SIGAR

Special Inspector General for Afghanistan Reconstruction

SIGAR 17-08 Inspection Report

Herat University Women's Dormitory: Generally Well Constructed, but Instances of Contract Non-Compliance Should Be Addressed



остовек **2016** October 25, 2016

The Honorable John F. Kerry Secretary of State

The Honorable Ashton B. Carter Secretary of Defense

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

The Honorable P. Michael McKinley U.S. Ambassador to Afghanistan

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

This report discusses the results of SIGAR's inspection of the newly built Herat University women's dormitory located in Herat, Afghanistan. U.S. Forces–Afghanistan (USFOR-A) provided \$7.1 million in Commander's Emergency Response Program funding to the U.S. Army Corps of Engineers (USACE) to build a women's dormitory at Herat University. USACE awarded a \$5.59 million contract to Poushang Construction Company to design and construct a three-story dormitory for 372 female students. We found that Poushang Construction generally built a well-constructed dormitory and supporting facilities according to contract requirements. However, we found instances of non-compliance with the contract, such as the absence of flashing-light fire alarms, which could place the health and safety of residents and visitors at risk. Further, we found an instance of poor workmanship involving uneven plastering on interior walls and a problem with the dormitory's 36 fire extinguishers that could impact their use in the event of a fire.

We recommend that the Commanding General, USFOR-A, in coordination with the Commanding General and Chief of Engineers, USACE, take the following actions and report the results back to SIGAR before the contractor warranty period expires on December 14, 2016: (1) direct Poushang Construction to correct all instances of contract non-compliance identified in this report, specifically the failure to install flashing-light fire alarms, the missing exit signs and smoke detectors, and the improperly constructed library stairway area and ramp; and (2) in coordination with the Herat University operation and maintenance activity, examine the dormitory's fire extinguishers to determine whether they are faulty, and, if they are, replace them.

We provided a draft of this report to USFOR-A and USACE for comment. USFOR-A and USACE partially concurred with both of our recommendations. For the parts of the recommendations it did not concur with, USACE noted that it did so based on its determination that the recommendations mentioned some items for which it already had provided documentation showing that the items met contract specifications.



Based on USFOR-A's and USACE's comments, our review of USACE documentation, and our site visits in September 2016, we revised our recommendations. USFOR-A's and USACE's comments are reproduced in appendices II and III, respectively.

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

ABBREVIATIONS

IBC International Building Code

MoHE Ministry of Higher Education

O&M operation and maintenance

PAS Public Affairs Section

USACE U.S. Army Corps of Engineers

USFOR-A U.S. Forces-Afghanistan

On June 24, 2013, U.S. Forces–Afghanistan (USFOR-A) provided approximately \$7.1 million in Commander's Emergency Response Program funding to the U.S. Army Corps of Engineers (USACE) to build a women's dormitory at Herat University in Herat, Afghanistan. On July 26, 2013, USACE awarded a \$5.28 million firm-fixed-price contract to Poushang Construction Company, an Afghan firm, to design and construct a three-story dormitory for 372 female students.¹ The contract required the dormitory to have 93 4-person bedrooms, 2 shared baths on each floor, a common area, a laundry room, a dining room, and separate facilities for a library, power house, and sports area.² Poushang Construction started building the dormitory on August 10, 2013, and the dormitory was completed on December 13, 2014. Under the contract, the dormitory has a 2-year warranty period, which began on December 14, 2014. On February 13, 2015, USACE turned over the dormitory, operation and maintenance (O&M) manuals, and as-built drawings to USFOR-A.

USFOR-A transferred the dormitory to the Afghan Ministry of Higher Education (MoHE) on March 1, 2015. As part of the transfer, USFOR-A agreed to complete additional work outlined in two approved modifications that USACE requested and issued to Poushang Construction. USACE approved the first modification, valued at \$40,900, on February 26, 2015, for translating the 0&M manuals into Dari and Pashto, and the second modification, valued at \$268,700, on March 6, 2015, for the installation of a voltage stabilizer and undervoltage protection.³ These two modifications increased the contract award amount to approximately \$5.59 million.⁴

On May 18, 2015, the American Consulate General Frankfurt awarded Barikab Durani Logistic Service, an Afghan company, a \$276,479 fixed-price contract to procure, deliver, and install new dormitory furnishings. This included furnishings and equipment for the bedrooms, kitchen, library, common areas, laundry facility, dining hall, and offices. The contractor was to install the furnishings and equipment within 60 days of the contract award, or by July 16, 2015.

On August 25, 2015, the Public Affairs Section (PAS) at U.S. Embassy Kabul entered into a \$1.08 million cooperative agreement with Binazeer Construction Company, an Afghan firm, to provide O&M for the women's dormitories at Herat and Balkh Universities. ^{6,7} The agreement required Binazeer Construction Company to procure labor, materials, and equipment to support O&M of the Herat University women's dormitory for 2 years—from August 2015 to August 2017. A February 2015 Memorandum of Understanding between PAS, the MoHE, and Herat University, requires Herat University to take over responsibility for the dormitory's O&M in August 2017, which, according to a 2012 Memorandum of Agreement between USFOR-A and the MoHE, is estimated to cost \$220,000 annually.

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

We conducted our work in Kabul and Herat, Afghanistan, from February 2015 through October 2016 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

¹The contract number is W911KB-11-D-0012-0003.

² The two shared bathrooms on the first floor have four toilets, four showers, and four sinks each, while the two shared bathrooms on the second and third floors have five toilets, five showers, and five sinks each.

³ A voltage stabilizer is a device that feeds constant electrical current to units, such as air conditioners and computers, and protects them from damage due to voltage fluctuations. An under-voltage protector is an electronic circuit used to turn off the power of a device if the voltage level drops below a specific threshold.

⁴ USACE also obligated \$745,364 for labor and security during construction and, according to USFOR-A officials, returned the remaining \$763,741 of the \$7.1 million Commander's Emergency Response Program funds to USFOR-A.

⁵ The contract number is SGE50015M0062.

⁶ The cooperative agreement number is SAF20015CA011.

⁷ SIGAR initiated an inspection of the women's dormitories at Balkh University on August 10, 2015.

engineer in accordance with the National Society of Professional Engineer's *Code of Ethics for Engineers*. Appendix I contains a detailed discussion of our scope and methodology.

DORMITORY IS GENERALLY WELL CONSTRUCTED, BUT WE FOUND INSTANCES OF NON-COMPLIANCE WITH THE CONTRACT THAT SHOULD BE ADDRESSED

We conducted on-site inspections of the Herat University women's dormitory from June 29 through July 8, 2015; on September 1, 2015; and on September 7 and September 10, 2016.8 The dormitory is located approximately 1 kilometer from the main campus and is the university's only female-dedicated living space. We found that Poushang Construction generally built a well-constructed dormitory and supporting facilities. For example, the completed three-story dormitory included, as required, 93 4-person bedrooms, two shared bathrooms on each floor, a kitchen, a common area, laundry facilities, a dining hall, and separate facilities for the library, power house, and sports area (see photo 1). In addition, Poushang Construction completed the construction of the women's dormitory on schedule and completed the two modifications for the translated

0&M manuals and the installation of the voltage stabilizer and under-voltage protection. At the time of our June-July 2015 inspection, Barikab Durani Logistic Service was in the process of installing the required dormitory furnishings, to be completed by July 15, 2015.

However, we found several instances of non-compliance with contract requirements and technical specifications, as well as one instance of poor workmanship. Most of the deficiencies we found, such as the absence of required flashing-light fire alarms and the presence of potentially defective fire extinguishers, could place the health and safety of the dormitory's residents and visitors at risk.

Photo 1 - Herat University Women's Dormitory



Source: SIGAR, July 2, 2015

Instances of Non-Compliance with Contract Requirements Pose Potential Risks to the Health and Safety of Dormitory Occupants

During our June-July 2015 inspection, we found five instances where Poushang Construction did not comply with contract requirements. All of these instances of noncompliance pose potential health or safety risks. Specifically, we found:

• No lightning protection system: The design drawings and the National Fire Protection Association Codes required Poushang Construction to install a lightning protection system for the dormitory's power house building; however, at the time of our inspection, we found that the system had not been installed. When lightning strikes and passes through a building, it can take more than one path to the ground at a time. Lightning can also pass through the air from one conductive path to another in what is called a side flash, which can create sparks that start fires.⁹ A lightning strike on the power house building could disable the main power supply to the dormitory and library, which could result in safety

⁸ On September 7 and September 10, 2016, we conducted additional site visits to verify the status of items USACE mentioned in its comments on a draft of this report (see appendix III).

⁹ A side flash occurs when lightning strikes one object and a portion of the current jumps to another object.

problems and significant repair costs. However, this risk can be reduced by installing the required lightning protection system.

- No flashing-light fire alarms: The contract required adherence to the International Building Code (IBC), which requires a flashing-light fire alarm capability in sleeping units. 10 However, the design drawings did not include flashing-light fire alarms in the dormitory bedrooms, and during our inspection we did not observe flashing-light fire alarms in the bedrooms. The absence of flashing-light fire alarms may increase the safety risks to dormitory occupants and visitors in the event of a fire.
- Exit signs missing or not labeled in Dari and Pashto: The contract required Poushang Construction to install exit signs in Dari and Pashto above the doors and for the signs to be visible in any direction of egress. We found that three of the required exit signs were not installed. Based upon the design drawings, one exit sign should have been installed on the dormitory's first floor near the middle stairwell and restroom, another in the same location on the second floor, and the third on the ground floor outside of the electrical room. The absence of these exit signs could cause confusion during an emergency situation, such as a fire. Further, the exit signs that were installed were written in Dari and English, rather than the required Dari and Pashto.
- Not all smoke detectors were installed: The contract, design drawings, and technical specifications required Poushang Construction to install smoke detectors and heat detectors in accordance with the National Fire Protection Association Codes. However, we found that only four of the five dining hall smoke detectors were installed, and of those four, two were not located in the correct location, according to the design drawings. The absence and incorrect placement of the required number of smoke detectors could put occupants and visitors at greater risk in the event of a fire.
- Improperly constructed stairway landing area and library ramp: The contract required adherence to the IBC, which requires a minimum 48-inch landing area at the base of the library's emergency exit stairway. 11 When we measured the landing area, it was 29 inches (see photo 2). Further, the design drawings required Poushang Construction to construct the library ramp with no more than an 8 percent slope, but we found that the ramp had a 14 percent slope. The narrow emergency exit landing area and steep ramp slope could present safety issues for occupants exiting the facility during an emergency situation.

Photo 2 - Narrow Stairway Landing Area



Source: SIGAR, July 7, 2015

¹⁰ See IBC 2009, Section 907.5.2.3.

¹¹ See IBC 2009, Section 1007.3.

Additional Deficiencies Identified Included Poorly Finished Interior Walls and Potentially Faulty Fire Extinguishers

During our June-July 2015 inspection, we also found one instance of poor workmanship by Poushang Construction and potentially faulty fire extinguishers that may not work in the event of a fire. Specifically, we found:

- Poorly finished interior walls: The contract's technical specifications stated that the dormitory's plaster surfaces, such as interior walls, should be brought to a true, even finish with a rod or straightedge to fill surface defects. However, during our inspection, we found that the plaster surface on the interior walls had noticeable waves (see photo 3). Although the condition of the walls does not pose a health or safety risk, it shows a lack of compliance with contract requirements. In the June 5, 2014, Weekly Quality Deficiency Tracking List, USACE noted the poorly finished interior walls. At the time of our inspection, we found no evidence that corrective action had been taken.
- Fire extinguishers have duplicate serial numbers and do not have the required external markings: Poushang Construction installed 36 dry chemical fire extinguishers in the dormitory even though the contract only required the installation of 29 of these extinguishers. Two additional fire extinguishers were installed on each of the dormitory's three floors, and two fire extinguishers were kept as spares in the electrical room. However, we found that all of the extinguishers, manufactured by Buckeye Fire Equipment Company, a U.S. company, were missing the embossed manufactured date, typically located on the bottom of the cylinder (see photo 4). Every Buckeye fire extinguisher's manufacture date should be embossed on the bottom of the cylinder, and this embossed date does not scratch or fade. We also found that 30 of the fire extinguishers had the same serial number, instead of each

Photo 3 - Poorly Finished Interior Wall



Source: SIGAR, June 29, 2015

Photo 4 - Fire Extinguisher with No Manufacture Date



Source: SIGAR, July 7, 2015

fire extinguisher having its own unique serial number as required by the manufacturer. The lack of the required manufacture date and duplicate serial numbers raises the concern that these fire extinguishers may not work in the event of a fire.

USACE Approved the Design and Construction of the Women's Dormitory without a Heating System

The contract that USACE awarded to Poushang Construction required that all building designs follow the 2009 IBC. The 2009 IBC calls for a heating system in interior spaces intended for human occupancy, which would include a dormitory. In our review of Poushang Construction's design drawings for the women's dormitory at Herat University, we noticed that the final dormitory design drawings did not include a heating system, and the site visit confirmed that no heating system had been installed. In USACE's May 2014 final design review, the

mechanical engineer who reviewed the design commented that, "no heating in the building is unacceptable and does not meet code. Recommend resubmittal." 12

In May 2016, USACE officials told us that they ultimately approved the design and construction of the dormitory with no heating system because the MoHE did not want one installed. However, the winter temperature in Herat drops to approximately 26 degrees Fahrenheit or colder, and Herat University officials told us that students were using large, high-voltage portable electric heaters when it was cold, which caused fuses to blow due to the dormitory's fluctuating electrical power. USACE officials and Herat University officials told us that students have now switched to low-voltage heaters to stay warm and to avoid blowing fuses.

USACE officials cited three reasons for approving the dormitory's design and construction without a heating system. First, Herat University is out of session during the winter, and as a result, the dorm is closed from December through March every year. Second, the MoHE was concerned about the high cost of operating and maintaining a modern heating system. Third, USACE officials told us they built the dormitory to typical Afghan standards that USACE has used across Afghanistan. However, MoHE officials told us that students expressed dissatisfaction with the lack of heating system. The women's dormitories currently under construction at Balkh University are designed and being constructed with heating systems.

We did not find any evidence in the documentation provided by USACE that the MoHE requested that a heating system not be installed, that USACE concurred with such a request, or that USACE modified the contract to account for such a deviation from the IBC. The lack of documentation regarding the decision not to install a heating system raises the possibility that USACE paid for a heating system that was not installed. The design was approved without the installation of a heating system, but it is unclear whether the contract award amount was adjusted to accommodate for this change.

THE DORMITORY IS BEING USED, BUT THERE ARE CONCERNS ABOUT LONG-TERM MAINTENANCE COSTS

The Herat University women's dormitory was being used at the time of our September 2015 site visit, but it was not fully occupied. According to Herat University and PAS officials, at the time of our visit, there were approximately 136 female students and two female staff living in the dormitory, which was built to accommodate 372 female students. Herat University officials told us that at the start of the new school year in March 2016, there were 200 female students living in the dormitory.

MoHE and Herat University officials told us that they and the students were generally satisfied with the dormitory and were pleased to have a dedicated living space for female students. However, Herat University officials did express dissatisfaction with the lack of a water filtration system, the small kitchen, and the poorly finished interior walls. ¹³ In addition, Herat University officials told us that dormitory residents cannot simultaneously operate electrical appliances that consume high amounts of electricity because it overloads the electrical system, causing fuses to blow.

Herat University officials also expressed concerns about the university's financial ability to operate and maintain the dormitory after the current \$1.08 million 2-year PAS 0&M cooperative agreement for the Herat and Balkh Universities women's dormitories expires in August 2017. The officials told us that the cost of replacing parts and equipment, even with less expensive substitutes, may exceed the MoHE's estimated annual budget of \$220,000 for future 0&M costs for the Herat University women's dormitory. Herat University officials are also concerned that there may be additional 0&M issues and associated costs once the dormitory is fully occupied. Despite these concerns, university officials stated they plan to add one more bed to each

¹² USACE, Herat University Women's Dormitory 100 Percent Resubmittal 4, May 8, 2014.

¹³ The contract did not require Poushang Construction to install a water filtration system.

dormitory room to accommodate five female students per room. If that occurs, the number of student residents could increase to 465, even though the building was built to accommodate 372 student residents.

CONCLUSION

Poushang Construction generally constructed a well-built women's dormitory and supporting facilities at Herat University. The fact that university officials and the 200 female student occupants are generally satisfied with the dormitory speaks well for the project. Further, to their credit, USACE and the MoHE found a way to save money by not installing a heating system in the dormitory. The system would not only have been costly to operate and maintain, but, more significantly, it would not have been used much because the dormitory is closed in the winter months.

However, we found some instances of contract non-compliance, such as the absence of flashing-light fire alarms and missing exit signs. These instances of contract non-compliance could pose safety risks for students and visitors. Lastly, of the 36 fire extinguishers installed in the dormitory, we found that none of them had the embossed manufacture date on the bottom and that 30 fire extinguishers had the same serial number, which raises concerns about whether they would work in the event of a fire. These deficiencies require immediate attention because the contract warranty period expires in December 2016.

RECOMMENDATIONS

To help protect the U.S. taxpayers' investment in the Herat University women's dormitory, and to reduce the safety risks to dormitory occupants, SIGAR recommends that the Commanding General, USFOR-A, in coordination with the Commanding General and Chief of Engineers, USACE, take the following actions and report the results back to SIGAR before the contractor warranty period expires on December 14, 2016:

- Direct Poushang Construction to correct all instances of contract non-compliance identified in this
 report, specifically the failure to install flashing-light fire alarms, the missing exit signs and smoke
 detectors, and the improperly constructed library stairway area and ramp; and
- 2. In coordination with the Herat University O&M activity, examine the dormitory's fire extinguishers to determine whether they are faulty, and, if they are, replace them.

AGENCY COMMENTS

We provided a draft of this report to USFOR-A and USACE for comment. In the draft, we recommended that the Commanding General, USFOR-A, in coordination with the Commanding General and Chief of Engineers, USACE, take the following actions and report the results back to SIGAR within 90 days:

- Direct Poushang Construction to correct all instances of contract non-compliance identified in this
 report, such as the failure to install the lightning protection system and flashing-light fire alarms,
 before the contract warranty period expires in December 2016, and determine whether the cost of a
 heating system was included in the contract.
- 2. Conduct an examination of the dormitory's fire extinguishers to determine whether
 - a. they have the required manufacture dates and stamps, and
 - b. for those that do not meet those requirements, determine whether they are faulty, and, if they are, replace them.

With respect to recommendation 1, the specific deficiencies we identified in the draft report were related to (a) the lightning protection system, (b) flashing-light fire alarms, (c) exit signs, (d) smoke and heat detectors, (e) the narrow emergency landing area and steep ramp slope for the library, and (f) the heating system.

USFOR-A and USACE provided written comments on the draft report. In those comments, USFOR-A and USACE partially concurred with both of our recommendations. Where it did not concur, USACE noted that it did so based on its determination that our draft report included items for which it already had provided documentation showing that it completed the work in accordance with contract specifications. USFOR-A's and USACE's comments are reproduced in appendices II and III, respectively. USACE also provided technical comments, which we incorporated into this report, as appropriate.

USFOR-A and USACE did not concur that the lightning protection needed to be corrected, stating that "the electrical lightning protection system is installed according to the USACE approved electrical design and where it was required by the design." USACE also provided us the photos and design build drawings. Based on our review of this information and our September 2016 site visits, we determined that the required lightning protection system has been installed on the dormitory's power house building. As a result, we removed the lightening protection system from our first recommendation.

USFOR-A and USACE did not concur that the flashing-light fire alarms needed to be installed. USACE stated that "according to [its] review of the facilities design, International Building Code, and contract specifications, all required flashing-light fire alarms were installed properly where required." USACE also provided us two photos of flashing-light fire alarms installed in a restroom. However, the IBC requires that "sleeping units be provided with the capability to support visual alarm notification." ¹⁴ During our September 2016 site visits, we confirmed that there were no flashing-light fire alarms in the dormitory bedrooms. As a result, the flashing-light fire alarms will remain in our first recommendation until we receive evidence that each bedroom is capable of supporting visual alarm notification.

USFOR-A and USACE did not concur that the exit signs required correction, stating that all exit signs were installed at the locations specified in the design drawings and show the correct direction. USACE also provided us photos showing some of the signs that were installed and added that even in places where there was an exit sign in English, the "design builder had installed additional Dari/Pashto signs." During our September 2016 site visits, we found that three exit signs were missing, and the installed exit signs were written in Dari and English, not Dari and Pashto as the contract required. Therefore, the exit signs will remain in our first recommendation until we receive evidence that the three missing exit signs have been installed, and that all exit signs are written in Dari and Pashto.

USFOR-A and USACE partially concurred that the smoke and heat detectors needed to be addressed, stating that, with several approved exceptions, all smoke detectors were installed according to the design drawings. USACE added that four smoke detectors were installed in the kitchen, instead of five, because the fifth smoke detector was too close to the stove used for cooking and would have resulted in false alarms. However, the contract and design drawings required two heat detectors in the kitchen and five smoke detectors in the dining room. During our September 2016 site visits, we found that two heat detectors were installed in the kitchen, but only four of the required five smoke detectors were installed in the dining hall. Further, two of those smoke detectors located in the dining hall were not installed in their designated locations. The smoke detectors will remain in our first recommendation until we receive documentation of the approved exemptions from number and location of the smoke detectors called for by the facility design.

USFOR-A and USACE partially concurred that the narrow emergency landing area and steep ramp slope for the library should be corrected, stating that USACE is in the process of reviewing the circumstances surrounding the narrow emergency exit landing area and steep ramp slope. USACE noted that it will provide us the results within 90 days. USACE added that the library, two exit ways, and emergency landing area are sufficient for emergency egress and should not present significant safety issues for occupants exiting the facility during an

¹⁴ See IBC 2009, Section 907, Fire Alarm and Detection Systems-Occupant Notification System.

emergency situation. The narrow emergency landing area and steep ramp slope for the library will remain in our first recommendation until we receive and evaluate the results of USACE's review as to why the stairway landing areas and ramp slopes did not meet construction requirements.

USFOR-A and USACE partially concurred that the heating system needed to be addressed, stating that the MoHE did not request a heating system because "the dormitory is closed from December to March of each year." USACE added that the high cost of operating and maintaining a modern heating system was not acceptable for the university, and the school planned to use portable heaters, on a temporary basis, if it gets too cold. USACE also confirmed that the contract did not include specifications or funds for a heating system. Because USACE confirmed that the cost of a heating system was not included in the contract, we removed the heating system from our first recommendation.

USFOR-A and USACE partially concurred with our recommendation to conduct an examination of the dormitory's fire extinguishers to determine whether they have the required manufacture dates and stamps. In its comments, USACE stated that it approved the fire extinguisher submittals, and "the brand selected, Buckeye, is the best quality of fire extinguisher imported to Afghanistan." USACE added that it had no indication that the fire extinguishers did not fully meet contract requirements. However, during our June-July 2015 site inspection, we observed that although the fire extinguishers appeared to be the Buckeye brand, some did not appear to meet Buckeye's standards, which raises concerns that the extinguishers may not be authentic. For example, some of the extinguishers did not have an embossed manufacture date.

To verify the information in USACE's comments, we conducted two additional site visits in September 2016 and inspected all of the fire extinguishers in the dormitory to assess their authenticity. We used Buckeye's product brochures for identifying a counterfeit fire extinguisher as guidance for our assessment. We found that none of the 36 installed fire extinguishers had the manufacture date stamped on the bottom. In addition, we found that 30 of the 36 fire extinguishers had the same serial number, instead of each extinguisher having a unique serial number, which is Buckeye's standard. As a result, we determined the fire extinguishers did not meet the manufacturer's requirements and therefore may not be authentic.

USFOR-A and USACE did not concur with our recommendation to determine whether the fire extinguishers without the required manufacture dates and stamps are faulty, and, if they are, replace them. In its comments, USACE stated that "The fire extinguishers will need to be inspected by the user and Operations and Maintenance activity to determine if the fire extinguishers still meet the original contract requirements and if they remain operational." USACE added that the dormitory's O&M activity will need to replace any fire extinguishers found to be defective. Based on USACE's response and the results of our September 2016 site visits, we revised our recommendations regarding the fire extinguishers. We now recommend that USFOR-A and USACE, in coordination with the Herat University O&M activity, examine all of the dormitory's fire extinguishers to determine whether they are faulty, and, if they are, replace them.

APPENDIX I - SCOPE AND METHODOLOGY

This report provides the results of SIGAR's inspection of the Herat University women's dormitory in Herat, Afghanistan. To determine whether work was completed in accordance with contract requirements and technical specifications, and the dormitory was being used and maintained, we:

- reviewed contract documents, design submittals, and other relevant project documentation;
- conducted an engineering assessment of the project drawings and construction methods used;
- interviewed U.S. and Afghan government officials concerning the project's construction, use, and maintenance; and
- conducted on-site inspections from June 29 through July 8, 2015; on September 1, 2015; and on September 7 and September 10, 2016.¹⁵

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 inspectors and an engineer inspected the Herat University women's dormitory from June 29 through July 8, 2015; on September 1, 2015; and on September 7 and on September 10, 2016. We developed a standardized engineering evaluation checklist covering items required by the contract and design/specification documents for the women's dormitory. 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 engineer 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 them;
- 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 our partners in accordance with SIGAR's policies and procedures to ensure their work resulted in impartial, credible, and reliable information.

We conducted our work at the Herat University women's dormitory in Herat and in Kabul, Afghanistan, from February 2015 through October 2016. 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 engineer 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.

¹⁵ On September 7 and September 10, 2016, we conducted additional site visits to verify the items USACE mentioned in its comments on a draft of this report (see appendix III).



HEADQUARTERS UNITED STATES FORCES-AFGHANISTAN BAGRAM AIRFIELD, AFGHANISTAN APO AE 09354

MEMORANDUM THRU U.S. Forces Command, Afghanistan, Deputy Corpmander, Support

FOR United States Central Command Inspecter General, 7115 South Boundry Blvd, MacDill AFB, FL 33621-5101

SUBJECT: CENTCOM tasker USCC 1621548365 "SIGAR I-027 Draft Report "Inspection of the Women's Dormitory at Herat University"

- The purpose of this memorandum is to provide U.S. Forces Command-Afghanistan (USFOR-A) response to SiGAR 1-027 draft report recommendations. These responses have been coordinated with U.S. Army Corps of Engineers, Transatlantic Division (encl).
- 2. Recommendation 1. "Direct Poushang Construction to correct all instances of contract non-compliance identified in this report, such as the failure to install the lightning protection system and flashing-light fire alarms, before the contract warranty period expires in December 2016, and determine whether the cost of a heating system was included in the contract". Coordinated responses:
- a. Lightning protection system/flashing-light fire alarms/exit signs. Non-Concur. The electrical lightning protection system was installed according to the USACE approved electrical design and was inspected by the quality assurance personnel to make sure the electrical lightning protection system meets the contract requirements. All flashing-light and fire alarms were installed where required by the design and approved by the authority having jurisdiction. USACE provided photos and design build drawings to SIGAR during their audit that supported the installations of both systems. USACE again re-looked the lighting protection system and verified the contractor installed the lighting protection systems, flashing-light and fire alarms, as required and in accordance with the contract. All exit signs were installed where required according to the design. Every exit sign shows the correct direction. Further, even in those few places where there is an exit sign in English, the Design Builder also installed additional Dari/Pashto Exit signs. All smoke detectors were installed per design with approved variances. In the kitchen 4 were installed instead of 5 because the 5th smoke detector was too close to the stove used for cooking and it would have resulted in problems of faise alarms while cooking. In the laundry room, given issues with evaporation, the Government Design Build Team determined it was better not to install a detector in this room. The authority having jurisdiction concurred and approved the variance from the technical specifications.

SUBJECT: CENTCOM tasker USCC 1621548365 "SIGAR I-027 Draft Report "Inspection of the Women's Dormitory at Herat University"

- b. Not all smoke and heat detectors were installed. Partially-Concur. USACE confirms that all smoke detectors were installed per design with exemption. The USACE Design Build Team determined that one of the five smoke detectors was not installed due to being too close to the stove used for cooking which would have resulted false alarm while cooking.
- c. Improperly constructed stairway landing area and library ramp. Partially-Concur. USACE in process of conducting a review of the circumstances surrounding the stairway, landing and ramp and will provide SIGAR a response within 90 days.
- d. The domitory lacks a heating system. Partially-Concur. According to the Statement of Work there was no heating system planned in this contract. The subject project scope of work was coordinated with the Afghanistan Ministry of Education (MoE) prior to execution, which included the MoE request to exclude the heating system in the contract due to high maintenance cost and non-usage during the extended winter break months of December to March. The MoE decided on using portable heaters as needed.
- Recommendation 2. Conduct an examination of the dormitory's fire extinguishers to determine whether:
 - a. they have the required manufacture dates and stamp, and
- b. for those that do not meet those requirements, determine whether they are faulty, and, if they are, replace them. Coordinated response:
 - 2.a. Partially-Concur. The fire extinguishers were selected based on the specifications and standards, and met contract requirements when installed. Fire extinguisher usage training was also conducted to train the end users. It is the responsibility of the Operational Maintenance activity to inspect the fire extinguishers regularly to determine if they remain operational.
 - 2.b. Non-Concur. The fire extinguishers will need to be inspected by the Operations and Maintenance activity to determine if the fire extinguishers meet the original contract requirements and if they remain operational. Any fire extinguishers found to be defective will need to be replaced by the Operations and Maintenance activity.

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- 4. USFOR-A JENG remains committed to training, advising, and assisting our Afghan counterparts in the development of their infrastructures. We continue to support the mission and are fully invested in providing the best assistance to the Afghans.
- 5. My Point of Contact is LTC Paul Fredin,

Encl USACE TAD Response CHRISTOPER M MCGOWAN Colonel (OF-5) U.S. Army Director, Joint Engineers

JTF-10/United States Forces-Afghanistan



DEPARTMENT OF THE ARMY

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

August 19, 2016

Mr. John F. Sopko Special Inspector General for Afghanistan Reconstruction 1550 Crystal Drive, Suite 900 Arlington, VA 22202

Dear Mr. Sopko:

This is the U.S. Army Corps of Engineers (USACE) Transatlantic Division's (TAD) response to the SIGAR Draft Report I-027, "Herat University Women's Dormitory: Dormitory is Generally Well-Constructed, but We Found Instances of Non-Compliance with the Contract That Should Be Addressed," dated August 2, 2016.

Enclosed is TAD's response to the subject report's recommendations. Based on the results of the audit, SIGAR's report developed two recommendations with multiple parts. USACE partially-concurs with SIGAR's recommendations 1. d. e. f. and 2 a; and non-concurs with 1. a. b. c. and 2. b.

Our Transatlantic Afghanistan District conducted a detailed review, including contract documents and photo documentation, of completed work, and determined there were items included in your report they had previously addressed and provided documentation showing completion in accordance with contract specifications. These documents were provided during the course of your audit and in response to the Statement of Facts in May 2016. As a result, our response includes non-concurrences. We are in the process of conducting a review of the circumstances surrounding the stairway, landing and ramp, recommendation 1. e. We will conclude our review within 90 days and report back the results to SIGAR.

We will continue to review and monitor any areas that our customer indicates may place the health and safety of the domitory's residents or visitors at risk. We believe, as SIGAR noted in the report, the dormitory is well-constructed, built in accordance with contract requirements, and in our opinion will serve many years of useful service if proper user care and appropriate Operations and Maintenance is performed.

Additional details are provided in the enclosure. My point of contact for this response is Mr. Mike Hatchett, Internal Review Auditor. He may be reached by e-mail at

or by telephone at

I

Patrick V. Kinsman Colonel, U.S. Army Chief of Staff

O,

Enclosure

SIGAR DRAFT REPORT DATED AUGUST 2, 2016 SIGAR I-027

"HERAT UNIVERSITY WOMEN'S DORMITORY: DORMITORY IS GENERALLY WELL-CONSTRUCTED, BUT WE FOUND INSTANCES OF NON-COMPLIANCE WITH THE CONTRACT THAT SHOULD BE ADDRESSED."

U.S ARMY CORPS OF ENGINEERS TRANSATLANTIC DIVISION COMMENTS TO THE SIGAR RECOMMENDATIONS

Recommendation 1: Direct Poushang Construction to correct all instances of contract non-compliance identified in this report, such as the failure to install the lightning protection system and flashing-light fire alarms, before the contract warranty period expires in December 2016, and determine whether the cost of a heating system was included in the contract.

USACE Response:

- a. Lightning protection system. Non-Concur. The electrical lightning protection system is installed according to the USACE approved electrical design. Our Quality Assurance personnel inspected the project and the electrical lightning protection system meets the contract requirements. As noted in our response to the Draft Statement of Facts our records indicate the required lightning protection system was installed where required by the design. We provided photos and design build drawings to SIGAR during their audit that supported the installation of this system. As a result of the design drawing and photo documentation provided, we do not concur with the finding of no lightning protection system was provided by contractor. We believe no further action is necessary on our part for this recommendation.
- **b. No flashing-light fire alarms. Non-Concur.** According to our review of the facilities design, International Building Code, and contract specifications, all required flashing-light fire alarms were installed properly where required. As noted in our response to the Draft Statement of Facts our records indicate the required flashing-light fire alarms were installed where required by the design and approved by the authority having jurisdiction. We provided photos and design build drawings to SIGAR during their audit that supported the installations of this system. As a result of the design drawing and photo documentation provided, we do not concur with the finding of no flashing-light fire alarm system was provided by the contractor. We believe no further action is necessary on our part for this recommendation.
- **c.** Exit signs missing or not labeled in Dari and Pashto. Non-Concur. All exit signs were installed where required according to the design and show the correct direction for exit. Further, even in those few places where there was an exit sign in

English, the Design Builder had installed additional Dari/Pashto exit signs. As noted in our response to the Draft Statement of Facts we provided photos showing additional signs were provided and installed. As a result of the design drawing and photo documentation provided, we do not concur with the finding of exit signs missing or not labeled in Dari/Pashto. We believe no further action is necessary on our part for this recommendation.

- d. Not all smoke and heat detectors were installed. Partially-Concur. All smoke detectors were installed per design with approved exemptions. In the kitchen 4 were installed instead of 5 because the 5th smoke detector was too close to the stove used for cooking and it would have resulted in problems of false alarms while cooking. In the laundry room, given issues with evaporation, the Government Design Build Team determined it was better not to install a detector in this room. The authority having jurisdiction concurred and approved the exemption from the technical specifications. We believe no further action is necessary on our part for this recommendation.
- e. Improperly constructed stairway landing area and library ramp. Partially-Concur. We are in the process of conducting a review of the circumstances surrounding the stairway, landing and ramp. We will conclude our review within 90 days and provide SIGAR the results. We would like to point out, in the meantime, the library has two exit ways, and the emergency landing would only be used for the second floor, which also has 2 exit ways. It is not a large library and will not have a large population at any given time. Presently, the exits provided, in our opinion, are sufficient for emergency egress and should not present significant safety issues for occupants exiting the facility should an emergency situation arise. We will expedite or review in order to resolve this issue as soon as possible.
- f. The dormitory lacks a heating system. Partially-Concur. According to the Statement of Work there was no heating system planned in this contract. The Afghanistan Ministry of Education did not request one as all schools and universities are off during winter season, so the dormitory is closed from December to March of each year. Further, the high cost of Operations and Maintenance of a modern heating system was not acceptable for the university in the long run. If too cold, it was planned that portable heaters would be used on a temporary basis. Our review of the contract confirmed that a heating system was not included in the specifications nor were funds included in the contract for one. We believe no further action is necessary on our part for this recommendation.

Recommendation 2. Conduct an examination of the dormitory's fire extinguishers to determine whether:

- a. they have the required manufacture dates and stamps, and
- b. for those that do not meet those requirements, determine whether they are faulty, and, if they are, replace them.

USACE Response:

- **a. Partially-Concur.** The fire extinguishers were submitted via submittal 01 11 00-10, and were selected based on the specifications and standards, and approved by USACE. The brand selected, Buckeye, is the best quality of fire extinguisher imported to Afghanistan. We believe the fire extinguishers fully met the contract requirements when installed and we had no indications they did not. We believe no further action is necessary on our part for this recommendation.
- **b. Non-Concur.** The fire extinguishers will need to be inspected by the user and Operations and Maintenance activity to determine if the fire extinguishers still meet the original contract requirements and if they remain operational. Any fire extinguishers found to be defective will need to be replaced by the Operations and Maintenance activity. We believe no further action is necessary on our part for this recommendation.

APPENDIX IV - ACKNOWLEDGEMENTS

Steven Haughton, Senior Inspection Manager

Jennifer Hoegen, Inspector-in-Charge

Melissa McAllister, Professional Engineer

Wilhelmina Pierce, Professional Engineer

Ahmad Javed Khairandish, Civil Engineer

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This inspection was conducted under project code SIGAR-I-027.

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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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