 (Site Photo 11 and 12). The eight latrine trailers were particularly filthy, thereby creating a health hazard. In response to the vandalism, MNSTC-I and the GOI have taken actions to minimize future issues with respect to construction. These actions include building stand alone latrines separate form barracks to separate the plumbing and potential for water and sewage damage in living areas and transfer buildings to specific GOI agencies and organizations. Specific Iraqi ownership has improved the operations and maintenance of the facilities. Installing gravity-fed water systems where practicable to account for uncertainty in the electrical systems to ensure potable water is still available when needed.



Site Photo 11. Condition of hand-and-foot washing stations in latrine trailer.



Site Photo 12. Condition of shower in latrine trailer.

Conclusions

The facility was operating at full capability when accepted by the U.S. government and when transferred to Iraqi operators. The contract called for the design and construction of a new one-level latrine facility to accommodate 3,200 men. A work change request further delineated that it would involve the construction of 160 eastern-style toilets in individual stalls, 160 individual shower stalls, and 80 hand-and-foot washing stations in a concrete trough. These proposed quantities are consistent with the Sand Book Standards that are used for the U.S. military, and it was decided that the same standards would be used for the Iraqis. Because the space available for the two new latrine buildings was designed to accommodate only 142 toilets, 121 showers, and 105 hand-and-foot washing stations a decision was made to install 8 ablution (latrine) trailers near the new latrine buildings to make up the difference. The eight latrine trailers were added in another modification to the contract.

The Multi-National Security Transition Command – Iraq and Air Force Center for Engineering and the Environment executed a successful quality management plan with regular, well-documented, weekly meetings between the contractor's quality control and the U.S. government's quality assurance staffs overseeing work at the Baghdad Police College. The resulting close and cooperative working relationship ensured that the quality of construction and repair work performed was satisfactory. Oversight of the construction and repair work was maintained, and significant construction problems were avoided.

On 12 May 2008 the new latrine buildings, constructed by Laguna Construction Company, Inc. were turned over to the Government of Iraq. According to transfer documents, representatives of the Multi-National Security Transition Command – Iraq and the Government of Iraq inspected the latrine buildings and signed turnover documents stating that they had inspected the two latrine buildings and noted only minor deficiencies. Nevertheless, six months later during a site inspection on 25 November 2008, SIGIR observed significant vandalism; the widespread apparent theft of plumbing, heating, and ventilation equipment; a lack of repairs; and generally an unsatisfactory level of maintenance performed on the latrine buildings. SIGIR inspection of representative barracks confirmed that the buildings were well maintained and the barracks plumbing on the first floors had been repaired and was generally in good shape.

The Government of Iraq did not repair the damage caused by vandalism or replace the items that had been removed by apparent theft. As a result, only portions of the two new latrine buildings and none of the eight latrine trailers appeared usable. The eight latrine trailers were particularly filthy thereby creating a health hazard.

Although some vandalism has occurred at the facility, Multi-National Security Transition Command – Iraq has reported that there are or have been eight major construction projects totaling nearly \$128M, and that these projects are supporting thousands of students in facilities that are fully operational today and are well-utilized by the Iraqi Police Forces.

Actions Taken by the Multi National Security Transition Command – Iraq. The Multi National Security Transition Command – Iraq has implemented a number of lessons learned on subsequent contracting actions as a result of the experience with the Baghdad Police College that SIGIR finds appropriate:

1. Plumbing is no longer installed in barracks. All plumbing is included in single-story stand-alone latrine buildings. The particularly hard use of institutional buildings such as barracks by large numbers of personnel and frequent turnover requires particularly robust plumbing. This is best accommodated in single-story stand alone latrine buildings that are specifically constructed for the rugged use that they will undergo.
2. Separate latrine buildings are constructed for each building or unit occupying a building. When a unit is assigned a building, it takes a proprietary ownership interest and maintenance reflects the fact that the unit is in control of the building. On the other hand, when multiple units use two latrine buildings, as was the case here, no single unit can take proprietary ownership and in fact no proprietary ownership was evident.
3. Gravity-fed water systems are used, not water pressure systems. With gravity-fed water systems, water is pumped up to roof-top storage tanks when electricity is available. Gravity-fed water is then available when power is off, as is frequently the case in Iraq.

Recommendations

This report does not contain any findings or recommendations for corrective action. Therefore, management comments were not required.

Management Comments

Although management comments were not required, the appropriate Multi-National Security Transition Command – Iraq representatives reviewed the draft report and provided additional information and informal comments for clarity and accuracy. The final report was revised as appropriate.

Appendix A. Scope and Methodology

SIGIR performed these project assessments from October through December 2008 in accordance with the Quality Standards for Inspections issued by the Council of the Inspector's General on Integrity and Efficiency. The assessment team comprised an engineer/inspector and an auditor/inspector.

In performing these Project Assessments SIGIR:

- Reviewed contract documentation summarized in purchase request and commitment from ISFF, and from IRFF, sole source justification, reviewed the SOW for contract 8904-07-D-8960 Task Order 15 Modification 10 encompassing Work Change Request 10-R4; and SOW Modification 12 encompassing Work Change Request R9.-09;
- Reviewed engineering assessments conducted by Unites States Army Corps of Engineers, Gulf Region Division;
- Conducted a site visit on 25 November 2008; and
- Conducted briefings with the Multi-National Security Transition Command – Iraq on 26 October 2008, 25 November 2008, and 4 December 2008.

Appendix B. Acronyms

AFCEE	Air Force Center for Engineering and the Environment
GOI	Government of Iraq
GRD	Gulf Region Division
IRRF	Iraq Relief and Reconstruction Fund
ISSF	Iraq Security Forces Fund
MNSTC-I	Multi-National Security Transitional Command – Iraq
SIGIR	Special Inspector General for Iraq Reconstruction
SOW	Statement of Work
USACE	United States Army Corps of Engineers
WC	Water Closet

Appendix C. Report Distribution

Department of State

Secretary of State

Senior Advisor to the Secretary and Coordinator for Iraq

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

Director, Office of Iraq Reconstruction

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

U.S. Ambassador to Iraq

Director, Iraq Transition Assistance Office

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

Inspector General, Department of State

Department of Defense

Secretary of Defense

Deputy Secretary of Defense

Under Secretary of Defense (Comptroller)/Chief Financial Officer

Deputy Chief Financial Officer

Deputy Comptroller (Program/Budget)

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

Inspector General, Department of Defense

Director, Defense Contract Audit Agency

Director, Defense Finance and Accounting Service

Director, Defense Contract Management Agency

Department of the Army

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

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

Deputy Assistant Secretary of the Army (Policy and Procurement)

Commanding General, Joint Contracting Command-Iraq/Afghanistan

Assistant Secretary of the Army for Financial Management and Comptroller

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

Commanding General, Gulf Region Division

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

Auditor General of the Army

U.S. Central Command

Commanding General, Multi-National Force-Iraq

Commanding General, Multi-National Corps-Iraq

Commanding General, Multi-National Security Transition Command – Iraq

Commander, Joint Area Support Group-Central

Other Federal Government Organizations

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

Congressional Committees

U.S. Senate

Senate Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Foreign Relations
Senate Committee on Homeland Security and Governmental Affairs

U.S. House of Representatives

House Committee on Appropriations
House Committee on Armed Services
House Committee on Oversight and Government Reform
House Committee on Foreign Affairs

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:

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