Baghlan Prison: Severe Damage to $11.3 Million Facility Requires Extensive Remedial Action
WHAT SIGAR REVIEWED

On September 28, 2010, the Department of State’s Bureau of International Narcotics and Law Enforcement (INL) awarded a contract to Omran Holding Group (OHG), an Afghan firm, to build a 495-inmate prison in Baghlan province. OHG completed construction of the Baghlan prison on November 8, 2012.

For this inspection, SIGAR assessed (1) INL’s management and oversight of construction, and (2) whether the facility is being used as intended and maintained.

SIGAR conducted its work in Kabul, Afghanistan from January through May 2014, in accordance with the Quality Standards for Inspection and Evaluation published by the Council of the Inspectors General on Integrity and Efficiency. SIGAR inspectors were unable to visit the prison because of security conditions and instead relied upon INL and contractor site visit reports, interviews with INL officials, and other project documentation.

WHAT SIGAR FOUND

After construction of the Baghlan prison was completed in November 2012, building settlement occurred, which led to serious structural damage including wide cracks to three buildings. As a result, one building was demolished. Two other buildings also have collapsing walls and cracked structural beams and columns and will likely need to be rebuilt.

The Department of State’s Bureau of International Narcotics and Law Enforcement (INL) and its contractor, Omran Holding Group (OHG), an Afghan firm, do not agree on the cause of the building settlement and remain in negotiation regarding OHG’s responsibility for repairing the facilities and assuming the cost of those repairs. Nonetheless, both parties agree that OHG did not fully comply with all contract requirements. For example, OHG failed to construct a required stormwater management system and substituted lower-grade plumbing materials that had been prohibited by INL. OHG also failed to deduct 10 percent from its billed invoices to create a retainage fund as required by the contract. This led to an $807,254 shortfall in funds, which should have been retained for INL’s protection in the event of a contract dispute.

Many of the construction deficiencies may be the result of fraudulent actions by the project’s original contracting officer’s representative—a former embassy employee—and, possibly, OHG personnel. SIGAR is currently conducting a preliminary inquiry to determine whether any OHG or embassy officials may have been complicit in these alleged activities. In 2013, the contracting officer and INL appointed a new contracting officer’s representative and lead engineer for Baghlan prison. INL also took measures to correct problems at the site, such as the missing stormwater management system. These steps are positive, but SIGAR remains concerned about an unaddressed construction deficiency—specifically, the use of unreinforced brick walls between the column...
supports of the structures, which violates the International Building Code (IBC) standards called for in the
contract. American Concrete Institute manuals, referenced by the IBC, do not allow building unreinforced
walls in a seismic zone. According to U.S. Geological Survey data, Baghlan prison is located in the second
highest earthquake hazard zone in Afghanistan.

In April, SIGAR alerted the Secretary of State and the U.S. Ambassador to Afghanistan to this problem and
suggested that INL rebuild the structures at Baghlan with steel reinforced masonry. In response, INL
provided photographs that it said showed the buildings had been built using reinforced masonry. To the
contrary, these photos demonstrate that the concrete columns at Baghlan were improperly constructed
and, moreover, that the method of demolition was unsafe. The methods and materials used to place the
concrete in the columns caused voids in the concrete that exposed the reinforcing steel, seriously
compromising the column strength. Moreover, the building's heavy concrete roof was left in place, while
portions of the brick walls that help support the roof were removed. INL has informed SIGAR that it intends
to rebuild any structures at Baghlan in conformance with the original design specifications. However, in
SIGAR's view, INL's apparent reluctance to use reinforced masonry to rebuild Baghlan prison presents a
risk to both prisoner and worker safety.

Despite extensive structural damage, the prison is being used. Furthermore, the prison, which was originally
designed for 495 inmates, is overcrowded, with an INL-reported current population of 777. The prison also
faces two major maintenance issues, which both INL and contractor officials attribute to poor or non-
existent maintenance by the Afghan government. First, both diesel generators, which were designed to be
the prison's exclusive sources of power, are non-operational. As a result, the prison is being powered by a
much smaller capacity generator that was purchased in July 2012 with the assistance of the International
Red Cross. Second, the prison's sewer system is backed up with debris. INL is working to address these
problems by helping to fund a nationwide prison operation and maintenance program that will train mobile
maintenance teams—consisting of electricians, plumbers, masons, carpenters, and painters—to provide
maintenance services at various facilities throughout the region, including Baghlan prison.

WHAT SIGAR RECOMMENDS

To ensure prisoner safety and security and to ensure that the U.S. government receives the highest value
for its contract dollars, SIGAR recommends that the Secretary of State direct INL to (1) recoup the
$807,254 in invoice charges paid to OHG that should have been retained in order to protect INL in the
event of a contract dispute, (2) require that any rebuilding at Baghlan prison comply with International
Building Code and American Concrete Institute requirements regarding the use of steel-reinforced
masonry walls, (3) determine the structural adequacy of the other buildings constructed under the
contract and take action to repair or replace those found structurally inadequate, and (4) require the
contractor to follow an INL-approved demolition safety plan.

In commenting on a draft of this report, INL agreed with all four SIGAR recommendations and discussed
the steps being taken to implement them. INL’s comments and SIGAR’s response are reproduced in
appendix II.
May 27, 2014

The Honorable John F. Kerry
Secretary of State

The Honorable James B. Cunningham
U.S. Ambassador to Afghanistan

This report discusses the results of SIGAR’s inspection to assess the Department of State’s Bureau of International Narcotics and Law Enforcement’s (INL) management and oversight of construction of the regional prison in Baghlan province. The inspection also discusses how the facility is being used and maintained. This report recommends that the Secretary of State direct INL to (1) recoup the $807,254 in invoice charges paid to OHG that should have been retained in order to protect INL in the event of a contract dispute, (2) require that any rebuilding at Baghlan prison comply with International Building Code and American Concrete Institute requirements regarding the use of steel-reinforced masonry walls, (3) determine the structural adequacy of the other buildings constructed under the contract and take action to repair or replace those found structurally inadequate, and (4) require the contractor to follow an INL approved demolition safety plan.

In commenting on a draft of this report, INL agreed with each of our report recommendations. INL’s comments are presented in appendix II.

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

Background .................................................................................................................................................................. 1
INL and OHG Are Taking Steps to Address Construction Deficiencies, except for Major Defect in Unreinforced Brick Walls ................................................................................................................... 3
Baghlan Prison Is Being Used Despite Structural Damage, and Maintenance Problems Require Attention ....... 6
Conclusion .................................................................................................................................................................... 7
Recommendations ...................................................................................................................................................... 8
Agency Comments ....................................................................................................................................................... 8
Appendix I - Scope and Methodology ................................................................................................................................. 9
Appendix II - Comments from the Department of State’s Bureau of International Narcotics and Law Enforcement .......................................................................................................................................................... 10
Appendix III - SIGAR’s April 2, 2014 Alert Letter and INL’s Response ........................................................................ 14
Appendix IV - Acknowledgements ........................................................................................................................................ 21

PHOTOS

Photo 1 - Buildings 17, 18, and 19 at Baghlan Prison .............................................................................................. 1
Photo 2 - Internal View of Damage to Building 17 ...................................................................................................... 2
Photo 3 - Flooding at Baghlan Prison in April 2012 ................................................................................................. 2
Photo 4 - Building 17 under Demolition Showing Brick Walls with a Small Amount of Reinforcing Steel ............. 4
Photo 5 - Building 17 under Demolition Showing Brick Walls with a Small Amount of Reinforcing Steel ............. 5
Photo 6 - Concrete Column with Voids and Exposed Reinforcing ............................................................................. 5

ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>ACI</td>
<td>American Concrete Institute</td>
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<td>FMT</td>
<td>Facility Maintenance Team</td>
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<td>IBC</td>
<td>International Building Code</td>
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<td>INL</td>
<td>Department of State’s Bureau of International Narcotics and Law Enforcement</td>
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<td>OHG</td>
<td>Omran Holding Group</td>
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Since 2009, the Department of State’s Bureau of International Narcotics and Law Enforcement (INL) has funded the construction or renovation of five regional prisons in Afghanistan. Additionally, INL funds the Afghanistan Corrections System Support Program, which assists the Afghan Ministry of Interior’s General Directorate of Prisons and Detention Centers in developing the capacity to manage its network of prisons. The program provides mentoring, advising, capacity building, and infrastructure support to the General Directorate of Prisons and Detention Centers.

This inspection focuses on the regional prison in Baghlan province. Specifically, we assessed (1) INL management and oversight of construction and (2) whether the facility is being used as intended and maintained.

We conducted our work in Kabul, Afghanistan, from January through May 2014 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 a professional engineer in accordance with the National Society of Professional Engineers’ Code of Ethics for Engineers. We interviewed INL officials and examined program documentation relating to each phase of construction including contract award, design, construction oversight, and project close-out. We were unable to conduct a site visit to the prison due to security conditions; however, we reviewed site visit reports filed by INL and contractor staff between December 11, 2011 and January 22, 2014. Appendix I provides more detail on our scope and methodology.

BACKGROUND

On September 28, 2010, INL awarded a contract to Omran Holding Group (OHG), an Afghan firm, to build a 495-inmate prison in Baghlan province using a design created by Suraya Construction and Production Company (Suraya) under a separate contract. The original contract award to OHG was $8.8 million, but it increased to approximately $11.3 million after a series of contract modifications.\(^1\) OHG completed construction of the Baghlan prison on November 8, 2012, within the expected time, cost, and quality parameters, as determined by responsible INL officials. Following construction, INL handed over the facilities to Afghan correctional authorities on November 11, 2012. The contract required OHG to provide a 1-year warranty following handover to the Afghan government. Subsequently, building settlement occurred, which led to serious structural damage, including wide cracks to buildings 17 (detention section), 18 (male section), and 19 (maximum security housing). The causes of this settlement remain in dispute at this time.

Photo 1 provides an aerial view of the prison with the three most seriously damaged buildings marked. Photo 2 shows an example of damage to the interior of building 17, which was demolished due to safety concerns.

\(^1\) Eight contract modifications were issued over the life of the contract. The largest dollar modifications were 001 and 006. Modification 001 added approximately $788,000 to the contract value for costs associated with adapting all plans to accommodate an alternate building site selected by the Ministry of Interior after contract award. Modification 006 added approximately $1.3 million to the contract, including $171,000 for the design and construction of a new channel for flood mitigation and the remainder for a 6-month supply of diesel fuel.
Buildings 18 and 19 also have collapsing walls and cracked structural beams and columns. Photo 3 shows the flooding conditions in April 2012.

Building damage was first reported to the INL contracting officer’s representative in a letter from OHG, dated August 24, 2013. The letter highlighted building 17 as a particular concern and recommended that it be demolished and rebuilt. In a response letter dated September 4, 2013, INL’s contracting officer expressed concern about conditions at the prison and reminded OHG that corrective action needed to be initiated under the contract’s warranty clause. In addition, on October 2, 2013, INL requested a written plan of action from OHG detailing planned repairs and/or rebuilding to correct the extensive damage documented by a September 7, 2013, INL structural damage report.\(^2\)

OHG responded to INL on October 31, 2013, stating that, while accepting responsibility under the warranty provision for five specific items, including the need to install a stormwater management system, it did not agree that structural repairs fell under the contract’s warranty. OHG stated that the building settlement resulted from unexpected flood conditions at the prison and other factors beyond OHG’s control, such as prisoner abuse of installed plumbing fixtures and poor sewer system maintenance by Afghan authorities. INL’s position is that the primary causes for building settlement were improper soil compaction by OHG prior to construction, OHG’s failure to install the stormwater management system required by the contract, and the installation of improper plumbing materials.

INL and OHG officials were—as of the date of this report—reviewing and discussing a number of remedial actions to address the damage at the facility, but had not yet agreed who would pay for the needed repairs and new construction. The contract requires OHG to provide schedules for any construction and corrections of construction deficiencies. These schedules must be approved by INL before work begins. According to INL officials, they will soon contract with an independent third party to conduct a geotechnical and materials study to document the materials that were used in the construction performed by OHG and the existing soil conditions at the facility. This study will allow INL to determine the underlying causes of building settlement—

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\(^2\) This structural damage report was based on site visits conducted by the INL contracting officer’s representative and engineering staff on August 18, 22, and 28, 2013. INL officials noted that the September 7, 2013, report was intended to serve as a clear record of existing damage before the warranty period expired. As such, the report provides a record of latent damages, which INL maintains OHG must address.
help decide where liability rests—and ensure excessive settlement does not occur again. In its comments on a draft version of this report, INL commented that it awarded a contract for geotechnical and materials testing on May 9, 2014. The performance period for the contract is expected to be 60 days. INL is also putting in place a mechanism to help ensure that on-site monitoring continues, even though visiting the site is difficult due to security issues.³

**INL AND OHG ARE TAKING STEPS TO ADDRESS CONSTRUCTION DEFICIENCIES, EXCEPT FOR MAJOR DEFECT IN UNREINFORCED BRICK WALLS**

In November 2012, INL determined that OHG completed construction of the prison within expected time, budget, and quality parameters. However, information that came to light after the prison was completed indicated that OHG had not fully complied with all contract requirements and terms. Many of the construction deficiencies may also have been the result of fraudulent actions by the project’s original contracting officer’s representative—a former embassy employee—and, possibly, OHG personnel. The embassy employee—an Afghan engineer—was removed from his position in June 2013, amid concerns that he may have colluded with OHG. In particular, INL suspected that this former employee enabled the contractor to substitute inferior products and materials, failed to discover substandard construction, approved questionable invoices, and certified that all contract terms had been met at the time of project turnover to INL, even though construction deficiencies remained. The Afghan engineer resigned in August 2013. SIGAR investigators are currently conducting a preliminary inquiry to determine whether any OHG or embassy officials were complicit in these alleged activities.

The following are examples of construction deficiencies, problems with INL’s oversight, and poor contractor performance at Baghlan:

- None of the geotechnical reports or design studies conducted for the prison took into account that the prison was to be built on a floodplain. The omission of this important information was not addressed until March 2013, at which time a flood mitigation project was added as modification 006 to the contract, at a cost of approximately $171,000. This flood mitigation project includes building perimeter barriers and channels to divert floods away from the prison. OHG’s plans for this project are still being reviewed by INL.

- The contract required that OHG construct a stormwater management system to handle all surface water run-off. This system was never built, but OHG invoiced INL $170,400 for this work and for a security fence that was never built. These invoices were approved by the contracting officer’s representative who is now under investigation. OHG has since agreed to build the system and has already completed the security fence.

- INL’s September 2013 damage report notes that drain pipes in the showers were disconnected from the shower pans due, in part, to OHG using INL-rejected plumbing products, such as flexible hose connectors typically used for temporary repairs as opposed to the higher grade products required by the contract. INL officials noted that OHG installed these products despite INL rejecting two specific requests—dated October 2011 and February 2012—from the company to use lower-grade plumbing products. The use of this temporary and low quality flexible tubing contributed to the discharge of waste water in the soil around buildings 17, 18, and 19. OHG plans to correct this problem by installing INL-approved hose connectors at no cost to the government.

After final inspection and acceptance on November 11, 2012, the contract called for the government to continue to retain an amount equal to 10 percent of the total contract amount for the duration of the one-year

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³ The new oversight mechanism is a draft Indefinite Delivery, Indefinite Quantity contract, which INL plans to use to obtain local engineering, material testing, and site monitoring services for Baghlan Prison under a task-delivery system. INL officials noted that, once the contract is in place, they will be able to exercise appropriate oversight of planned remedial efforts at the site by using Afghan nationals when travel by INL officials is ruled out due to security concerns.
warranty period. Government retainage of 10 percent of the total contract amount is intended, among other things, to guarantee the contractor’s correction of any defects during the warranty period. However, INL officials told us that OHG failed to deduct the required amount from filed invoices and admitted that INL staff initially failed to catch this omission. INL officials noted that they started to hold back the payment of all filed invoices beginning with invoice 18 filed in June 2013. To date, they have set aside $251,746, which is $807,254 less than should have been retained from the costs claimed by the contract during its performance of the contract.

INL Plans to Use Unreinforced Brick Walls When Rebuilding Structures

Although OHG has taken steps to address construction deficiencies and billing inconsistencies and INL’s project oversight has improved,4 a serious construction defect remains unaddressed. On April 2, 2014, SIGAR issued a letter to the Secretary of State and the U.S. Ambassador to Afghanistan, alerting them to problems associated with the use of unreinforced brick walls between the column supports of the structures at Baghlan prison.5 This type of construction does not comply with the International Building Code (IBC), even though both the contract for design of the prison and the contract for construction required IBC compliance. The IBC requires the use of steel reinforced masonry, such as concrete masonry units with rebar.6 American Concrete Institute (ACI) requirements,7 which are referenced by the IBC, do not allow construction of unreinforced walls in a seismic zone. Afghanistan is situated in a geologically active region of the world, where there is a continuous threat of strong earthquakes, and modern seismograph networks show that earthquake activity is widespread throughout much of the eastern part of the country, where the prison is located. According to U.S. Geological Survey data, the prison is located in the second highest earthquake hazard zone in Afghanistan.

However, the drawings submitted by Suraya—the firm contracted to design the facilities—did not show reinforced masonry walls and did not specify the size or type of reinforcing steel to be used.8 INL and OHG staff provided no evidence that these designs were ever questioned, despite their clear nonconformance with the IBC requirements. On the contrary, INL accepted the design drawings, and OHG proceeded to build the facilities without reinforced masonry.

In response to our alert letter, INL provided two photographs purported to show building 17 during demolition. According to INL, these photographs establish that the building had actually been built using reinforced brick. See photos 4 and 5.

Although these photographs show brick walls that include a small amount of reinforcing steel, the construction shown does not, as INL asserts, meet IBC requirements. The ACI Building Code

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4 For example, a new contracting officer’s representative and lead engineer were assigned in 2013.
6 Concrete masonry units (or CMU) are hollow concrete blocks, most typically a nominal 16”x8”x8”. The majority of CMU construction uses steel reinforcing bars (rebar) to tie the block together for a structurally monolithic masonry wall.
7 ACI 530-05 Building Code Requirements for Masonry Structures, section 1.14.2.1.
8 The masonry section of Suraya’s detailed construction specifications stipulate that IBC requirements be met.
Requirements for Masonry Structures, referenced by the IBC and incorporated by reference into

OHG’s contract, provide minimum reinforcement requirements for masonry walls. The remnants of the walls shown in photos 4 and 5 have small diameter plain wire horizontal reinforcing, spaced at approximately 28-inches on-center, and have no vertical steel. These two deficiencies alone indicate that the walls do not meet the requirements for reinforced masonry walls and, in fact, do not even comply with the minimum reinforcing steel needed to be referred to as “unreinforced” masonry walls.9

Alarmingly, the photos INL provided indicate that the reinforced concrete columns were improperly constructed and that the method of demolition of building 17 was unsafe. Specifically, the heavy concrete roof was left in place, while portions of the brick walls that help support the roof were removed. Although the brick walls contribute very little lateral load resistance, removing them entirely and allowing these improperly constructed columns to support the five-inch thick concrete roof provided for in the plans is dangerous. Carrying out demolition in a manner identified in the photos provided could put workers’ safety in jeopardy. The photographs also raise additional concerns regarding the structural integrity of the columns and the risk of catastrophic failure. Photo 6 shows an example of a structurally deficient column. In particular, there is severe aggregate segregation10 throughout the column and a void in the concrete three-and-a-half bricks high that exposes the reinforcing steel, seriously compromising the column’s strength.

Finally, we also question the use of brick walls in structures designed to hold prisoners. Suraya’s drawings did not call for reinforced walls, as were required under the contract. Instead, the drawings provided for walls three

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9 See ACI requirements for Detailed plain (unreinforced) masonry shear walls in ACI 530-05 section 1.14.2.2.2.

10 Concrete consists of sand, gravel, or crushed stone (or aggregates) combined with water and Portland cement. The aggregates make up 60 to 75 percent of the concrete mix and are critical to the strength of the concrete. Segregation of concrete is separation of ingredients of concrete from each other. In good concrete work, all concrete aggregates are evenly coated with the water, sand, and cement paste that forms a homogeneous mass. Dropping concrete from heights over 48-inches and excessively high water content are two common causes of segregation.
bricks deep based on wall dimensions. Mortar strength is typically half that of concrete and if mixed by hand in small batches, as is the case on many Afghan projects, the quality of the mix is highly variable. If the mix for a portion of a wall varied from other portions, the mortar holding the brick in place could more easily be chipped away by hand, potentially facilitating prison escapes.

INL officials told us that, when the structures are rebuilt, they expect OHG to comply with the original design specifications. However, as noted in our April 2, 2014, alert letter, we are concerned that new construction using similar materials and methods could threaten employee and prisoner safety, as well as the security of the facility.

**BAGHLAN PRISON IS BEING USED DESPITE STRUCTURAL DAMAGE, AND MAINTENANCE PROBLEMS REQUIRE ATTENTION**

Baghlan prison, despite extensive structural damage, is being used to house inmates and suffers from overcrowding. Although originally designed for 495 inmates, INL reports that the prison’s current population is 777. In addition, prisoners displaced by the demolished building 17 were reassigned to other housing units at the facility, which exacerbated the overcrowded conditions. INL officials noted that Afghan prison authorities determine how many prisoners to accommodate at a given facility and added that prison overcrowding is a common condition in Afghanistan.

The prison also faces two major maintenance issues, which both INL and OHG officials attribute to poor or non-existent maintenance by the Afghan government. First, both diesel generators, designed to power the entire prison, are non-operational. Second, the prison’s sewer system is reportedly backed up with debris, including clothing, bottles, and mop heads.

- In a December 8, 2013, letter and in additional emails, OHG notified INL that both generators were no longer functioning due to improper maintenance and operation, including a failure to change the filter and oil on the generators, improper start-up and shut-down operations, and an over-reliance on the use of each generator’s emergency mode versus automatic mode. According to INL officials, Afghan prison staff also failed to understand the generator’s requirement to run at 70-80 percent of capacity to avoid permanent engine damage. OHG estimated that the total cost of repairs to both generators would be approximately $17,000. INL officials have not agreed to pay for these repairs because the Afghan government assumed responsibility when it accepted the completed facility. According to INL officials, the prison’s power needs are currently being met using a diesel generator purchased with assistance from the International Red Cross in July 2012.

- In a February 1, 2014, letter, OHG notified INL of sewer system back-up problems and the pooling of wastewater on the leach field. The letter notes that the Afghan prison staff has “miserably failed to implement” approved, periodic operation and maintenance procedures. OHG’s letter includes a copy of a February 2012 operation and maintenance manual for the sewage collection system that INL officials confirmed was provided to Afghan authorities. The manual provides detailed instructions on how the system needed to be maintained in order to ensure its continued effective operation.

11 To operate at maximum efficiency a diesel engine has to have the correct air-to-fuel ratio and be able to sustain its designed operational temperature for a complete burn of fuel. When a diesel engine is operated on light loads, it will not attain its correct operating temperature. When the diesel engine runs below its designed operating temperature for extended periods, unburned fuel is exhausted and collects in the exhaust side of the engine. Over long periods of time, such deposits can scar and erode key engine surfaces and lead to permanent damage.

12 INL officials agreed that Afghan power costs could have been reduced if a connection to the power grid, in addition to the diesel generators, had been part of the original project design. As a general rule, commercially-supplied electricity is cheaper than diesel fuel. A prior director of the General Directorate of Prisons and Detention Center proposed that the Afghan government fund such a connection. According to INL officials, this proposal has moved forward within the Afghan government and has been approved pending funding availability from the Afghan Ministry of Finance.

13 OHG’s letter includes a copy of a February 2012 operation and maintenance manual for the sewage collection system that INL officials confirmed was provided to Afghan authorities. The manual provides detailed instructions on how the system needed to be maintained in order to ensure its continued effective operation.
electrical systems management, and INL officials stated that seven workers were actually trained. From this group, five workers were re-assigned to other prisons by Afghan authorities. INL officials further stated that leaving two staff members at Baghlan was consistent with operation and maintenance staffing for a prison of its size. However, it is unclear why these two trained staff members were not able to prevent the maintenance problems described above.

INL is helping to implement a nationwide prison operation and maintenance program called the Facility Maintenance Team (FMT) training initiative, which is being implemented through Afghanistan’s Corrections System Support Program. The FMT initiative was approved by INL in the spring of 2012, and is designed to enhance the General Directorate of Prisons and Detention Center’s capacity to perform basic facility maintenance at prisons nationwide. Under the initiative, mobile maintenance teams consisting of electricians, plumbers, masons, carpenters, and painters will be placed in seven regions. An FMT in the Northeast region based in Kunduz will provide facility maintenance services for Baghlan prison. The Kunduz FMT completed training in November 2013, and tools and one maintenance vehicle were recently donated by INL for delivery to this FMT. Upon receipt, the team is scheduled to begin performing maintenance functions at various facilities, including Baghlan prison. While the bulk of future funding for these regional FMTs will be provided by the Afghan government, INL provided initial funding of $800,000. INL expects to provide additional funding of $80,000 during 2014 to support this initiative. The overall goal of the FMT and the regional maintenance teams is to assist the Afghans to better manage limited resources devoted to prison maintenance. INL intends the teams to become an integrated part of the Afghan government’s facility maintenance plans.

CONCLUSION

Although INL has spent $11.3 million to build the Baghlan prison facility, multiple problems remain. One building at the facility has been demolished and two others have collapsing walls and cracked structural beams and columns and will likely need to be torn down and rebuilt. Some of the causes for the structural problems— the contractor’s failure to correctly compact the soil, as INL claims, or unanticipated flooding, as the contractor claims—are currently in dispute. Negotiations over who will pay for remedial actions are ongoing, with millions more dollars at stake. What is not in dispute is that OHG is responsible for certain construction deficiencies, including the failure to construct the required security fence. INL has also acknowledged that the original contracting officer’s representative for this project conducted poor oversight and management. This combination of deficiencies in construction and possibly fraudulent activity led to uncompleted work, overcharges, and part of the prison being unusable. INL’s lack of oversight also contributed to the failure to retain $807,254 from OHG invoices as a fund to protect INL in the event of performance problems or contract disputes. To its credit, INL has taken action to address many of these problems and is now pursuing corrective measures. INL is also working with the Afghan government to develop a nationwide operation and maintenance system for its prisons to correct specific concerns and avoid future problems, such as the maintenance problems we found at Baghlan.

However, we remain concerned about the use of unreinforced masonry at Baghlan prison. Rebuilding structures without steel-reinforced masonry walls between adequately constructed concrete columns can lead to collapse in areas prone to earthquakes, such as the area in which Baghlan is located. Although INL initially missed this significant design and construction error, it should now ensure that the contractor follows the IBC when rebuilding structures. Furthermore, we believe the risk of prisoner escape is increased if this construction error is repeated because prisoners could more easily break down unreinforced walls.
RECOMMENDATIONS

To ensure the safety and security of the inmates and workers at Baghlan prison and to ensure the U.S. government receives the highest value for its contract dollars, SIGAR recommends that the Secretary of State direct INL to:

1. Recoup $807,254 in payments to OHG that should have been retained by INL in order to protect its interests in the event of a contract dispute. If this is not done within 90 days, we will refer the matter to SIGAR’S Investigations Directorate.

2. Require that any rebuilding at Baghlan prison comply with IBC and ACI requirements stipulated in the contract regarding the use of steel-reinforced masonry walls and report back to SIGAR within 90 days that these requirements have been met.

3. Determine the structural adequacy of the other buildings constructed under the contract and take action to repair or replace those found to be structurally inadequate, and report the plans for corrective actions to SIGAR within 90 days.

4. Require the contractor to provide and follow an INL-approved demolition safety plan and report back to SIGAR within 90 days that a safety plan has been developed.

AGENCY COMMENTS

INL provided written comments on a draft of this inspection report that are reproduced in appendix II. INL commented that it continues to actively address the identified deficiencies at Baghlan prison including instructing its contractor to submit corrective action and safety plans to INL for approval. INL also commented that it awarded a contract to test whether or not appropriate soil compaction was performed by the contractor and whether the contractor used construction materials with appropriate properties. In addition, INL commented that it is putting in place a construction monitoring and reporting contract to track daily renovation and reconstruction activities at Baghlan prison to supplement oversight conducted by INL personnel.

INL generally agreed with our four recommendations and detailed the steps it is taking to implement them. For example, with regard to our first recommendation, INL commented that an amount equal to ten percent of the contract amount for the duration of the one-year warranty should have been withheld. According to INL, the State Department intends to pursue all remedies available to it to protect the U.S. government’s interests.

INL also agreed with our second recommendation, but commented that it did in fact adhere to the requirements for construction in an earthquake zone in its initial design and planning. Nevertheless, INL acknowledges that its contractor did not follow the contract specifications. INL stated that it will continue to hold the contractor accountable to rectify deficient construction and will ensure that reinforced masonry compliant with IBC standards is used in any future reconstruction.

With regard to our third recommendation, INL commented that it awarded a contract on May 9, 2014, to conduct soil and construction materials testing at Baghlan prison, which will enable the State Department to identify any possible further issues at the site as well as further actions that may be required to address them.

Finally, INL agreed with our fourth recommendation and commented that it has demanded that its contractor submit a corrective action plan for demolition activities and an associated demolition safety plan for INL approval.

In our view, INL’s actions are generally responsive to our recommendations and we will monitor its implementation of these actions as part of our regular recommendation follow-up activities.

INL also provided technical comments that we incorporated into the report, as appropriate.
APPENDIX I - SCOPE AND METHODOLOGY

To assess (1) the Department of State’s Bureau of International Narcotics and Law Enforcement’s (INL) management and oversight of construction of the Baghlan regional prison, and (2) whether the facility was being used as intended and maintained, we

- reviewed contract documents, design submittals, site visit reports, and other relevant project documentation;
- conducted an engineering assessment of the facility drawings, the construction methods used, and the seismic zone and relevant code requirements for the location of the prison; and
- interviewed cognizant U.S. government officials concerning the facility’s construction and maintenance.

SIGAR conducted its work in Kabul, Afghanistan from January to May 2014. We were unable to conduct a site visit to the regional prison in Baghlan Province because of security conditions, but were able to review an extensive collection of prior site visits conducted by INL staff and contractors. Our 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 a professional engineer in accordance with the National Society of Professional Engineers’ *Code of Ethics for Engineers*. We did not rely on computer-processed data in conducting this inspection. However, we considered the impact of compliance with laws and fraud risk.

We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our inspection objectives. SIGAR conducted this inspection under the authority of Public Law No. 110-181, as amended and the Inspector General Act of 1978, as amended.
Dear Mr. Welsh:

The Bureau of International Narcotics and Law Enforcement Affairs (INL) welcomes the opportunity to comment on this draft Special Inspector General for Afghanistan Reconstruction (SIGAR) report entitled, “Baghlan Prison: Severe Damage to $11.3 Million Facility Requires Extensive Remedial Action” (dated May 2014). INL respects SIGAR’s role in safeguarding U.S. taxpayer investment, and we share your goals of implementing programs free from waste, fraud, and abuse.

This letter, which includes detailed responses to the recommendations in the SIGAR draft report, provides clarifications on INL’s current operating practices and planned actions concerning Baghlan provincial prison. In Appendix I, we provide the Department of State’s April 3, 2014 correspondence responding to SIGAR’s alert letter about Baghlan prison construction. We ask that SIGAR reflect that additional information in its final report.

INL acknowledges that subsequent to the transfer of the Baghlan prison facility to the Government of the Islamic Republic of Afghanistan on November 11, 2012, soil subsidence occurred at the site due to causes yet to be determined. On July 22, 2013, INL identified damages to the facility caused by soil subsidence and immediately notified the contracting officer. INL conducted site visits on August 18, 22, and 28, 2013 and released a comprehensive assessment of the structural damage on September 7, 2013. On August 24, 2013, INL informed the Department of State’s Office of the Inspector General (OIG) of the structural deficiencies at the site and remained in communication with the OIG to coordinate remedial action. On October 2, 2013, at INL’s request, the contracting officer submitted a cure notice to the contractor requiring repairs and rebuilding to correct the deficiencies identified in INL’s September 7 assessment.

Mr. Mike Welsh
Deputy Assistant Inspector General for Audits and Inspections
Special Inspector General for Afghanistan Reconstruction
1550 Crystal Drive, Suite 900
Arlington, VA 22202
INL continues to actively address the remediation of identified deficiencies, including instructing the construction contractor, Omran Holding Group (OHG), to submit corrective action and safety plans to INL for approval and subsequent action by OHG in accordance with the approved plans. INL continues to engage OHG to follow up and closely track the progress of INL-approved corrective actions that OHG has taken to address the deficiencies.

The Department has awarded a contract for geotechnical investigative soil and construction materials testing for the entire Baghlan prison site. An independent contractor will conduct this testing to identify whether or not appropriate soil composition was performed by OHG and whether OHG used the construction materials with the appropriate properties.

Further, INL has developed a multi-layered oversight approach and is putting in place a construction monitoring and reporting contract to track daily renovation/reconstruction activities at Baghlan prison and supplement the oversight conducted by INL personnel.

Responses to Recommendations

**Recommendation 1**: Recoup the $850,000 in invoice charges paid to OHG that should have been retained in order to protect INL in the event of a contract dispute.

**INL Response (May 2014)**: The Department generally agrees with this recommendation, because an amount equal to ten percent of the contract amount for the duration of the one-year warranty period should have been withheld. The legal issues involving responsibility for the damages that have arisen and the contractor's obligation to provide a remedy and/or reimburse the Department are the subjects of pending negotiation and possible litigation. The Department intends to pursue all remedies available to it to protect the U.S. government's interests.

**Recommendation 2**: Require that any rebuilding at Baghlan Prison comply with the International Building Code and American Concrete Institute requirements regarding the use of steel-reinforced masonry walls.

**INL Response (May 2014)**: The Department agrees with SIGAR's recommendation and did in fact adhere to the requirements for construction in an earthquake zone in its initial design and planning. The design for Baghlan prison specifically provided that: "In addition to design requirements of [International
Code Council International Building Code] ICC IBC, the Contractor shall provide additional seismic reinforcement.” While the photographs INL provided in SIGAR demonstrate that OIH constructed reinforced brick walls, OIH did not follow the contract specifications, design requirements, or proper construction techniques. INL will continue to hold OIH accountable to rectify deficient construction identified by INL in July 2013 and subsequently recognized by SIGAR. It is incorrect that INL plans to allow unreinforced brick walls in any reconstruction. INL is committed to maintaining safe and secure facilities and will ensure that reinforced masonry compliant with IBC standards is used in any future reconstruction.

**Recommendation 3:** Determine the structural adequacy of the other buildings constructed under the contract and take action to repair or replace those found structurally inadequate.

**INL Response (May 2014):** The Department agrees with SIGAR’s recommendation and initiated steps prior to the SIGAR inspection to award a contract for an independent company to conduct soil and construction materials testing at the Baghlan provincial prison compound. The Department awarded the contract on May 9, 2014. This testing will enable the Department to identify any possible further issues at the site as well as further actions that may be required to address them.

**Recommendation 4:** Require the contractor to follow an INL-approved demolition safety plan.

**INL Response (May 2014):** The Department agrees with SIGAR’s recommendation and has already demanded that OIH submit, for INL approval, a corrective action plan for demolition activities and an associated demolition safety plan which has yet to be received. INL and OIH agreed on February 4, 2014 that OIH will provide corrective action plans for INL approval before starting any work on the site. INL has repeatedly demanded that OIH submit the required plans, as documented in correspondence dated March 27, April 14, and May 1. INL is willing to pursue all rights and remedies to enforce this requirement upon the contractor. On February 4, INL directed the contractor to cease all remediation activities not covered by INL-approved corrective action and safety plans.
We appreciate SIGAR's thorough examination of U.S. foreign assistance programming in Afghanistan's corrections sector. INL looks forward to continuing to work with SIGAR and other relevant authorities on these issues.

Sincerely,

James A. Walsh  
Executive Director
April 2, 2014

The Honorable John F. Kerry
Secretary of State

The Honorable James B. Cunningham
U.S. Ambassador to Afghanistan

I am writing to inform you of design and construction defects at a prison in Baghlan province built by a contractor hired by the Department of State, Bureau of International Narcotics and Law Enforcement (INL). In December 2013, we announced an inspection of the Baghlan prison. While we have been unable to conduct a physical inspection of the prison because of security concerns, our review of the contract files found serious structural damage. The structural damage resulted in at least one of the housing units being demolished. The designs indicate that this unit and other buildings at the site were built using unreinforced brick walls between concrete columns. Subsequent information provided by INL shows the facilities were built using some reinforcing steel. Although INL officials told us that any rebuilt structure(s) will use the same construction materials and methods that were previously used, we believe that INL should, for security and safety reasons, use steel reinforced masonry, such as concrete masonry units with rebar, instead.

The security concerns we identified pertain to the relative ease with which the strength of unreinforced brick walls can be compromised by removing the mortar between the bricks. Employees and prisoner safety is also jeopardized because the Baghlan prison is built in an area at risk of significant seismic events. As a result, structures not built to withstand such events could put life and property at significant risk. Our review of the entire Baghlan prison construction project is ongoing, but the serious nature of this defect warrants your immediate attention.

On September 26, 2010, the State Department, Regional Procurement Support Office awarded a contract on behalf of INL to Omran Holding Group (OHG), an Afghan firm, to build a prison that could house 496 inmates. The contract was valued at about $8.9 million, but eventually rose to approximately $11.3 million after a series of contract modifications. INL required OHG to build the prison based on drawings completed by Suraya Construction and Production Company (Suraya), another Afghan company, under a separate contract. Suraya’s design for the Baghlan prison called for the use of unreinforced brick walls, even though the International Building Code (which was incorporated by reference into OHG’s contract), requires that reinforced masonry be used in structures built in areas at risk of significant seismic events.

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1 Concrete masonry units (CMU) are hollow concrete blocks, made typically a nominal 16"x8"x8". The majority of CMU construction uses steel reinforcing bars (rebar) to tie the block together for a structurally monolithic masonry wall.
3 The International Building Code is developed by the International Code Council to provide modern, up-to-date building codes addressing the design and installation of building systems. The code establishes minimum standards for building systems, using prescriptive and performance-based provisions. According to the International Code Council, the International Building Code is founded on principles intended to establish provisions consistent with the scope of a building code that adequately protects public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of...
The contract files show that after the prison was transferred to the Afghan government on November 11, 2012, soil settlement occurred, which led to serious structural damage including wide cracks to buildings 17 (detention section), 18 (male section), and 19 (maximum security housing). Photos 1 and 2—obtained from INL—show an aerial view of the prison and the damage to building 17, which was subsequently demolished due to safety concerns.

**Photo 1 - Buildings 17, 18, and 19 (May 2012)**

![Aerial view of buildings 17, 18, and 19]


**Photo 2 - Interior View of Damage to Building 17**

![Interior view of damage to building 17]


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SIGAR 14-62-IP/Baghlan Prison Construction
Because OHG’s contract required that the firm provide a 1-year warranty that would allow INL to request additional work necessary to correct any defects to equipment, material, design, or workmanship following the transfer of the facility to the Afghan government, INL asked OHG to prepare corrective action plans addressing the buildings’ structural damage. Both sides continue to discuss the question of liability, costs, and the extent to which repairs will be covered by the warranty. Additionally, INL officials stated they will soon contract with an independent third party to conduct a study to document the extent of damage at the facility and the underlying causes for building settlement.

Regardless of whether OHG is ultimately responsible for repairing or rebuilding the structures under the contract’s warranty, INL’s current plan is that any rebuilt structures will use the same construction materials and methods that were previously used to construct the facility.

During the course of our fieldwork, we met with INL officials on three occasions in February 2014 and held an additional meeting to discuss the findings of our inspection on March 12, 2014. During these meetings, we told INL about our concerns, particularly that unreinforced brick walls between concrete columns were used in construction. At no point during any of these meetings did INL representatives dispute our assertion that the contractor inappropriately used unreinforced brick walls to construct the facilities.

Nevertheless, on March 31, 2014, after we sent a draft of this letter to the State Department, U.S. Embassy Kabul, and INL, among others, we received an e-mail from INL providing two photos. According to INL’s e-mail, these photos show that, contrary to the findings in our draft letter, the housing unit being demolished had actually been built using reinforced brick. See photos 3 and 4 below.

**Photo 3 - Building under Demolition**

![Building under Demolition](image)

Source: INL, January 22, 2014.
Photo 4 - Building under Demolition

Although the two photos provided by INL show that some reinforcing steel had been used during construction, the photos do not show that reinforced masonry walls between concrete columns were used in compliance with the International Building Code. The American Concrete Institute (ACI) Building Code Requirements for Masonry Structures (ACI 530-05), referenced by the International Building Code and incorporated by reference into OHS’s contract, provide minimum reinforcement specifications for masonry walls. The remnants of the walls shown in photos 3 and 4 have small diameter plain wire horizontal reinforcing, spaced at approximately 28-inches on-center, and have no vertical steel. These two deficiencies alone indicate that these walls do not comply with ACI requirements for Detailed plain (unreinforced) masonry shear walls in ACI 530-05 section 11.4.2.2.2.

More alarmingly, the photos INL provided indicate that the reinforced concrete columns were improperly constructed and that the method of demolition was unsafe. Specifically, the heavy concrete roof was left in place, while portions of the brick walls that helped support the roof were removed. INL also provided additional photographs on April 1, 2014. Those photographs raise additional concerns regarding the structural integrity of the columns and the risk of catastrophic failure. Photo 5 shows an example of a structurally deficient column. In particular, there is severe aggregate segregation throughout the column and a void in the concrete three and a half bricks high that exposes the reinforcing steel, seriously compromising the column’s strength.

*Concrete consists of sand, gravel, or crushed stone (or aggregates) combined with water and Portland cement. The aggregates make up 60 to 75 percent of the concrete mix and are critical to the strength of the concrete. Segregation of concrete is separation of ingredients of concrete from each other. In good concrete work, all concrete aggregates are evenly coated with the water, sand, and cement paste that forms a homogeneous mass. Dropping concrete from heights over 48-inches and excessively high water content are two common causes of segregation.

SIGAR 14-62-IP/Baghlan Prison Construction
We are concerned that additional structural damage as a result of this type of demolition and new construction using similar materials and methods could threaten employee and prisoner safety and the security of the facility. Therefore, we suggest that INL reconsider its plan and direct that the structures be rebuilt using reinforced masonry between concrete columns, as called for in the International Building Code.

Should you have any questions or need additional information, please contact Elizabeth Field, Assistant Inspector General for Audits and Inspections, at ..., or Ryan Coles, Principal Deputy Assistant Inspector General for Audits and Inspections, at .... Thank you in advance for your attention to this matter.

John F. Sopko
Special Inspector General for Afghanistan Reconstruction
Mr. John F. Sopko  
Special Inspector General for Afghanistan Reconstruction (SIGAR)  
2530 Crystal Drive  
Arlington, Virginia 22202

Re: SIGAR Inspection of Baghlan Prison Construction Project

Dear Mr. Sopko:

This is in response to your letter concerning the U.S. Department of State Bureau of International Narcotics and Law Enforcement’s (INL) Baghlan prison construction project. The Department of State values the role played by the Special Inspector General for Afghanistan Reconstruction (SIGAR) in safeguarding U.S. taxpayer investment, and we share your goals of implementing programs free from waste, fraud, and abuse.

The Department has carefully reviewed your alert letter of April 2, 2014 and the construction concerns that it discussed. We acknowledge that subsequent to the transfer of the prison facility to the government of Afghanistan, soil subsidence occurred at the site due to undetermined causes. On July 22, 2013, INL identified damages to the facility caused by soil subsidence and immediately notified the contracting officer. INL conducted site visits on August 18, 22, and 28, 2013 and released a comprehensive assessment of the structural damage on September 7, 2013. On August 24, 2013, INL informed the Department of State’s Office of the Inspector General (OIG) of the structural deficiencies at the site and remained in communication with the OIG to coordinate remedial action. On October 2, at INL’s request, the contracting officer submitted a cure notice to the contractor requiring repairs and rebuilding to correct the deficiencies identified in INL’s September 7 assessment.

Your alert letter states that the design specifications developed by Suraya Construction and Production Company (Suraya) under a separate contract called for the use of unreinforced bricks walls. In fact, section 1.4.3 of the Baghlan prison specifications document created by Suraya states: “In addition to design requirements of [International Code Council International Building Code] ICC...
IBC, the Contractor shall provide additional seismic reinforcement.” INL will continue to hold the contractor accountable to rectify deficient construction identified by INL in July 2013 and subsequently recognized by SIGAR. INL is committed to maintaining secure and safe facilities and will continue to comply with IBC standards in any future reconstruction contracts in Afghanistan.

The Department of State values independent oversight, including from SIGAR, and is working closely with the oversight community to protect taxpayer resources as well as enhance and improve the return on investment. INL has developed a multi-layered approach to oversight in Afghanistan and is putting in place a construction monitoring and reporting contract and plan to track daily construction activities at Baghlan prison and other sites, supplementing the current oversight conducted by INL personnel.

We stand ready to answer any questions or supply documents that would help SIGAR complete a more precise review of the Baghlan construction project. As always, members of the Department remain ready to meet at SIGAR’s convenience to clarify any persisting questions.

Sincerely,

[Signature]

James DeHart
Director
Bureau of International Narcotics and Law Enforcement
APPENDIX IV - ACKNOWLEDGEMENTS

Scott Harmon, Senior Inspections Manager
Brian Flynn, Senior Audit Manager
Michael ten Kate, Inspector-in-Charge
Ron Riach, P.E., Engineer
This inspection report was conducted under project code SIGAR-I-012.
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;
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- advance U.S. interests in reconstructing Afghanistan.

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