

SIGAR

Special Inspector General for
Afghanistan Reconstruction

SIGAR 17-65 Inspection Report

Afghan Ministry of Interior Headquarters
Project: Phase 2 Experienced Lengthy
Delays, Increased Costs, and Construction
Deficiencies that Need to Be Addressed



SEPTEMBER
2017

SIGAR

Special Inspector General for Afghanistan Reconstruction

WHAT SIGAR REVIEWED

In September 2011, the U.S. Army Corps of Engineers (USACE) initiated a three-phase, \$90 million project to construct a headquarters complex near the Kabul International Airport for the Afghan Ministry of Interior (MOI) and the national police. This report focuses on phase 2 of the project. SIGAR will issue a separate report examining phases 1 and 3.

On December 16, 2011, USACE awarded a \$30.6 million firm-fixed-price contract to Technologists Inc. to complete phase 2 of the project. This phase required the construction of the MOI headquarters building, a communications building, gatehouse, water supply, wastewater treatment plant, power plant, and fuel storage facility.

On December 24, 2012, USACE terminated the contract with Technologists Inc. for default, citing poor contractor performance. On June 23, 2013, USACE awarded a second contract, worth \$31.5 million, to Yuksel Insaat, a Turkish company, to complete the project. Following the contract's completion, the Combined Security Transition Command–Afghanistan (CSTC–A) funded a third contract on September 15, 2015, worth \$2.3 million, that the North Atlantic Treaty Organization Support Agency awarded to FEKA Insaat to make several aesthetic enhancements to the MOI headquarters building. The phase 2 project was completed on November 21, 2015.

The objectives of this inspection were to assess whether (1) construction was completed in accordance with contract requirements and applicable construction standards, and (2) the MOI headquarters building was being used and maintained.

September 2017

Afghan Ministry of Interior Headquarters Project: Phase 2 Experienced Lengthy Delays, Increased Costs, and Construction Deficiencies that Need to Be Addressed

SIGAR 17-65 INSPECTION REPORT

WHAT SIGAR FOUND

Phase 2 construction of the MOI headquarters project experienced lengthy delays and cost increases because of the need for three contracts to complete the project, one of which was terminated for default for poor work that was demolished and redone by the second contractor. The phase 2 project was completed in November 2015, more than 2 and a half years after the originally planned completion date of May 1, 2013. In addition, the phase 2 project's cost rose to approximately \$46.2 million or \$15.6 million more than originally planned.

During 13 site visits between October 2015 and August 2016, SIGAR found seven instances where the phase 2 contractors did not comply with contract requirements. Most significantly, Yuksel Insaat did not install certified fire-rated doors in the headquarters and communications buildings and gatehouse, as the contract required, which raises safety concerns should a fire occur. Due to the seriousness of this issue, on October 5, 2016, SIGAR sent an alert letter to USACE, CSTC–A, and other Department of Defense components notifying them that none of the 153 doors installed under phase 2 was certified. In its May 9, 2017, response, USACE acknowledged that the doors did not meet certification requirements and stated that it requested corrective action plans from Yuksel Insaat. USACE also stated that it was investigating the suitability of the noncertified doors that had been installed and the contractual issues involved, as well as developing several potential courses of action to address SIGAR's concerns. USACE further noted that it was implementing a personnel training program that entails a detailed review of fire door assemblies, to include contract requirements and referenced standards.

The other six instances where the phase 2 contractors did not comply with contract requirements included several items that USACE overlooked, which raises concerns about the quality of USACE's project oversight. Some of these instances of noncompliance also pose potential health or safety risks.

- The design drawings required wires of various sizes, or capacities, for the electrical panel boards and feeding receptacles in the headquarters and communications buildings and the gatehouse. However, SIGAR found that Yuksel Insaat installed wires that were not the required size. For example, SIGAR found that the headquarters building had wires that were only 2.5 square millimeters, where a 4-square-millimeter wire was required. These smaller wires can overheat and catch fire, and SIGAR found a burnt receptacle in the gatehouse.
- USACE approved the installation of door closers and hardware manufactured by Briton, a company based in the United Kingdom, for the headquarters and communications buildings and the gatehouse, but SIGAR found that Yuksel Insaat installed door closers and hardware by Kale, a Turkish company; AoLiDa, a Chinese company; and other unidentified manufacturers. USACE did not approve the substitution and did not find the noncompliant hardware during its quality assurance process.

- Areas around the headquarters building, special entry gate, and sidewalks were not properly sloped so that water could drain away from them. As a result, rainwater collects near the headquarters building entrance. In addition, the soil was not well compacted in some areas, and the soil around the wastewater treatment plant settled about 50 centimeters below grade level. The contract also required a soil density of 95 percent, and in 8 of the 10 project sites where SIGAR conducted soil density tests, density levels ranged from 70 to 94 percent. As a result, the soil will erode and lead to unnecessary repairs.
- Yuksel Insaat installed rigid instead of the required flexible electrical conduits and cable trays across the two seismic joints that divide the headquarters building into three parts, allowing each part to react separately in a seismic event. As a result, the rigid electrical conduits and cable trays could break or be damaged during a seismic event.
- The submittal register for the contract showed that Yuksel Insaat did not perform and submit the seismic bracing analysis for USACE's review, as required. The contract required that suspended equipment and other items be braced using specified arrangements of rods, wire rope, bars, or pipes to protect building occupants from falling objects during a seismic event. However, SIGAR found that equipment in the electrical and mechanical rooms did not have the required seismic bracing.
- Several locations in the headquarters building contained step risers constructed at a height of just over 9 inches, and thereby exceeding the 7-inch height limit established by the International Building Code, which was required to be followed under the contract's specifications. An uneven step height can create a tripping or falling hazard.

The deficiencies that SIGAR found are associated with USACE's failure to adhere to its three-phase quality assurance inspection process. The process—preparatory, initial, and follow-up—is designed to help contractors and USACE detect and correct construction deficiencies. USACE's process requires a contractor to identify every definable feature of work (DFOW) in its quality control plan. A DFOW is separate from other tasks and has separate control requirements. However, USACE could not provide the required information from the preparatory and initial phases for any of the seven instances of contract noncompliance listed above. Further, the deficiencies were not identified during the follow-up inspection phase, the final inspection before USACE transferred the facility over to CSTC-A, or any of the warranty inspections after the transfer, raising concerns about the quality of USACE's project oversight.

Despite these construction deficiencies, SIGAR found that the MOI headquarters building was being used and maintained. SIGAR also found that IDS International Government Services, a U.S. company, was providing the operation and maintenance services required by the contract, and it had conducted all of the required operation and maintenance training for the MOI staff, including courses in electrical, plumbing, power generation, and general maintenance. Plans call for the staff to take over the site's maintenance responsibilities eventually.

WHAT SIGAR RECOMMENDS

To protect the U.S. taxpayers' investment in the MOI headquarters project, SIGAR recommends that the CSTC-A Commander and the USACE Commanding General and Chief of Engineers take the following actions and report the results back to SIGAR within 90 days:

- 1. Take immediate steps to replace the noncertified fire doors that were installed in the MOI headquarters building, communications building, and gatehouse that do not meet the fire-rating standards, as required in the contract.**
- 2. Obtain a refund from Yuksel Insaat for deficient workmanship or direct the contractor to correct the issues identified in this report involving noncompliance with the contract and poor workmanship, such as the use of substituted door closers and hardware, smaller than required wires for panel boards and receptacles, rigid instead of flexible electrical conduits and cable trays across seismic joints, lack of seismic bracing for suspended equipment in the electrical and mechanical rooms, poorly graded and compacted soil, and step risers that exceed specified height limits.**
- 3. Clarify guidance of the project oversight team's responsibility to ensure that all three phases of USACE's inspection process are performed and documented so that all definable features of work are completed in accordance with the contract.**

The Office of the Under Secretary of Defense–Policy (OUSD-P), CSTC-A, and USACE provided written comments to a draft of this report. OUSD-P and CSTC-A stated that USACE would address the recommendations. In its comments, USACE stated that it is conducting a further review of the first recommendation and would report back to SIGAR within 90 days. USACE partially concurred with the second recommendation and concurred with the third recommendation.



SIGAR

Office of the Special Inspector General
for Afghanistan Reconstruction

September 11, 2017

The Honorable Jim Mattis
Secretary of Defense

General Joseph L. Votel
Commander, U.S. Central Command

General John W. Nicholson, Jr.
Commander, U.S. Forces–Afghanistan and
Commander, Resolute Support

Lieutenant General Todd T. Semonite
Commanding General and Chief of Engineers,
U.S. Army Corps of Engineers

Major General Robin L. Fontes
Commander, Combined Security Transition Command–Afghanistan

This report discusses the results of SIGAR’s inspection of the phase 2 construction of the Afghan Ministry of Interior’s (MOI’s) headquarters project located in Kabul, Afghanistan. In September 2011, the U.S. Army Corps of Engineers (USACE) initiated a three-phase project to construct a MOI headquarters complex near the Kabul International Airport for the Afghan MOI and the national police. The phase 2 project included the construction of the headquarters building, a communications building, gatehouse, water supply, wastewater treatment plant, power plant, and fuel storage facility. We will issue a separate report examining phases 1 and 3.

We found that phase 2 construction of the MOI headquarters project experienced lengthy delays and cost increases because of the need for three contracts to complete the project. We also found seven instances where the phase 2 contractors did not comply with contract requirements. Most significantly, the contractor Yuksel Insaat installed 153 noncertified fire doors in place of the required certified fire-rated doors. This raises serious safety concerns should a fire occur.

We are making three recommendations in this report. We recommend that the Combined Security Transition Command–Afghanistan (CSTC-A) Commander and the USACE Commanding General and Chief of Engineers take the following actions and report the results back to SIGAR within 90 days: (1) take immediate steps to replace the noncertified fire doors that were installed in the MOI headquarters building, communications building, and gatehouse that do not meet the fire-rating standards required in the contract; (2) obtain a refund from Yuksel Insaat for deficient workmanship or direct the contractor to correct the issues identified in this report involving noncompliance with the contract and poor workmanship, such as the use of substituted door closers and hardware, smaller than required wires for panel boards and receptacles, rigid instead of flexible electrical conduits and cable trays across seismic joints, lack of seismic bracing for suspended equipment in the electrical and mechanical rooms, poorly graded and compacted soil, and step risers that exceed specified height limits; and (3) clarify guidance of the project oversight team’s responsibility to ensure that all three phases of USACE’s inspection process are performed and documented so that all definable features of work are completed in accordance with the contract.



SIGAR

Office of the Special Inspector General
for Afghanistan Reconstruction

The Office of the Under Secretary of Defense–Policy (OUSD–P), CSTC–A, and USACE provided written comments to a draft of this report. OUSD-P and CSTC-A stated that USACE would address the recommendations. USACE responded that it is conducting a further review of the first recommendation and would report back to us within 90 days. USACE partially concurred with the second recommendation and concurred with the third recommendation. OUSD-P's, CSTC-A's, and USACE's comments are reproduced in appendices II, III, and IV, respectively. USACE also provided technical comments, which we incorporated, as appropriate.

SIGAR conducted this inspection under the authority of Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended; and in accordance with the *Quality Standards for Inspection and Evaluation*, published by the Council of the Inspectors General on Integrity and Efficiency.

John F. Sopko
Special Inspector General
for Afghanistan Reconstruction

TABLE OF CONTENTS

Phase 2 Project Experienced Lengthy Delays, Increased Costs, and Construction Deficiencies	1
MOI Headquarters Building Is Being Used and Maintained.....	6
Conclusion.....	7
Recommendations	7
Agency Comments	8
Appendix I - Scope and Methodology	10
Appendix II - Comments from the Office of the Under Secretary of Defense–Policy	11
Appendix III - Comments from the Combined Security Transition Command–Afghanistan	12
Appendix IV - Comments from U.S. Army Corps of Engineers	13
Appendix V - Acknowledgments	18

PHOTOS

Photo 1 - Pooling Water in the MOI Headquarters Building Entrance	5
Photo 2 - Ground Settlement and Water Pooling Around the Lift Station	5

ABBREVIATIONS

CSTC-A	Combined Security Transition Command–Afghanistan
DFOW	definable feature of work
IDS	IDS International Government Services LLC
MOI	Ministry of Interior
O&M	operation and maintenance
OUSD–P	Office of the Under Secretary of Defense–Policy
USACE	U.S. Army Corps of Engineers

In September 2011, the U.S. Army Corps of Engineers (USACE) initiated a \$90 million, three-phase project to construct a Ministry of Interior (MOI) headquarters building and support structures near the Kabul International Airport for the MOI and national police. The MOI complex includes a headquarters building, national police command center, a communications building, gatehouse, police barracks, and supporting infrastructure such as perimeter walls, a power plant, and a wastewater treatment plant. Due to the size and complexity of the MOI project, we are issuing two reports. This report focuses on phase 2, and a separate report will examine phases 1 and 3. Phase 2 consisted of the construction of the headquarters and communication buildings, along with the gatehouse, water supply system, wastewater treatment plant, power plant, and fuel storage facility.

On December 16, 2011, USACE awarded a \$30.6 million firm-fixed-price contract to Technologists Inc., a U.S. company, for the phase 2 construction.¹ Technologists Inc. received the notice to proceed on January 17, 2012, and the original completion date was May 1, 2013. However, Technologists Inc. failed to make adequate progress in the first year, and on December 24, 2012, USACE terminated the contract for default, after paying Technologists Inc. approximately \$11.5 million.²

On June 23, 2013, USACE awarded a firm-fixed-price contract to Yuksel Insaat, a Turkish company, to complete the phase 2 work, with a final value of \$32.1 million.³ USACE issued Yuksel Insaat the notice to proceed on August 21, 2013, with a completion date of November 14, 2014. Following contract completion, the Combined Security Transition Command–Afghanistan (CSTC-A) funded and the North Atlantic Treaty Organization awarded a third contract on September 15, 2015, with a final value of \$2.6 million, to FEKA Insaat, a Turkish company. The contract addressed aesthetic upgrades to the headquarters building that the MOI requested.⁴

The objectives of this inspection were to assess whether (1) construction was completed in accordance with contract requirements and applicable construction standards, and (2) the MOI headquarters building was being used and maintained.

We conducted our work in Kabul, Afghanistan, from July 2015 through September 2017 in accordance with the *Quality Standards for Inspection and Evaluation*, published by the Council of the Inspectors General on Integrity and Efficiency. The engineering assessment was conducted by our professional engineers in accordance with the National Society of Professional Engineers' *Code of Ethics for Engineers*. Appendix I contains a detailed discussion of our scope and methodology.

PHASE 2 PROJECT EXPERIENCED LENGTHY DELAYS, INCREASED COSTS, AND CONSTRUCTION DEFICIENCIES

Multiple Contract Delays and Cost Increases Affected Completion of the MOI Headquarters Project

The phase 2 construction for the MOI headquarters complex was not completed until November 2015, or more than 2 and a half years after the originally planned completion date. Further, the phase 2 construction cost was \$46.2 million, or \$15.6 million more than originally planned. The primary cause of schedule delays and cost increases was the need to award three separate contracts to complete the work—when the need for only one contract had been anticipated at the outset of phase 2. More specifically,

¹ The contract number is W912DQ-12-C-4000.

² A termination for default is generally the exercise of the government's contractual right to completely or partially terminate a contract because of the contractor's actual or anticipated failure to perform its contractual obligations.

³ The contract number is W5J9JE-13-C-0030.

⁴ The North Atlantic Treaty Organization Support Agency awarded and oversaw the contract (number 4500321284).

- USACE issued the notice to proceed for the first phase 2 contract, worth \$30.6 million, to Technologists Inc. on January 17, 2012, with a required completion date of May 1, 2013. On December 24, 2012, after USACE paid \$11.5 million in approved progress payments to Technologists Inc., the contracting officer terminated the contract for default. The USACE termination notice stated that Technologists Inc. routinely missed critical milestones; performed deficient work; failed to provide evidence of timely ordering and procurement of long lead items, including the generator set and wastewater treatment plant; and failed to perform the work diligently to ensure completion by the contractually required date.⁵ In addition, the delays would have taken the contract beyond the May 2013 completion date, and Technologists Inc.'s failure to provide utilities under phase 2 in a timely manner would adversely affect the other project phases. Technologists Inc. filed a claim with the U.S. Court of Federal Claims on November 12, 2013, charging that the contracting officer's decision was "arbitrary, capricious, without factual support and/or contrary to law." The claim requested that the contracting officer's termination for default be converted to a termination for convenience, which does not carry the financial penalties associated with a termination for default. As of March 24, 2017, Technologists Inc.'s complaint was still in the discovery phase, which means that the contractor's claim and the government's counterclaims for financial compensation remain unresolved.
- USACE issued the notice to proceed for the second phase 2 contract, worth \$31.5 million, to Yuksel Insaat, on August 21, 2013, with a scheduled completion date of November 14, 2014. Contract modifications extended the completion date to January 22, 2015, and increased the cost to approximately \$32.1 million. As part of the contract, Yuksel Insaat submitted a structural assessment report to USACE in October 2013 to demolish or repair existing structures that Technologists Inc. had constructed before any new work could be undertaken. Due to concerns over concrete strength and poor workmanship resulting in extensive concrete deficiencies, the report recommended demolishing (1) reinforced concrete walls and columns, cement masonry unit walls, and lintel beams for the MOI headquarters and communications buildings, and (2) the concrete foundation, reinforced concrete walls, and reinforced concrete slab for the power plant.⁶ Yuksel Insaat carried out all approved demolition work, but amended its structural assessment report to note that it was not responsible for any problems that might arise in connection with the concrete building foundations that were not demolished based on a USACE decision even though the tested concrete strength fell below contract specifications. Work under this contract was completed on December 28, 2014, or almost 1 month ahead of schedule.
- CSTC-A's decision to provide additional aesthetic enhancements to the MOI headquarters after the first two contracts were completed in December 2014 necessitated a third contract. When the MOI headquarters project was initiated in 2011, CSTC-A directed USACE to follow CSTC-A's contingency construction standards when developing the contracts. Those standards, issued in August 2009, consisted of construction features such as exposed conduits, ceiling fans, electric heaters, exposed concrete ceilings, and terrazzo-tiled stairwells and entrance halls. These features supported easier maintenance of the facility once completed. However, after the MOI headquarters project was under way, CSTC-A switched to higher quality standards for construction of Afghan facilities at the provincial level or higher. These higher standards are more closely aligned with Western construction standards than the contingency construction standards, which provide for aesthetic enhancements such as covered conduits and higher quality heating and air conditioning systems. The MOI did not request higher quality construction standards for the headquarters until after it was initially turned over to CSTC-A in December 2014, when senior MOI officials toured the Ministry of Defense headquarters building and observed the enhancements built into that structure. Adding aesthetic enhancements, however, required the award of the third phase 2 contract, originally worth \$2.3 million, by the North

⁵ A long lead item is a component of a system or piece of equipment for which the time to design and fabricate it are the longest.

⁶ A lintel beam is a horizontal beam placed across an opening to support the portion of the structure above it. The function of a lintel is the same as that of an arch.

Atlantic Treaty Organization Support Agency to FEKA Insaat. This contract included rework of the MOI headquarters' floors and stairways constructed under the first two contracts at a cost of approximately \$1.3 million. CSTC-A officials acknowledged that better initial coordination among CSTC-A, MOI, and USACE officials regarding customer requirements could have avoided the need for the third contract. Contract modifications extended the FEKA Insaat contract completion date to November 21, 2015. CSTC-A officials said the final contract cost was \$2.6 million. The work was completed and the warranty commenced on November 21, 2015.

Noncompliance with Contract Requirements Resulted in Construction Deficiencies at the MOI Headquarters and Support Buildings, Some Having Safety Implications

During our site visits to the MOI headquarters and support buildings, we found seven instances where the phase 2 contractors did not comply with contract requirements.⁷ Most significantly, noncertified fire-rated doors were installed, which raises safety concerns should a fire occur.

Yuksel Insaat Did Not Install Certified Fire-Rated Doors in Three Buildings

We found that 153 internal doors for the headquarters and communications buildings and gatehouse were not certified fire-rated doors as the contract required. Fire-rated doors are designed to protect building occupants from the effects of fire and smoke and to contain fires for specified times. The phase 2 contract drawings and specifications required 153 interior doors for the headquarters and communications buildings and gatehouse to be fire-rated for intervals of 20, 45, 60, or 90 minutes depending on their location. The contract also required fire doors to be certified by one of three independent testing companies—Underwriters Laboratory, Factory Mutual Engineering and Research, or Warnock Hersey-Intertek International.

To ensure that doors, frames, hardware, and other components of a fire door assembly are manufactured to the strict specifications needed to withstand a fire, they are tested to National Fire Protection Agency or Underwriters Laboratory standards by one of the three independent testing companies. Once a manufacturer's product passes the tests, it is considered approved and listed in a directory of certified fire-rated products. Products that have been certified and listed are distinguishable by a metal label permanently attached to the product during manufacture, bearing the manufacturer's name, certifying body's logo, and other relevant rating information.

During our site visits, we found that Yuksel Insaat installed noncertified fire doors manufactured by a Turkish company, Ankara Celik Kapi, with no manufacturer's label attached to them. The USACE process for approving contractor product submittals requires a technical review and contracting officer's representative's approval of the contractor's proposed product information to ensure that it meets the contract requirements before the contractor purchases and installs those products. We reviewed Yuksel Insaat's fire door submittals provided to USACE and found that USACE approved fire doors made by Ankara Celik Kapi, which is not registered as a certified manufacturer of fire doors by Underwriters Laboratory, Factory Mutual Engineering and Research, or Warnock Hersey-Intertek International.⁸ USACE's approval of these noncertified fire doors raises safety and cost concerns.⁹

Due to the seriousness of the fire door issue, on October 5, 2016, we sent an alert letter to USACE, CSTC-A, and other Department of Defense components, stating that none of the required fire-rated doors installed

⁷ We made 13 site visits to the MOI compound between October 26, 2015, and August 15, 2016, to inspect the phase 2 construction.

⁸ For the Ankara Celik Kapi-manufactured doors, Yuksel Insaat's submittal included the results of a local university's verification test. However, this test was not a valid form of certification under the contract.

⁹ We could not obtain the price of the noncertified fire doors from Yuksel Insaat or Ankara Celik Kapi. However, the price for a regionally manufactured certified fire door is \$3,600 for a single door and \$4,300 for a double door.

during the three phases of the MOI headquarters project were certified.¹⁰ We suggested that USACE conduct a review and begin taking corrective action, where necessary, to ensure the safety of building occupants at the MOI compound and safeguard the expenditure of U.S. funds. The letter stated that USACE's actions should include (1) taking immediate steps to identify and replace all noncertified fire doors in the MOI buildings that do not meet the fire-rating standards required in the contracts, and (2) identifying the USACE official(s) who approved the installation of those noncertified fire doors and take appropriate disciplinary action.

On May 9, 2017, USACE responded to our alert letter with an interim update of actions to address the issues highlighted. USACE stated that it took immediate action to inspect and document each of the 934 doors—1 installed in phase 1, 153 in phase 2, and 780 in phase 3—in 25 MOI facilities that we identified as being noncertified. USACE acknowledged that the doors did not meet certification requirements and stated that it requested corrective action plans from the phase 2 and phase 3 contractors. USACE also stated that it was implementing a training program for its personnel that entails a detailed comprehensive review of fire door assemblies, to include contract requirements and referenced standards. The program will include information regarding the submittal process, areas to focus on in the field, and lessons learned for application to mitigate or avoid future occurrences. In addition, USACE stated that it was in the process of investigating the suitability of the installed doors at the MOI, and was working to place a third party under contract to analyze whether the entire door assembly meets, or could meet if tested, the standards for fire resistance, as well as developing several potential courses of action to address our observations and concerns. USACE indicated that, to date, it has determined that USACE personnel had no malicious intent, and, as a result, no disciplinary action was required.

Additional Instances of Contract Noncompliance Were Found, Some of Which Pose a Safety Risk to Building Occupants

During our site visits, we found six additional instances where the phase 2 contractors did not comply with contract requirements, including several items that USACE approved or overlooked. As with the noncertified fire doors, some of these instances of noncompliance pose potential health or safety risks. Specifically, we found:

- **Low-capacity wires were used for panel boards and receptacles.** The phase 2 design drawings provided size, or capacity, requirements for wires to be installed within the electrical panel boards and feeding receptacles in the headquarters and communications buildings and gatehouse. However, we found some wires did not meet the capacity requirements identified in the drawings. For example, some wires in the MOI headquarters building were only 2.5 square millimeters instead of the required 4 square millimeters. The use of smaller wires could cause them to overheat and catch fire, and we found a burnt electrical receptacle in the gatehouse (room 102, building 204).
- **Required door closures and hardware were not installed.** Yuksel Insaat installed door closers and hardware in the headquarters and communications buildings and gatehouse that did not meet contract requirements. USACE approved for Yuksel Insaat to install door closers and hardware manufactured by Briton, a company based in the United Kingdom, but we found that door closers and hardware by manufacturers such as Kale Kilit Co., a Turkish company; AoLiDa Co., a Chinese company; and other unidentified manufacturers were installed. USACE did not approve the substitution and did not discover that noncompliant hardware had been installed during its quality assurance process. We could not determine the quality of the substituted door hardware in comparison to the hardware required in the contract.¹¹
- **Some areas of the project site were not well graded or compacted.** We found that areas around the headquarters building, special entry gate, and sidewalks were not properly sloped so that water could

¹⁰ See SIGAR, *Fire Doors at the MOI Compound in Kabul*, SIGAR 17-2-AL, October 5, 2016.

¹¹ We could not obtain the price of the door closer from the contractor or manufacturer, but found the price of unapproved and approved door closers to be approximately \$95 and \$126, respectively.

drain away from them. For example, rainwater pools in front of the main headquarters building entrance (see photo 1). Storm water also flooded communication and electrical manholes. In addition, the soil in some areas of the project site was not well compacted. For example, we found that the area around the wastewater treatment plant has settled about 50 centimeters below grade level (see photo 2). Further, we conducted soil field density tests at 10 project site locations and found that the soil density in 8 of the sites did not meet contract requirements. The contract required a density of 95 percent, and the density levels in the eight sites ranged from 70 to 94 percent. As a result, the soil at the sites will continue to erode over time and lead to unnecessary repairs. In its comments on a draft of this report, USACE stated that it was not responsible for the poorly graded and compacted soil deficiency, and that this was the result of work performed by a different contractor under a follow-on contract. We accept that an unidentified party, possibly another contractor working at the site, damaged some areas around the MOI headquarters building and that USACE's contractor, Yuksel Insaat, is not responsible for that damage. However, we found ground settlement and water pooling in areas that would not have been affected by other contractors.

Photo 1 - Pooling Water in the MOI Headquarters Building Entrance



Source: SIGAR, March 24, 2016

Photo 2 - Ground Settlement and Water Pooling Around the Lift Station



Source: SIGAR, April 6, 2016

- **Rigid electrical conduit and cable trays were installed across seismic joints.** The headquarters building has two seismic joints that divide the building into three parts, allowing each part to react separately in a seismic event. We found that Yuksel Insaat installed rigid instead of the required flexible electrical conduits and cable trays across the seismic joints. As a result, the rigid electrical conduits and cable trays could break or be damaged during a seismic event, given the uneven displacement that would likely occur.
- **Seismic analysis was not performed, and seismic bracing was not installed.** USACE was required to review and approve the seismic bracing analysis for any suspended equipment before construction started. However, the submittal register for the contract showed that Yuksel Insaat did not perform and submit the seismic bracing analysis for USACE's review as the contract required. Specifically, the contract required that suspended equipment and other items be braced using specified arrangements of rods, wire rope, bars, or pipes to protect building occupants from falling objects during a seismic event. However, we found that equipment in the electrical and mechanical rooms did not have the required seismic bracing because USACE did not enforce this requirement.
- **Step risers exceeded the specified height limit in the MOI headquarters building.** We found several locations where the step risers were constructed at a height of 23 centimeters, or just over 9 inches, which exceeded the 17.8-centimeter, or 7-inch, height limit established by the International Building

Code that was incorporated into the contract specifications.¹² An uneven step height can create a tripping or falling hazard. USACE officials said the contract addressing some aesthetic issues with the headquarters building led to the addition of marble or terrazzo tiles to the steps and intermediate landing areas, which created the height difference. We found that some of the step risers exceeded the height limit by 2 inches.

USACE's Three-Phase Quality Assurance Inspection Process Was Not Fully Documented or Implemented

We found that USACE failed to fully adhere to its three-phase quality assurance inspection process. The process is designed to help contractors and USACE detect and correct construction deficiencies and deviations from contract requirements.¹³ USACE's three-phase inspection process requires that a contractor identify every definable feature of work (DFOW) in its quality control plan. A DFOW is separate and distinct from other tasks and has separate control requirements. Examples of DFOWs for Technologists Inc.'s contract included items such as doors and frames, cast-in-place concrete, plumbing, ceramic and terrazzo tiles, glass, and glazing. These DFOWs are tracked and documented for the three phases of construction: preparatory, initial, and follow-up.¹⁴ The contractor is required to submit to USACE the minutes with information from the preparatory and initial phases and daily status reports for the follow-up phase.

The phase 2 project included 91 DFOWs, as documented in Yuksel Insaat's quality control plan. We found that USACE did not ensure that the contractor consistently provided the minutes for the first two phases of the quality control process; minutes were provided for 10 preparatory meetings and 8 initial meetings for the DFOWs. In addition, USACE could not provide the minutes for the preparatory and initial phases for any of the seven instances of contract noncompliance that are listed above. Furthermore, the deficiencies were not identified during the follow-up inspection phase or any of the final or warranty inspections, raising concerns about the quality of USACE's project oversight.¹⁵

MOI HEADQUARTERS BUILDING IS BEING USED AND MAINTAINED

In August 2016, the MOI was in the process of occupying the headquarters building, and we found that it was being well maintained. IDS International Government Services (IDS), a U.S. company, is providing operation and maintenance (O&M) services for the complex, and we found that the contractor was providing the services and conducting the required O&M training for MOI staff.¹⁶ During our site visits, we did not find any maintenance problems at the MOI headquarters building, and USACE oversight staff and MOI O&M staff did not report any maintenance problems. IDS noted that its contract expires in December 2017, and, at that time,

¹² The purpose of the International Building Code is to establish the minimum requirements to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment, and to provide safety to firefighters and emergency responders during emergency operations. USACE incorporated the code into the MOI headquarters phase 2 contract.

¹³ USACE contract, section 01451, "Contractor Quality Control," specifies the requirements for contractor quality control and discusses the three-phase process.

¹⁴ The preparatory and initial phase meetings include the contractor's quality control staff, the foreman responsible for the DFOW, and a USACE quality assurance representative. The meetings take place before (preparatory phase) and at the beginning (initial phase) of the DFOW to review and discuss whether the contractor is prepared to perform the work safely and in accordance with contract requirements. The follow-up phase consists of daily checks to assure compliance until the DFOW is completed.

¹⁵ USACE's failure to ensure adherence to the three-phase inspection process is noted also in another report. See SIGAR, *Afghan Air Force University: Contract Requirements Were Generally Met, but Instances of Non-Compliance, Poor Workmanship, and Inadequate Maintenance Need to Be Addressed*, SIGAR 16-26-IP, March 30, 2016.

¹⁶ The contract number is W912ER-15-D-0001.

responsibility for O&M services at the MOI complex will likely transfer to Afghan authorities.¹⁷ In August 2017, a senior MOI facilities manager told us the IDS contract was extended to December 2017 at the MOI's request because the ministry lacked a maintenance budget. The facilities manager said the MOI would solicit a new maintenance contract in December.

USACE awarded a performance-based, national O&M contract to IDS in June 2015, and since then IDS has been responsible for maintaining more than 30 Afghan army and police facilities throughout the country. IDS officials told us the MOI pays for and manages all basic maintenance such as janitorial work. IDS's role is to provide dedicated O&M resources to cover both scheduled and unscheduled O&M for critical facilities and infrastructure, and to provide O&M services for the MOI complex's structures. The O&M services cover infrastructure such as the power plant and power distribution grid, backup generators, water plant and water distribution system, and wastewater treatment plant and sewer grid.

The O&M contract also required IDS to train MOI staff, who will eventually take over the site's maintenance needs. IDS has provided three training sessions for quality assurance/quality control managers and site facility engineer courses. These training sessions, each 2 weeks long, were held in March and April 2016. IDS reported that 76 of the 84 students attending these courses graduated. IDS also developed courses for general electrical, plumbing, power generation (2 weeks each), and general maintenance (1 week). These courses were provided from July through September 2016. IDS reported that all 60 individuals attending these courses graduated. IDS officials told us the cost for all courses was about \$76,500.

CONCLUSION

The phase 2 construction was not only completed more than 2 and a half years later than planned, it also cost \$16 million more than expected. The project struggled from the beginning, with the first contractor, Technologists Inc., being terminated for default. Some of its work, such as concrete walls and columns, was so poorly done that it had to be demolished and redone by the second contractor, Yuksel Insaat, at additional cost to the U.S. government. In addition, Yuksel Insaat did not adhere to some contract requirements that USACE overlooked or did not enforce. The most significant case involved the installation of more than 150 noncertified fire doors in the phase 2 buildings. That, along with other issues of noncompliance such as the installation of smaller wires in the panel board and receptacles, the substitution of door closers and hardware, and step risers exceeding the height limits, raise concerns about the safety of building occupants, whether the U.S. government overpaid for some items, and whether the U.S. government has been defrauded. The failure of USACE to identify these instances of noncompliance during the three-phase inspection process raises concerns about the quality of its project oversight.

Despite the delays, noncompliance, and construction deficiencies, the MOI headquarters building and support facilities are being used. They also are being well maintained under a U.S.-funded contract. Although that contract expires in December 2017, MOI staff have been trained to maintain the MOI complex and will likely take over the maintenance activities when the contract expires.

RECOMMENDATIONS

To protect the U.S. taxpayers' investment in the MOI headquarters project, we recommend that the CSTC-A Commander and the USACE Commanding General and Chief of Engineers take the following actions and report the results back to SIGAR within 90 days:

¹⁷ Through September 11, 2016, IDS reported that it had billed USACE approximately \$1.57 million for O&M services at the MOI complex. IDS estimated it would cost an additional \$1 million for O&M services through contract closeout for this site.

1. Take immediate steps to replace the noncertified fire doors that were installed in the MOI headquarters building, communications building, and gatehouse that do not meet the fire-rating standards required in the contract.
2. Obtain a refund from Yuksel Insaat for deficient workmanship or direct the contractor to correct the issues identified in this report involving noncompliance with the contract and poor workmanship, such as the use of substituted door closers and hardware, smaller than required wires for panel boards and receptacles, rigid instead of flexible electrical conduits and cable trays across seismic joints, lack of seismic bracing for suspended equipment in the electrical and mechanical rooms, poorly graded and compacted soil, and step risers that exceed specified height limits.
3. Clarify guidance of the project oversight team's responsibility to ensure that all three phases of USACE's inspection process are performed and documented so that all definable features of work are completed in accordance with the contract.

AGENCY COMMENTS

The Office of the Under Secretary of Defense–Policy (OUSD–P), CSTC–A, and USACE provided written comments on a draft of this report. OUSD–P and CSTC–A stated that USACE would address the recommendations. In its response, USACE stated that it is conducting a further review of the first recommendation and would report back to us within 90 days. USACE partially concurred with the second recommendation and concurred with the third. OUSD–P's, CSTC–A's, and USACE's comments are reproduced in appendices II, III, and IV, respectively. USACE also provided technical comments, which we incorporated, as appropriate.

USACE stated that it needs to investigate our first recommendation further. USACE acknowledged that the installed fire doors did not comply with the contract and that it accepted submittals that did not comply with contract specifications because it failed to follow its internal submittal quality assurance review process. USACE has also requested that the U.S. Central Command acknowledge that CSTC–A's construction standards for Afghan National Defense and Security Forces projects were the applicable standards at the time the MOI contracts were awarded, and noted that the fire doors represent an improvement over what those standards require.

To address the noncompliant fire doors, USACE said it is communicating with the contractor responsible for installing them, and it is implementing corrective actions to address its failure to follow internal processes for enforcing contract compliance. USACE added that it has conducted training with field personnel, increased its monitoring of the internal quality review process, and centralized independent technical reviews to ensure that contract design and specifications are accurate and current. USACE stated that it is identifying lessons learned to provide feedback to the field and its districts. USACE is also planning to update its specifications and drawings for standard designs to meet current Unified Facilities Criteria requirements by September 2017 and will report the results to us within 90 days.

Despite these actions, the fire doors remain noncompliant because USACE's deviation from the referenced International Building Code requirement was not authorized by the contract, which required certified fire doors to be installed.

USACE partially concurred with our second recommendation. It concurred with the portions of our recommendation related to Yuksel Insaat's substitution and use of not approved door closers and hardware, and rigid instead of flexible electrical conduits and cable trays across seismic joints. USACE agreed that door closers and hardware of lesser quality was installed and the use of rigid electrical conduit and cable trays is a deficiency. In response, USACE said it is developing an internal construction bulletin to highlight both issues for its personnel to prevent similar incidents in the future and to consider all available remedies to get credits for noncompliant items.

USACE did not concur with the parts of the second recommendation that related to the use of smaller than required wires for panel boards and receptacles, poorly graded and compacted soil, and step risers that exceeded specified height limits. USACE stated that without the specific deficiency locations identified, it believed the installed electrical wiring met contract requirements. According to USACE, the contract drawings required wiring of various sizes based on the wire's location relative to its distribution panel, and a wire with a cross-sectional area of 3.3 square millimeters is acceptable for a drawing with a requirement for 4 square millimeters. Because of this, USACE said it would not take additional action on this part of the recommendation.

We agree that the 3.3-square-millimeter wires are acceptable where a 4-square-millimeter wire is required. However, as noted in the report, we found some 2.5-square-millimeter wires installed in the MOI headquarters that are not acceptable given the requirement for 4-square-millimeter wire. Therefore, this recommendation remains open until USACE addresses the smaller than required wires installed in the panel boards and receptacles.

USACE also stated that its contractor Yuksel Insaat was not responsible for the poorly graded and compacted soil. We accept that an unidentified party, possibly another contractor working at the site, may have damaged some areas around the MOI headquarters building. However, we also found poorly graded and compacted soil in areas of the phase 2 construction that were not damaged by other parties. Because these other areas were Yuksel Insaat's responsibility, this recommendation remains open until USACE addresses the issue.

Regarding the step risers, USACE stated that it was not responsible for this deficiency, noting that its contractor constructed the concrete step risers according to the original drawings. USACE stated that the height differences between the step risers resulted from a different contractor adding terrazzo tile to the steps for aesthetic purposes as part of a subsequent contract. However, we determined that the step heights were different before the tile was added because the tile's thickness was the same for every step. Therefore, the deficiency was created during the original construction of the step risers. As a result, this recommendation remains open until USACE addresses the issue.

With respect to the lack of seismic bracing for suspended equipment in the electrical and mechanical rooms, USACE stated that it needs to investigate this further. USACE acknowledged that its contractor did not perform a seismic analysis and indicated that the command will do such an analysis to make sure the suspended equipment is not a safety hazard to building occupants. USACE stated that if it determines there is a requirement for seismic bracing, it will bring the matter to CSTC-A and address the need for additional and separate work. USACE added that it will report the results of the analysis back to us within 90 days. While we commend USACE for committing to performing the seismic analysis, we also believe that if the analysis indicates a need for the seismic bracing, USACE should pursue a remedy directly with Yuksel Insaat because the bracing was required by the contract.

USACE concurred with our third recommendation and stated that it is taking action to improve its project oversight. USACE acknowledged that its three-phase inspection process is the core of its construction quality management system, and that there were challenges documenting the preparatory and initial phase meetings of the project's DFOs. USACE added that it will emphasize the requirement to maintain contract oversight documents and records, and take steps to ensure that contractors are fully executing their part of the three-phase inspection process. USACE said that personnel with full knowledge of these areas will conduct and document technical inspections to ensure that effective quality assurance oversight can be verified and demonstrated.

APPENDIX I - SCOPE AND METHODOLOGY

This report provides SIGAR's inspection results for the phase 2 construction of the Afghan Ministry of Interior (MOI) headquarters building and several support structures in Kabul, Afghanistan. For this inspection, we assessed whether (1) construction was completed in accordance with contract requirements and applicable construction standards, and (2) the MOI headquarters building was being used and maintained. Specifically, we:

- reviewed contract documents, design submittals, quality assurance and quality control reports, and other relevant project documentation;
- conducted 13 site visits between October 26, 2015, and August 17, 2016; and¹⁸
- interviewed U.S. Army Corps of Engineers and Combined Security Transition Command–Afghanistan officials regarding facility construction, use, and maintenance.

We did not rely on computer-processed data in conducting this inspection. However, we considered the impact of compliance with laws and fraud risk.

In December 2014, SIGAR entered into a cooperative agreement with Afghan civil society partners. Under this agreement, our Afghan partners conduct specific inspections, evaluations, and other analyses. In this regard, Afghan engineers inspected the MOI headquarters building and support structures during 12 site visits between March 2016 and August 17, 2016, to determine whether construction was completed in accordance with contract requirements and applicable construction standards, and whether the facilities were being used and maintained. We developed a standardized engineering evaluation checklist covering items required by the contract and design/specification documents. Our checklist required our partners to analyze the contract documents, scope of work, technical specifications, and design drawings.

We compared the information our Afghan civil society partners provided to accepted engineering practices, relevant standards, regulations, laws, and codes for quality and accuracy. In addition, as part of our monitoring and quality control process, we:

- met with the Afghan engineers to ensure that the approach and planning for the inspection were consistent with the objectives of our inspection and the terms of our cooperative agreement;
- attended periodic meetings with our partners, and conducted our normal entrance and exit conferences with agency officials;
- discussed significant inspection issues with our partners;
- referred any potential fraud or illegal acts to SIGAR's Investigations Directorate, as appropriate;
- monitored our partners' progress in meeting milestones and revised contract delivery dates as needed; and
- conducted oversight of them in accordance with SIGAR's policies and procedures to ensure that their work resulted in impartial, credible, and reliable information.

We conducted our inspection work in Kabul, Afghanistan, and Arlington, Virginia, from July 2015 through September 2017. This work was conducted in accordance with the *Quality Standards for Inspection and Evaluation*, published by the Council of the Inspectors General on Integrity and Efficiency. The engineering assessment was conducted by our professional engineers in accordance with the National Society of Professional Engineers' *Code of Ethics for Engineers*. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our inspection objectives. We conducted this inspection under the authority of Public Law No. 110-181, as amended, and the Inspector General Act of 1978, as amended.

¹⁸ We visited 1 site, and our Afghan partners visited the other 12.

APPENDIX II - COMMENTS FROM THE OFFICE OF THE UNDER SECRETARY OF
DEFENSE-POLICY



ASIAN AND PACIFIC
SECURITY AFFAIRS

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
2700 DEFENSE PENTAGON
WASHINGTON, D.C. 20301-2700

The Honorable John Sopko
Special Inspector General for Afghanistan Reconstruction
1550 Crystal Drive, 9th Floor
Arlington, VA 22202

JUL 21 2017

Dear Mr. Sopko:

Thank you for the opportunity to review the Special Inspector General for Afghanistan Reconstruction (SIGAR) draft inspection report, "Afghan Ministry of Interior Headquarters (MOI HQ) Project: Phase 2 Experienced Lengthy Delays, Increased Costs, and Construction Deficiencies that Need to Be Addressed."

The delays and deficiencies described in SIGAR's draft report highlight the challenge of working in a contingency environment while helping our Afghan partners develop the facilities and capabilities that they need to provide security for their country. USACE will address the report's recommendations more specifically in a separate response. The Department of Defense (DoD) is encouraged that SIGAR observed the Ministry of Interior headquarters being actively used and well maintained.

I would like to thank the inspection team for the work they conducted in theater and for SIGAR's continued commitment to the success of the U.S. mission in Afghanistan.

Sincerely,

Steven M. Riccardi
Deputy Assistant Secretary of Defense (Acting)
for Afghanistan, Pakistan and Central Asia



APPENDIX III - COMMENTS FROM THE COMBINED SECURITY TRANSITION COMMAND-AFGHANISTAN



NON SENSITIVE INFORMATION RELEASABLE TO THE PUBLIC

DEPUTY CHIEF OF STAFF SECURITY ASSISTANCE
COMBINED SECURITY TRANSITION COMMAND – AFGHANISTAN
KABUL, AFGHANISTAN
APO AE 09356

DCOS SA/CSTC-A

12 July 2017

MEMORANDUM THRU

United States Forces – Afghanistan, Audit Cell, APO AE 09356
United States Central Command (CCIG), MacDill AFB, FL 33621

FOR Special Inspector General for Afghanistan Reconstruction, 2530 Crystal Drive, Arlington,
VA 22202-3940

SUBJECT: CSTC-A response to Draft Report SIGAR 17-XX-IP, “Ministry of Interior
Headquarters: Time and Cost Increases Encountered; Construction Deficiencies Remain to be
Addressed, dated January 2017 (Project Code SIGAR –I-031)

1. Reference: Draft Report (SAB).
2. The purpose of this memorandum is to provide a response to the recommendations outlined in the Draft Report. CSTC-A has completed coordination with the US Army Corps of Engineers (USACE) as recommended in the SIGAR 17-XX Inspection Report, dated July 2017.
3. CSTC-A appreciates SIGAR’s efforts to protect U.S. taxpayer’s investment in Ministry of Interior Headquarters project. USACE and CSTC-A agree that the SIGAR recommendations are USACE actions and USACE will provide the required responses. CSTC-A will support USACE, as needed, as they implement SIGAR’s recommendations.
4. Point of contact for this memorandum is Mr. Billy Elbert, DSN 318-449-9939, billy.d.elbert.civ@mail.mil or Mr. Jeffrey Zielinski, DSN 318-449-9935, jeffrey.m.zielinski2.civ@mail.mil.

COL John G. Clement

JOHN G. CLEMENT
Colonel, USA
Chief of Staff

Digitally signed by COL John G. Clement
DN: cn=COL John G. Clement, o=CSTC-A, ou=CSTC-A,
email=john.g.clement@usmc.army.mil, c=US
Date: 2017.07.18 15:02:21 -0400

NON SENSITIVE INFORMATION RELEASABLE TO THE PUBLIC

APPENDIX IV - COMMENTS FROM U.S. ARMY CORPS OF ENGINEERS



DEPARTMENT OF THE ARMY
UNITED STATES ARMY CORPS OF ENGINEERS
TRANSATLANTIC DIVISION
201 PRINCE FREDERICK DRIVE
WINCHESTER, VIRGINIA 22602-4373

July 20, 2017

SUBJECT: Special Inspector General for Afghanistan Reconstruction (SIGAR) Draft Report, I-031a, Afghan Ministry of Interior Headquarters Project: Phase 2 Experienced Lengthy Delays, Increased Costs, and Construction Deficiencies that Need to Be Addressed

Mr. John F. Sopko
Special Inspector General for Afghanistan Reconstruction
2530 Crystal Drive,
Arlington, Virginia

Dear Mr. Sopko:

The purpose of this letter is to provide the U.S. Army Corps of Engineers (USACE) response to the subject report.

USACE conducted a detailed review, including contract, engineering and construction documents and photographs of completed work on the Ministry of Interior Headquarter Building. As a result, USACE concurs with SIGAR's recommendation 2.a, 2.c, and 3, and non-concurs with recommendation 2.b, 2e., and 2f. We are in the process of conducting further review of recommendation 1, and 2.d, and will conclude our review within 90 days and report back with the results to SIGAR.

The Phase II project was physically completed on April 19, 2015. Although the contract is complete, USACE is reviewing all available remedies to obtain credit for the items identified by SIGAR as not meeting the contract requirements.

USACE will continue to review and monitor any areas that our customer indicates may place the health and safety of Ministry of Interior personnel at risk.

Additional details are provided in the enclosure. My point of contact for this response is Mr. George Sullivan, Internal Review Auditor. He may be reached by e-mail at george.a.sullivan@usace.army.mil, or by telephone at 202-761-4573.

A handwritten signature in blue ink that reads "E. Scott Lowdermilk".

E. Scott Lowdermilk
Colonel, U.S.A.
Chief of Staff

Enclosure 1

U.S. Army Corps of Engineers (USACE) Response to SIGAR Recommendations contained in SIGAR Draft Report I-031a, Afghan Ministry of Interior Headquarters Project: Phase 2 Experienced Lengthy Delays, Increased Costs, and Construction Deficiencies that Need to Be Addressed

Contracts W912DQ-12-C-4000 and W5J9E-13-C-0030

Recommendation 1: Take immediate steps to replace the noncertified fire doors that were installed in the MOI headquarters building, communications building, and gatehouse that do not meet the fire-rating standards, as required in the contract.

USACE Response: Requires Further Investigation. The 100% Final Design for the Afghan Ministry of Interior Headquarters was developed under contract W912ER-09-D-0004 and called for the corridors on the first, second, and third floors to be fire rated at 1-hour construction, with 20 minute rated fire doors. The design also required fire rated walls along the corridors (the exit access), as well as fire rated penetrations, including doors. The fire doors installed by contractors under the four (4) MOI HQ contracts (1) W912DQ-11-C-4038 (Phase I); (2) W912DQ-12-C-4000 (Phase II – terminated); (3) W912DQ-12-C-4004 (Phase III – surety takeover); and (4) W912DQ-13-C-0030 (Phase II – reprocured) covering Phase I, II and III were not compliant with the contractually required references IBC 2009 or IBC 2012.

USACE accepted submittals that did not comply with the specifications contained in contracts due to a failure to follow its internal submittal quality assurance review process. Direction to provide plans to correct fire door deficiencies has been given to the construction contractors responsible for installing the non-compliant fire doors. USACE is currently evaluating contractor responses to that direction.

USACE has requested that CENTCOM acknowledge that the CSTC-A Construction Standards for ANSF Projects, issued 5 SEP 2011 and in place at that time all 4 MOI contracts were awarded, were the applicable standards outlining appropriate code and requirements for ANSF projects. Although the 4 MOI contracts included design and construction requirements outlined in IBC 2009 (Phases I-II) and IBC 2012 (Phase III) a determination needs to be made whether either served as appropriate governing criteria pursuant to the standards for ANSF projects at the time the contracts were awarded. The installation of fire doors represents an improvement, or betterment than what is required by the CSTC-A 05 SEP 2011 Construction Standards for ANSF Projects for ANSF issued at the time all 4 MOI contracts were awarded.

USACE is currently implementing the following corrective actions to address failures to follow internal process that impact enforcement of contract compliance:

- Conduct additional training with field personnel and increased monitoring of that internal quality review process. (Completed)

- Update specifications/drawings for standard designs to meet current requirements of UFC (September 2017)
- Capture lessons learned and provide better feedback to field and reachback districts (on-going)
- Centralizing Independent Technical Reviews at the Middle East District to ensure contract design and specifications are accurate and current (Completed)

We consider the recommendation open and plan to finalize our actions and report the results back to SIGAR within 90 days.

Recommendation 2: Obtain a refund from Yuksel Insaat for deficient workmanship or direct the contractor to correct the issues identified in this report involving noncompliance with the contract and poor workmanship, such as the use of substituted door closures and hardware, smaller than required wires for panel boards and receptacles, rigid instead of flexible electrical conduits and cable trays across seismic joints, lack of seismic bracing for suspended equipment in the electrical and mechanical rooms, poorly graded and compacted soil, and step risers that exceeded specified height limits.

USACE Response:

- a. **Use of substituted door closers and hardware. Concur.** The installed hardware is not the same as that approved for the construction project, I.E. Briton. While Briton products were installed in most cases, we concur that other brands of door hardware were installed and appear to be of a lesser quality. USACE is developing an internal Construction Bulletin to highlight these type product substitutions to our staff to prevent like incidents in the future. Although the contract being reviewed is complete, USACE is reviewing all available remedies to obtain credit for the items identified by SIGAR as not meeting the contract requirements.
- b. **Smaller than required wires for panel boards and receptacles. Non-concur.** Without specific deficiency locations identified, USACE believes the electrical wiring installed is in accordance with the contract drawings. The drawings require wiring of various sizes based on location relative to its distribution panel, many in the 2-4mm² range. A wire with a cross sectional area of 3.307mm² or 3.31mm² is classified as a 4mm² wire specification. No further action will be taken on our part for this recommendation.
- c. **Rigid instead of flexible electrical conduits and cable trays across seismic joints. Concur.** USACE agrees non-flexible electrical conduit and cable trays were installed on seismic joints and acknowledges this is a deficiency. USACE is developing an internal Construction Bulletin to highlight proper crossing of seismic joint by the various building systems to prevent like incidents in the

future. Although the contract being reviewed is complete, USACE is reviewing all available remedies to obtain credit for the items identified by SIGAR as not meeting the contract requirements.

- d. **Lack of seismic bracing for suspended equipment in the electrical and mechanical rooms. Requires Further Investigation.** A seismic analysis was not performed by the contractor. Given that there is limited HVAC ducting due to maximal use of unit heaters and ceiling fans, it is not anticipated that substantial seismic bracing would be required. However, to be certain suspended equipment and other items do not present a safety hazard to building occupants USACE will undertake a seismic analysis. Although this contract is closed, if USACE determines a requirement for seismic bracing, we will bring the matter to our customer and address the need for additional and separate work. We consider this recommendation open and will finalize our actions and report the results back to SIGAR within 90 days.
- e. **Poorly graded and compacted soil. Non-concur.** Regarding the grading around the site and compaction, there was a follow-on non-USACE landscaping contract that removed the soil and planted trees and grass. The report acknowledges this third contract to provide additional aesthetic enhancements to the MOI Headquarter, along with the impacts the actions had on the sidewalks. As a result, USACE does not believe it is responsible for the final grading nor damages to sidewalks. No further action will be taken on our part for this recommendation. In response to SIGAR's mention that storm water infiltrates into electrical manholes, these manholes are a typical industry standard, i.e. they were not designed to be watertight as water infiltration into manholes of all types is typical. Sump areas are specifically called for in drawings to allow manholes to be pumped out. Also cabling in the manholes are rated for contact with water. Therefore, a deficiency does not exist and the contractor is in compliance with the contract.
- f. **Step risers that exceed specified height limits. Non-concur.** USACE's contractor constructed the concrete surfaced stairs according to the original contract drawings with all risers compliant to the drawing and standards. A later contractor resurfaced the stairs by adding marble or terrazzo tile to the first and each subsequent step and intermediate landing to improve the architectural appearance of the Headquarters Building. This created the height difference noted in SIGAR's report, but is not a deficiency on this contract. Although the contract being reviewed is complete, USACE is reviewing all available remedies to obtain credit for the items identified by SIGAR as not meeting the contract requirements.

Recommendation 3: Clarify guidance of the project oversight team's responsibility to ensure that all three phases of USACE's inspection process are performed and documented so that all definable features of work are completed in accordance with the contract.

USACE Response: Concur. USACE generally agrees with the inspection comments and the below actions will be taken to improve the situation. USACE's three phases of control are the core of the Construction Quality Management System. We acknowledge there were challenges with this project and preparatory and initial phase meetings on each definable feature of work (DFOW) were not always documented with appropriate minutes. The Commander of the Transatlantic Afghanistan District and his engineering and construction staff will emphasize the requirement to maintain contract oversight documents, records, and the Resident Management System. Project engineers and construction representative are taking steps to ensure that contractors are fully executing the three phase inspection process. Technical inspections will be conducted by personnel with full knowledge of the technical area being addressed and documented to ensure effective QA oversight can be verified and demonstrated.

APPENDIX V - ACKNOWLEDGMENTS

Steven Haughton, Senior Inspection Manager

William Shimp, Senior Auditor

Michael Ten-Kate, Senior Program Analyst

Benjamin Goebel, Student Intern

Melissa McAllister, Professional Engineer

Wilhelmina Pierce, Professional Engineer

Abdul Rahim Rashidi, Program Analyst

Aziz Rahman Zaki, Engineer

Hasibullah Zeer, Program Analyst

This inspection was conducted
under project code SIGAR-I-031.

SIGAR's Mission

The mission of the Special Inspector General for Afghanistan Reconstruction (SIGAR) is to enhance oversight of programs for the reconstruction of Afghanistan by conducting independent and objective audits, inspections, and investigations on the use of taxpayer dollars and related funds. SIGAR works to provide accurate and balanced information, evaluations, analysis, and recommendations to help the U.S. Congress, U.S. agencies, and other decision-makers to make informed oversight, policy, and funding decisions to:

- improve effectiveness of the overall reconstruction strategy and its component programs;
- improve management and accountability over funds administered by U.S. and Afghan agencies and their contractors;
- improve contracting and contract management processes;
- prevent fraud, waste, and abuse; and
- advance U.S. interests in reconstructing Afghanistan.

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- Web: www.sigar.mil/fraud
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