

**HADITHA DAM PERIMETER SECURITY
HADITHA, IRAQ**

SUSTAINMENT ASSESSMENT

**SIGIR PA-09-192
APRIL 13, 2010**



Haditha Dam Perimeter Security

Summary of Report: PA-09-192

Why SIGIR Did this Study

SIGIR is charged to conduct assessments of Iraq reconstruction projects funded with amounts appropriated or made available by the U.S. Congress. SIGIR assessed this project to provide real-time information on relief and reconstruction to interested parties to enable appropriate action, when warranted.

The objective of this sustainment assessment was to determine whether the project is operating at the capacity stated in the original contract. To accomplish the objective, the assessment team determined whether the project was at full capability or capacity when accepted by the U.S. government, when transferred to Iraqi operators, and during the site inspection.

What SIGIR Recommends

SIGIR recommends that the Al Anbar Resident Office continue to ensure that the contractor:

1. Replace and repair the collapsed fence line.
2. Reset the remaining fence poles that were not set to their proper depth.
3. Implement controls to ensure that the contractor provides daily quality control reports of the corrective actions taken for the deficiencies.

Management Comments

SIGIR received comments on a draft of this report from the United States Forces – Iraq and the Gulf Region District of U.S. Army Corps of Engineers concurring with the recommendations, confirming that corrective action was already underway, and noting that it generally agreed with the facts in the report. The Gulf Region District also provided comments for the clarity and accuracy of this final report.

Evaluation of Comments

SIGIR appreciates the concurrence with the draft report's recommendations and corrective action taken by Gulf Region District. Their comments addressed the issues identified in our recommendations.

What SIGIR Found

The overall objective of this \$1 million Economic Support Fund project was to construct a security perimeter for the Haditha Dam in order to prevent the dam from being sabotaged. Destruction of the dam would greatly affect the functioning of the country's electrical grid and would cause major flooding downstream.

The project was turned over to the Government of Iraq on 5 January 2009 with no construction deficiencies noted. The design documents contained information conveying the scope and intent of the project, and the drawings appeared complete containing information regarding the fence, access drive, swing gate, lift gate, barriers, and other project details.

On 3 November 2009, SIGIR performed an on-site assessment. Due to security concerns, the total time available on site was approximately two hours. Therefore, a limited review was conducted. SIGIR inspected several sections of fence totaling one kilometer, 300 meters of perimeter road, and one access gate.

SIGIR found that sections of the perimeter fence did not conform to contract requirements. Strands of barbed wire were not placed on the brackets along the top of the fence. Also, the wire was only 18 inches in diameter instead of the required 24 to 30 inches. In addition, the chain-link fabric was at 32 inches on-center, which did not meet requirements. Further, several of the truss rods were poorly tensioned in the brace panels, which will affect the ability of the brace panels to support the fence without movement. SIGIR also noticed that the brace rails were misaligned.

SIGIR also observed that approximately 150 feet of fence line had fallen. Concrete anchorage for the fence posts was to be at a 45 inch depth; however, actual depth was 8 to 12 inches and their diameter was less than the required 16 inches. In addition, the anchorage did not cover the end of the post and gaps existed between the anchorage and the soil which will allow for increased corrosion. Other deficiencies were also noted.

SIGIR concluded that the construction of the Haditha Dam Perimeter Security project was inadequate. However, after the deficiencies identified by SIGIR were brought to the attention of the Al Asad Resident Office, corrective action was initiated. After review of the contractor's submitted remediation plan, SIGIR determined that the proposed corrective actions should correct the deficiencies noted.





SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

April 13, 2010

MEMORANDUM FOR COMMANDING GENERAL, UNITED STATES CENTRAL
COMMAND
COMMANDING GENERAL, UNITED STATES FORCES-
IRAQ
COMMANDING GENERAL, JOINT CONTRACTING
COMMAND-IRAQ/AFGHANISTAN
DIRECTOR, IRAQ TRANSITION ASSISTANCE OFFICE

SUBJECT: Report on the Haditha Dam Perimeter Security, Haditha, Iraq (SIGIR Report
Number PA-09-192)

We are providing this report for your information and use. It addresses the current status of the Haditha Dam Perimeter Security in Haditha, Iraq. This assessment was made to provide you and other interested parties with real-time information on a relief and reconstruction project and to determine whether the project was operating at the capacity stated in the original contract.

SIGIR received comments on a draft of this report from the United States Forces – Iraq and the Gulf Region District of the U.S. Army Corps of Engineers concurring with the recommendations and noting that it generally agreed with the facts in the report. They also provided comments for the clarity and accuracy of this final report. As a result, no additional comments are required.

We appreciate the courtesies extended to our staff by the United States Forces-Iraq and the offices of the Gulf Region District of the U.S. Army Corps of Engineers. If you have any questions please contact Mr. Brian M. Flynn at brian.flynn@sigir.mil or at 240-553-0581, extension 2485. For public queries concerning this report, please contact SIGIR Public Affairs at publicaffairs@sigir.mil or at 703-428-1100.

A handwritten signature in black ink, appearing to read "Stuart Bowen, Jr." with a period at the end.

Stuart W. Bowen, Jr.
Inspector General

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Introduction

Objective of the Project Assessment

The objective of this project assessment was to provide real-time information on relief and reconstruction to interested parties to enable appropriate action to be taken, if warranted. Specifically, SIGIR determined whether the project was operating at the capacity stated in the original contract. To accomplish this, SIGIR determined whether the project was at full capability or capacity when accepted by the U.S. government, when it was transferred to Iraqi operators, and when SIGIR inspected the site.

Pre-Site Assessment Background

Contract, Costs and Payments

On 1 May 2007, the Gulf Region Division¹, Central District (GRC) awarded Contract W917BG-07-C-0067, a firm-fixed-price contract to a local contractor in the amount of \$1,707,500. The contract contained two modifications.

- P00001, dated 27 August 2007, extended the period of performance by an additional 60 days. The Notice to Proceed was issued on 13 June 2007 and the contract completion date was 8 February 2008. The modification extension is at no cost to either party.
- P00002, dated 16 May 2008, modified the contract due to deletions and addition to the Bill of Quantities. This modification reduced the size of the enclosed area and the resulting perimeter fence length to 7.5 kilometers. As a result, the total funded amount of the contract was decreased by \$710,000 from \$1,707,500 to \$997,500.

The contractor received the Notice to Proceed on 14 June 2007.

Project Objective and Pre-Construction Description

The overall objective of the project was to construct a security perimeter for the Haditha Dam in order to prevent unauthorized access and the possibility of the dam from being destroyed. Destruction of the dam would greatly affect the functioning of the country's electrical grid and would cause major flooding downstream.

¹ Formerly, the U.S. Army Corp of Engineers (USACE) organization in Iraq consisted of the Gulf Region Division under which were the Gulf Region North District (GRN), Gulf Region Central District (GRC), and Gulf Region South District (GRS). Each of the Districts had local area, resident and project offices. The designation of a local office as an area, resident or project office depended on the number of reconstruction projects that it was responsible for overseeing.

Since July 2009, the USACE in Iraq has been undergoing reorganization to downsize as the number of reconstruction projects has diminished. The Gulf Region Division was disestablished. GRN, GRC, and GRS were combined to form the Gulf Region District. The reduced number of reconstruction projects has also resulted in the closing or reduction in size of many of the local area, resident and project offices. The local offices that have been reduced in size have had their designations changed from area offices to resident or project offices.

In the body of this report, the names of USACE organizations at the time of the actions cited are used. Recommendations are directed to the current designations of the organizations able to take corrective action.

The project required the construction of a perimeter security fence² and an access drive. The existing area surrounding the dam contains minimal security features. The perimeter security site follows the terrain surrounding the dam, which is mostly open and relatively level with some hills. There are several drainage channels which flow through this area that provide a security barrier and which will require construction to safely maneuver around.

The description of the facility (pre-construction) is based on information from the contract and GRC Al Asad Resident Office documentation and personnel. The Haditha Dam perimeter security project site is located at the Haditha Dam, in the Governorate of Anbar, Iraq. The Haditha Dam is an earthen-fill dam on the Euphrates River, north of Haditha, and which created Lake Qasisiyah (Site Photo 1). The purpose of the dam is to generate hydroelectricity, regulate the flow of the Euphrates, and provide water for irrigation. It is the second-largest hydroelectric contributor to the power system in Iraq behind the Mosul Dam.



Site Photo 1. Haditha Dam

Statement of Work

The Statement of Work required the contractor to design and construct a security perimeter for the Haditha Dam. Specifically, the contract required the following:

- construct a 2.5 meter chain link fence approximately 15,000 meters in length
- construct five entry points for the perimeter
 - three entry points will include lifting pole type gates, security barriers, and guard shacks
 - two entry points will include secure chain link gates
- install concertina wire around the perimeter fence

² The perimeter security fence consisted of a chain link fence, topped with concertina wire, and controlled entry points.

Current Project Design and Specifications

The GRC Al Asad Resident Office provided the contractor with a set of standard design drawings and specifications. The contractor was to review the standard design sheets and the original contract specifications and prepare the required design documents. The contract required the contractor to complete the design and construct the project. In addition, the contractor was required to provide a survey of the existing site, the preliminary design, detailed drawings, and as-built drawings. The as-built drawings were to include details of location work and existing site conditions.

The contract required conformance to the standard Iraqi building code as specified or the international building code appropriate to each work activity. Also, the contract included detailed specifications for construction of the security perimeter and referenced the Unified Facilities Guide Specifications, which addressed many construction details for the project.

The GRC Al Asad Resident Office provided SIGIR with the contractor's design documents. These design drawings were included with the documentation provided by GRC, as well as specifications and technical requirements for the construction of the project. The design documents contained information detailing the scope and intent of the project. The drawings appeared complete, containing information regarding the fence, access drive, swing gate, lift gate, "Jersey"³ barriers, and other project details.

Project Site

The contractor provided an overall site plan (Figure 1) and profile for the perimeter fence and access drive. The plan and profile were based on topographic information and included physical features of the project area and the proposed improvements.

Perimeter Fence

The contract included the standard drawings for the perimeter fence as part of the perimeter security project for the Haditha Dam. The standard drawings included details regarding the line posts, pull posts, brace panels, foundation requirements, and grounding.

The contractor submitted details in the design drawings for construction of the perimeter fence (Figure 2). These details were based on the standard drawings provided with the contract and provided additional dimensions and details.

Entry Control Point

The contractor provided drawings for the entry control point. The drawings show the inclusion of "Jersey" type barriers creating chicanes⁴ along the entry drive to slow approaching vehicles. In addition, the entry control point included a vehicle gate in the chain link fence, a lifting gate, and a guard house. Per contract modification P00002, the guard house and associated items were later removed.

³ A Jersey barrier is used as a means to keep car bombs away from perceived targets. They also separate lanes of traffic (often opposing lanes of traffic) with a goal of minimizing vehicle crossover in the case of accidents.

⁴ A chicane is an artificial feature creating extra turns in a roadway.

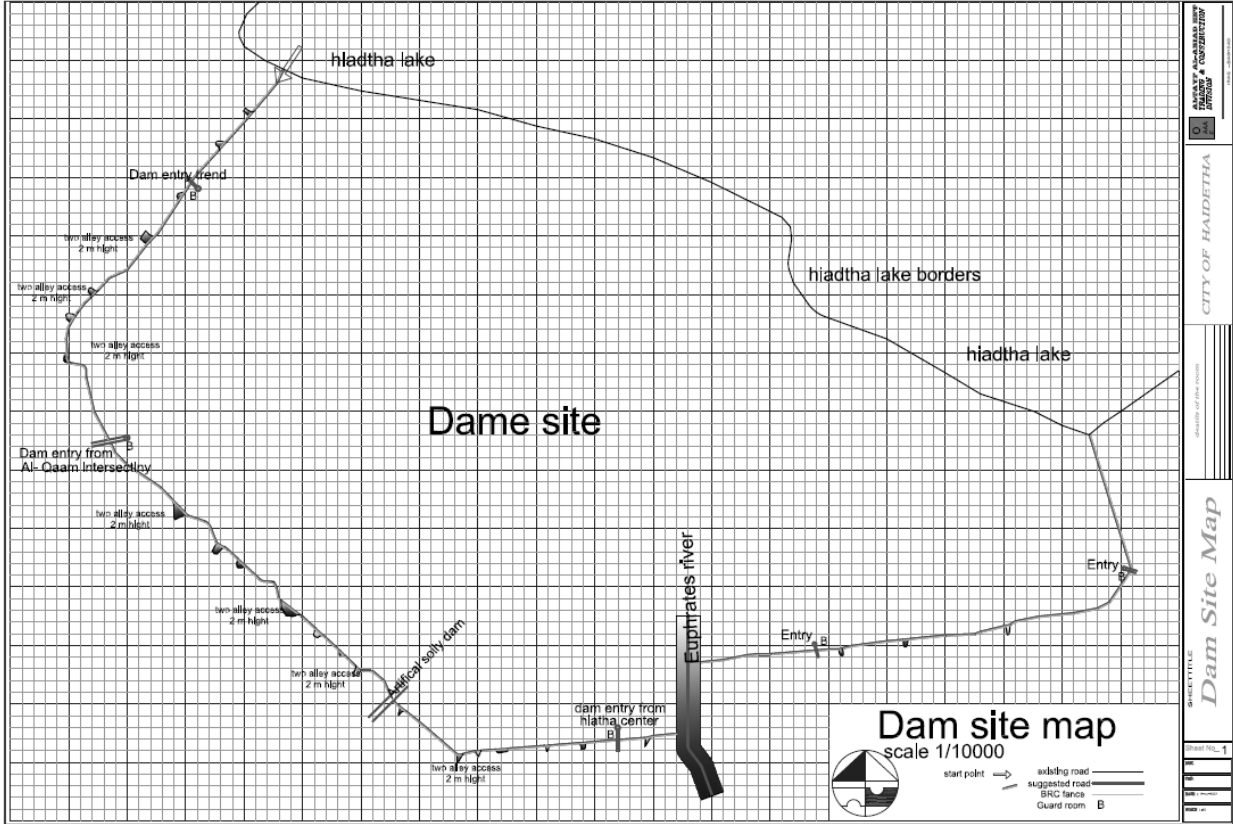


Figure 1. Haditha Dam perimeter security site plan
(Courtesy of GRC)

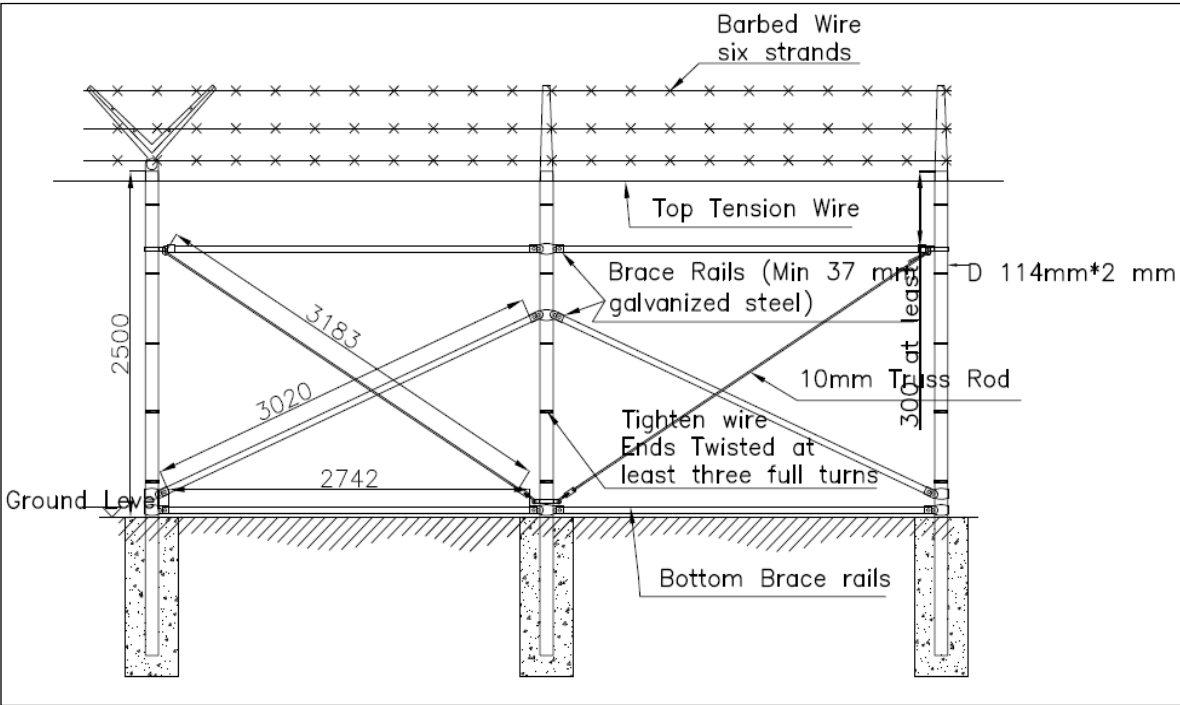


Figure 2. Contractor's design of typical fence section
(Courtesy of GRC)

Access Drive

The contract required a perimeter access drive along the interior of the fence. The contractor provided drawings for the perimeter access drive, which included details of a typical section of the roadway and culverts for crossing drainage channels. The typical section included details for both cut and fill sections of roadway.

The culvert details provided by the contractor included information for one and two culverts. Also, the details provided information for constructing the fence across the drainage channel. Details of the longitudinal sections of the culverts were provided to show the headwalls, pipe, and fence in relation to the access drive (Figure 3).

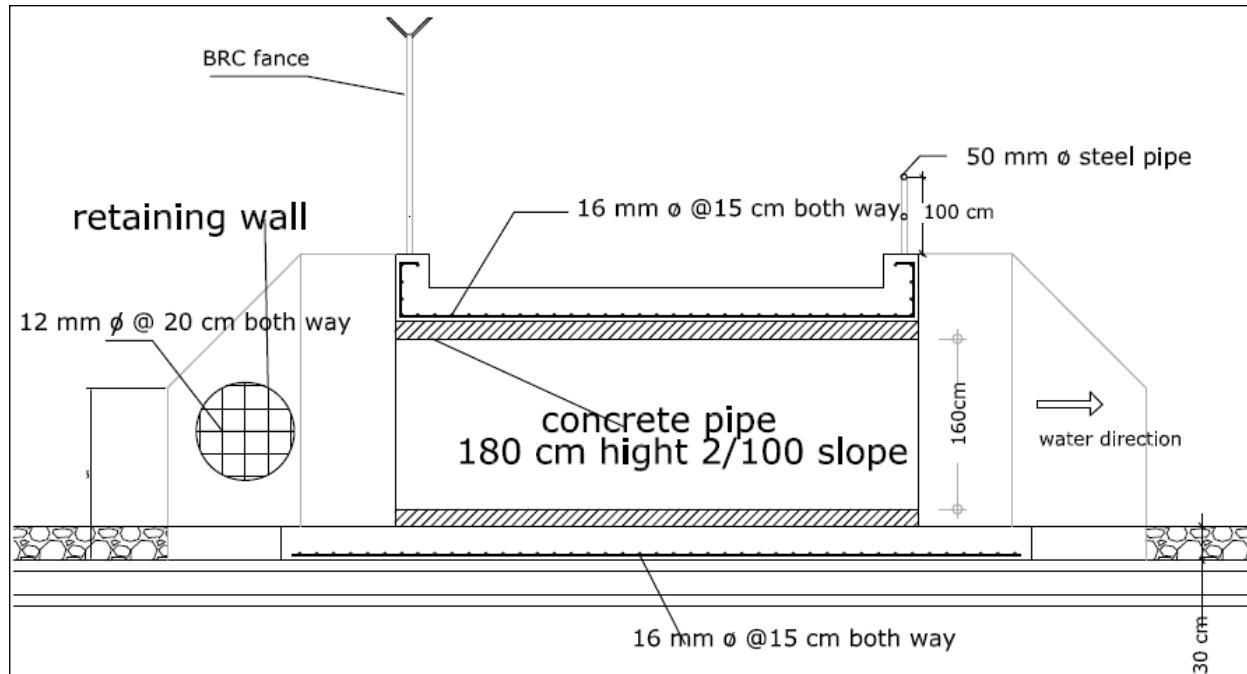


Figure 3. Culvert for access drive
(Courtesy of GRC)

The contract included detailed requirements and specifications that adequately instructed the contractor on how to design and construct the security perimeter. The contractor provided the design drawings to GRC for review and approval. The final design drawings and specifications provided by the contractor contained specific information for construction. SIGIR determined that the architectural, structural, electrical, and plumbing design drawings, with the inclusion of additional calculations and design submittals, were adequate to construct the facility.

Site Progress During Construction

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

The contract required the contractor to maintain an adequate inspection system and perform inspections, which ensured work performed under the contract conformed to contract requirements. In addition, the contractor was to maintain complete inspection records.

The contractor provided a construction report that documented quality control, including work activities performed. In addition, the GRC Al Asad Resident Office documented construction progress via quality assurance reports. Due to security concerns, the Government of Iraq prohibited the contractor from taking photographs during construction of the project.

Condition at Turnover

On 5 January 2009, the GRC Al Asad Resident Office officially turned over the Haditha Dam Perimeter Security project to an Iraqi Army representative. The GRC Al Asad Resident Office representative and the Iraqi Army representative signed a form stating that the transfer and acceptance of military real property was completed.

According to GRC Al Asad Resident Office documentation, authorized GRC Al Asad Resident Office personnel conducted a final inspection on 8 February 2009 and no construction deficiencies were noted.

The contract stated that the warranty for construction work continues for a period of 12 months from the date of final acceptance of the work. The project's one year warranty period commenced on 8 February 2009.

Site Assessment

On 3 November 2009, SIGIR performed an on-site assessment of the Haditha Dam Perimeter Security project. During the site visit, the GRC Al Asad Resident Office representative accompanied SIGIR⁵. Due to security concerns, the total time available on site was approximately two hours. This afforded the SIGIR assessment team the time to collect information for a representative sample of the overall project. The assessment team was able to inspect several sections of fence totaling approximately one kilometer, approximately 300 meters of perimeter road, and one access gate. Consequently, a complete review of all the work at the project site was not possible.

Perimeter Fence

The fence consisted of 2.5 meter tall, four-inch diameter posts at 3 meter intervals connected at the base with a two-inch diameter brace rail. A tension wire ran along the top of the fence through the chain link fabric. The posts were topped with "V" brackets, which support a continuous coil of concertina wire. Two additional coils of concertina wire were placed on grade (on the ground) along the exterior of the fence (Site Photo 2).

⁵ The unit from the 82nd Airborne Division provided transportation and site security for SIGIR and the GRC Al Asad Resident Office representative.



Site Photo 2. Typical fence section

Some sections of the perimeter fence did not conform to the Uniform Facilities Guidelines Section 3231 or the USACE standard drawings for the security fence. Strands of barbed wire were not placed on the “V” shaped brackets along the top of the fence to contain the concertina wire coil. The contractor used concertina wire coil that is a single coil approximately 18 inches in diameter, instead of the contract-required interlaced double coils of 24 and 30 inch diameter.

The contractor attached the chain link fabric to the fence posts with steel bands at 32 inches on center. The attachment did not conform to the 15 inches on-center requirement of the USACE standard drawings for a security fence, and was not consistent with the 18 inches on-center indicated on the contractor’s drawings.

Brace panels were constructed along the fence line at approximately 100 foot intervals (Site Photo 3). The brace panels consisted of two horizontal and two diagonal brace rails, and two truss rods. The chain link fencing appeared continuous across most of the pull posts with no tension bars or bands evident, which conflicted with the approved details for the fence.

Several of the truss rods were poorly tensioned in the brace panels, which will affect the ability of the brace panels to support the fence without movement. The truss rods should be checked and tensioned after any initial movement of the fence.

The fence brace rails were different dimensions than shown on the contractor’s drawings. The brace rails were attached to the pull post approximately 36 inches above the post base, instead of 58 inches as shown on the contractor’s drawings. The difference will affect the ability of the brace panel to resist tension from the chain link fabric.

Also, SIGIR noted that many of the brace rails were misaligned. This may not be critical to the function of the brace panels, but is indicative of poor workmanship.



Site Photo 3. Typical fence section

During the site assessment, SIGIR observed a fallen fence line approximately 150 feet long. The fallen fence section was located on the southern face of the dam and traversed the slope from the base of the dam to the paved road along the dam's breast⁶ (Site Photos 4 and 5).



Site Photo 4. Failed fence section

⁶ The dam breast provides a barrier to hold back the water.



Site Photo 5. Failed fence section, upper end

Iraqi Army representatives that were stationed at the Haditha Dam at the time of SIGIR's site inspection stated that the fence collapsed during a period of high winds. SIGIR inspected the section of collapsed fence and determined that this scenario was plausible.

The concrete anchorage for the fence posts was approximately 8 to 12 inches deep (Site Photo 6), which was inconsistent with the contractor's design drawings that showed a 45 inch depth for a typical line post. The configuration of the concrete anchorage was not consistent with the contractor's design plans and tapered from approximately 16 inches in diameter at the top to 8 inches in diameter at the base of the post, instead of the required uniform diameter of 16 inches. In addition, the anchorage did not cover the end of the post as shown in the design drawings, which will allow for increased corrosion of the post.



Site Photo 6. Concrete anchorage at failed fence post

SIGIR examined the post foundations for several posts that were still in the ground. A gap existed between the concrete anchorage and the surrounding soil, indicating movement of some posts (Site Photo 7).



Site Photo 7. Concrete anchorage

While inspecting the collapsed section of the fence, SIGIR noted a poorly constructed swale⁷ crossing (Site Photo 8). To bridge an existing swale perpendicular to the fence line, the contractor extended the spacing between posts and extended the chain link fence

⁷ A swale is a shallow trough-like depression that carries water mainly during rainstorms.

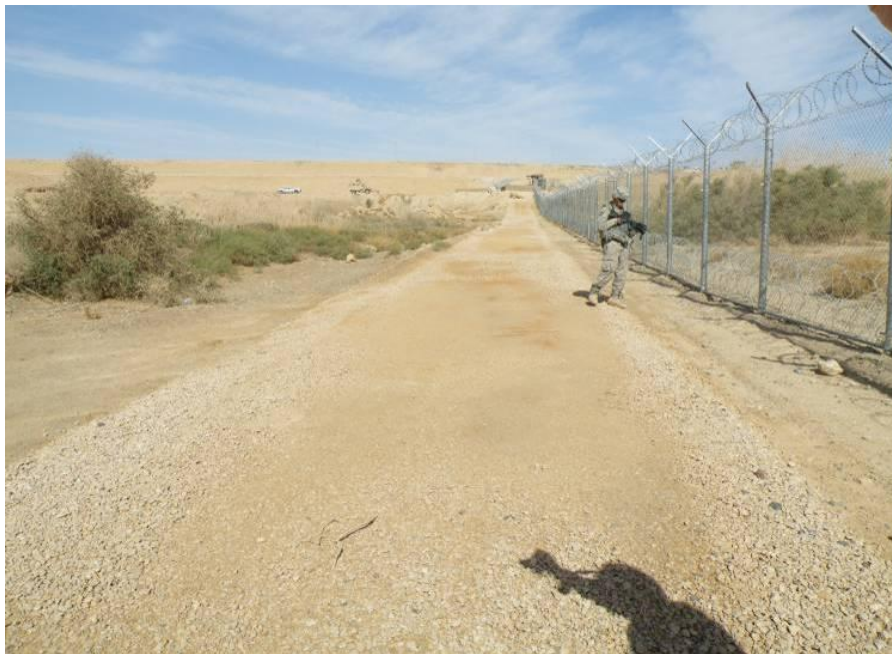
across the swale. This left a gap several feet high and several feet wide beneath the chain link fence. The concertina wire placed at the base of the fence did conform to the contour of the channel and provides a less effective barrier to prevent entry to the facility.



Site Photo 8. Poorly constructed swale crossing

Perimeter Drive

SIGIR inspected approximately 300 meters of the perimeter access road which was approximately 4 meters wide and surfaced with a coarse aggregate. The alignment of the road generally followed the perimeter fence and was straight with good visibility (Site Photo 9).



Site Photo 9. Perimeter drive

The contractor's design drawings show a 6-inch layer of compacted, coarse aggregate for surfacing. SIGIR verified the presence of a 4-6 inch layer of coarse aggregate on the roadway surface (Site Photo 10).



Site Photo 10. Roadway surface

During the site assessment, SIGIR observed that the access drive was constructed across a natural drainage channel. However, no provisions were made for the conveyance of storm water runoff beneath the access drive. Members of the security force from the 82nd Airborne Division checked the channel and reported that no culverts were visible beneath the roadway. Since this region is experiencing a severe drought, drainage issues caused by blocking this channel will not be apparent until after the warranty period for the project expires. When significant rainfall occurs, upstream flooding will result as well as a washout of the fence and access drive at this location.

Access Gate

SIGIR viewed one access gate and entry point along the fence line. The entry point consisted of a three-meter wide, double swing gate in the chain link fence, a tubular steel lifting gate, and concrete "Jersey" barriers to form chicanes on the approaching roadway.

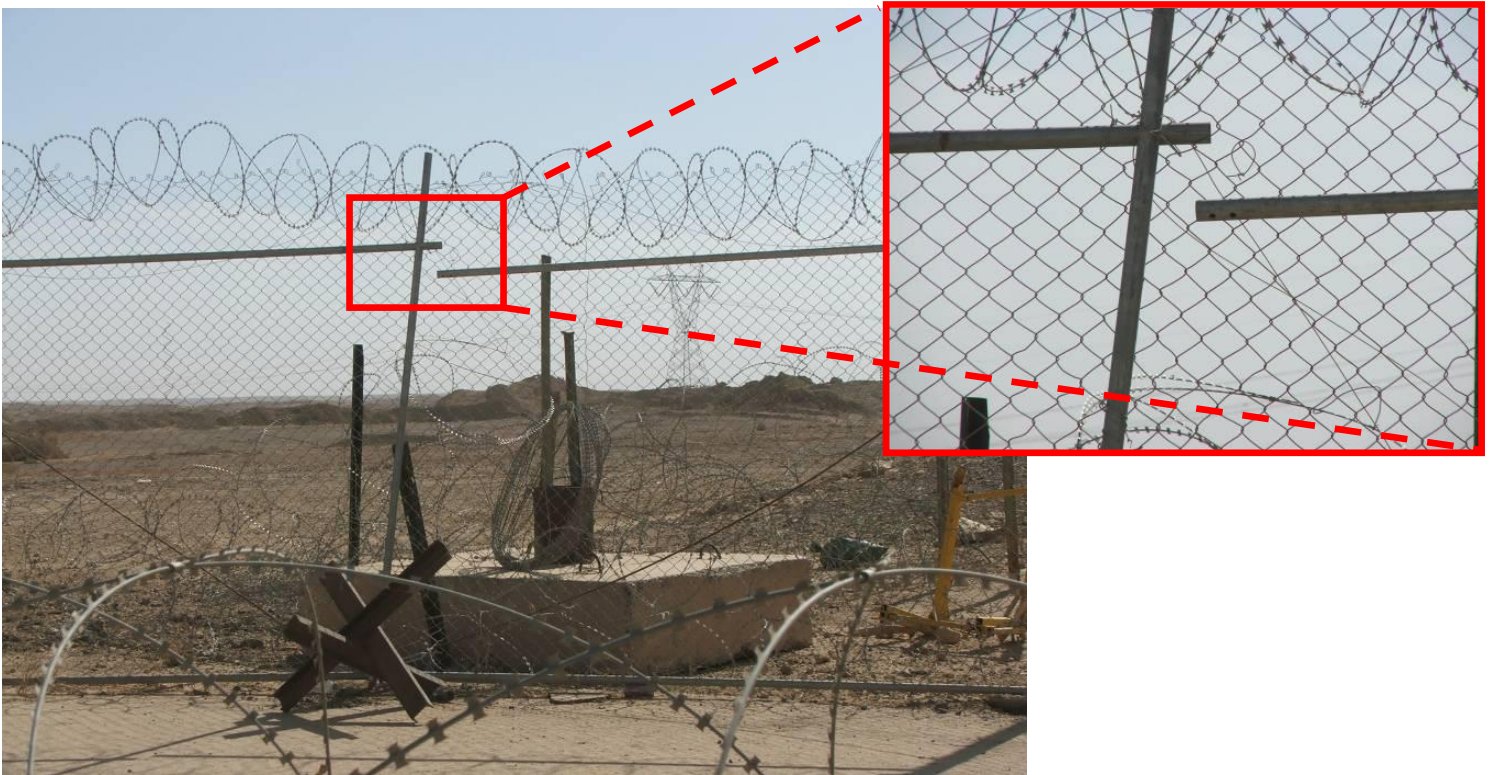
The entry point was constructed completely opposite of the contractor's submitted design plans. The contractor's plans indicated a reasonable method of controlling entry to the facility by using "Jersey" barriers and a lifting gate to slow vehicles prior to reaching the security fence. However, as constructed, vehicles first reach the swing gate in the security fence. After entering the secure area, vehicles are then confronted with the lifting gate, and finally directed through the chicanes into the facility. This configuration contributes little to force protection and allows vehicles to approach the secure area without any method to control speed or direction.

SIGIR noted that the quality of construction of the entry gate was poor. The swing panels of the gate were misaligned and the swing posts were not plumb (Site Photo 11).



Site Photo 11. Entry gate

The section of fence adjacent to the gate was broken and was inadequately repaired (Site Photo 12). According to Iraqi Army representatives, the fence fell apart. Iraqi Army representatives attempted to repair the fence with materials on hand.



Site Photo 12. Broken fence near entry gate

The lifting gate was misaligned and was damaged (Site Photo 13). The location of the lifting gate was poorly planned because the security fence was modified (not in accordance with the design) to accommodate the location of the lifting gate, leaving a significant gap in the chain link fabric (Site Photo 14).



Site Photo 13. Misaligned lifting gate



Site Photo 14. Lifting gate with modified fence

Corrective Actions Taken Since Site Visit

The Al Asad Resident Office representatives immediately followed-up with the contractor to correct the deficiencies that SIGIR identified during the site visit.

On 8 December 2009, the Contracting Officer Representative sent a "Warranty of Construction" letter to the contractor. The letter required the contractor to correct the fence, even if the corrective effort runs past the 8 February 2010 warranty expiration date. Also, the letter required the contractor to attend a meeting at the Al Asad Resident Office to discuss remedial actions.

Following the meeting on 12 December 2009, the contractor was directed to perform a 100% technical inspection of the fence line and prepare a report for government approval identifying all deficiencies. After inspecting the site, the contractor submitted a 100% or pole by pole technical inspection of the entire fence perimeter for the Al Asad Resident Office's review and approval.

After the inspection, it was determined that the fallen fence line poles were in the ground less than 0.5 meters. The Al Asad Resident Office stated that the contractor will replace and set the poles in concrete to the proper depth. In addition, approximately 10% of the remaining fence poles will be reset.

Currently, the Al Asad Resident Office is reviewing the contractor's prepared corrective action plan. Also, the contractor will provide the Al Asad Resident Office with a schedule and list of materials to fix the fence.

Conclusions

The Haditha Dam generates hydroelectricity, regulates the flow of the Euphrates River, and provides water for irrigation. Any damage to the Haditha Dam would adversely affect Iraq's electrical grid and result in major flooding downstream. In order to provide better security for the Haditha Dam, GRC awarded a \$1,707,500 contract in May 2007 to construct a perimeter security fence and access drive.

According to GRC Al Asad Resident Office documentation, on 8 February 2009 authorized GRC Al Asad Resident Office personnel conducted a final inspection of the Haditha Dam Perimeter Security project. The GRC Al Asad Resident Office completed an inspection report to document the condition of the project when accepted from the contractor. GRC Al Asad Resident Office closeout documentation indicates that no construction deficiencies were noted.

On 5 January 2009, the GRC Al Asad Resident Office officially turned over the Haditha Dam Perimeter Security project to a representative of the Iraqi Army. The GRC Al Asad Resident Office representative and the Iraqi Army representative signed a DD Form 1354 (Transfer and Acceptance of DOD Real Property) stating that the transfer and acceptance of military real property was completed.

On 3 November 2009, SIGIR conducted an on-site assessment of the Haditha Dam Perimeter Security project. During the site visit, the Haditha Dam Perimeter Security project was completed and the Iraqi Army was patrolling the area.

Before the site visit, SIGIR reviewed the design submittals for the project. The GRC Al Asad Resident Office provided the contractor with a set of standard design drawings and specifications. The contractor reviewed the standard design sheets and the original contract specifications, and completed the design for the project. The GRC Al Asad Resident Office provided SIGIR with the contractor's design documents. The design documents contained information conveying the scope and intent of the project, and the drawings appeared complete, containing information regarding the fence, access drive, swing gate, lift gate, "Jersey" barriers, and other project details. SIGIR determined that the Haditha Dam Perimeter Security project was adequately designed.

The design documentation for the Haditha Dam Perimeter Security project appeared adequate. However, SIGIR's site visit identified damage to an approximately 150 foot-long section of the fence; misaligned swing panels of the entrance gate; and a misaligned lifting gate. The specific cause of the damage could not be determined. However, the Al Asad Resident Office representatives immediately followed-up with the contractor to correct the deficiencies that SIGIR identified.

SIGIR concluded that the construction of the Haditha Dam Perimeter Security project was inadequate. However, after the deficiencies identified by SIGIR were brought to the attention of the Al Asad Resident Office, corrective action was initiated by GRC. After review of the remediation plan submitted by the contractor to GRC, SIGIR determined that the proposed corrective actions should correct the deficiencies.

Recommendations

SIGIR recommends that the Al Anbar Resident Office continue to ensure that the contractor:

1. Replace and repair the collapsed fence line.
2. Reset the remaining fence poles that were not set to their proper depth.
3. Implement controls to ensure that the contractor provides daily quality control reports of the corrective actions taken for the deficiencies.

Management Comments

SIGIR received comments on a draft of this report from the United States Forces – Iraq and the Gulf Region District of USACE concurring with the recommendations and noting that it generally agreed with the facts in the report. They also provided comments for the clarity and accuracy of this final report. As a result, no additional comments are required. The Gulf Region District had provided SIGIR with the contractor's 100% technical inspection. GRD's comments on the draft report stated that the contractor is repairing the collapsed fence line and resetting the poles, and the Reconstruction Liaison Team mission will provide updates on the contractor's progress. The complete texts of the comments are provided in Appendix C.

The Gulf Region District also noted that USACE in Iraq is undergoing reorganization. As a result of the reorganization the Al Asad Resident Office is now the Al Anbar Resident Office.

Evaluation of Management Comments

SIGIR appreciates the concurrence with the draft report's recommendations and corrective action taken by Gulf Region District. Their comments addressed the issues identified in our recommendations. As a result, no additional comments are required.

Appendix A. Scope and Methodology

SIGIR performed this project assessment from September 2009 through March 2010 in accordance with the Quality Standards for Inspections issued by the Council of Inspectors General on Integrity and Efficiency. The assessment team included two engineers/inspectors and two auditors/inspectors.

In performing this Project Assessment SIGIR:

- Reviewed documentation to include the following: contract W917BG-07-C-0067, contract amendments and/or modifications, Notice to Proceed;
- Reviewed the design package (plans) and submittals, and the final set of revised drawings;
- Reviewed contractor quality control reports and government quality assurance reports;
- Reviewed contract closeout document, DD 1354, 1594, and 1597; and
- Conducted an on-site assessment on 3 November 2009 and documented the results of the Haditha Dam Perimeter Security project in Haditha, Iraq.

Scope Limitation. Due to security concerns, the time allotted for the Haditha Dam Perimeter Security project site assessment was approximately two hours. SIGIR viewed several sections of perimeter fence that totaled approximately one kilometer; approximately 300 meters of perimeter road; and one access gate. Therefore, a complete review of all work completed was not possible.

Appendix B. Acronyms

cm	centimeter
DOD	Department of Defense
ER	Engineering Regulation
GRC	Gulf Region Central District
GRN	Gulf Region North District
GRS	Gulf Region South District
mm	millimeter
O&M	Operations and Maintenance
SIGIR	Special Inspector General for Iraq Reconstruction
USACE	U.S. Army Corp of Engineers

Appendix C. United States Forces-Iraq Provided Comments by GRD to Draft Report



REPLY TO
ATTENTION OF

CETAG

DEPARTMENT OF THE ARMY
GULF REGION DISTRICT
ARMY CORPS OF ENGINEERS
APO AE 09342



25 March 2010

MEMORANDUM FOR Special Inspector General for Iraq Reconstruction, US Embassy Annex II, Room 1013, APO AE 09316

SUBJECT: Draft SIGIR Audit Report – Haditha Dam Perimeter Security (SIGIR PA-09-192)

1. This memorandum provides the U.S. Army Corps of Engineers, Gulf Region District response to the subject draft audit report.
2. The Gulf Region District reviewed the subject draft report and generally agrees with the facts as presented in the report. Gulf Region District provided additional comments for clarity and accuracy in the enclosure.
3. Thank you for the opportunity to review the draft report and provide written comments for incorporation in the final report.
4. If you have any questions, please contact Robert Jones at (540) 678-2996 or via email Robert.A.Jones@usace.army.mil.

Encl
as


DIONYSIOS ANNINOS
COL, EN
Commanding

Appendix C. United States Forces-Iraq Provided Comments by GRD to Draft Report

GULF REGION DISTRICT COMMAND REPLY

to

SIGIR Draft Audit Report – Haditha Dam Perimeter Security (SIGIR Project PA 09-192)

General Comment: Throughout the report (Cover page, pages 1, 2, 3, 5, 6, 15, and 16) SIGIR references GRC Al Asad Resident Office. Though this was correct when SIGIR announced their review in September 2009, USACE has since significantly streamlined its organizational structure and corresponding footprint in Iraq. As a result, the Al Asad Resident Office is now the Al Anbar Resident Office. We suggest referencing the consolidation, in line with the US Force reduction, and addressing the recommendation to the current office Al Anbar Resident Office.

Recommendation. SIGIR recommends that the Al Asad Resident Office continue to ensure that the contractor:

1. Replace and repair the collapsed fence line.
2. Reset the remaining fence poles that were not set to their proper depth.
3. Implement controls to ensure that the contractor provides daily quality control reports of the corrective actions taken for the deficiencies.

Response: Concur. As stated in the report, Gulf Region District's Al Asad (Al Anbar) Resident Office directed the contractor to perform a 100% technical inspection. The resident office, as a result of the inspection and corrective action plan the contractor subsequently submitted, directed the contractor to correct the deficiencies. The contractor is currently repairing the collapsed fence and resetting the poles. The Al Anbar Resident Office has scheduled an RLT (Reconstruction Liaison Team) mission that will provide updates on the contractor's progress.

Appendix D. Report Distribution

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Appendix E. 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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