



INSPECTOR GENERAL

SEPTEMBER 25, 2020

AUDIT OF SENATE UNDERGROUND GARAGE RENOVATIONS AND LANDSCAPE RESTORATION PROJECT'S CONTRACT MODIFICATIONS

Report No. OIG-AUD-2020-06 **Redacted**

MISSION

The OIG promotes efficiency and effectiveness to deter and prevent fraud, waste and mismanagement in AOC operations and programs. Through value added, transparent and independent audits, evaluations and investigations, we strive to positively affect the AOC and benefit the taxpayer while keeping the AOC and Congress fully informed.

VISION

The OIG is a high-performing team, promoting positive change and striving for continuous improvement in AOC management and operations. We foster an environment that inspires AOC workforce trust and confidence in our work.



Results in Brief

Audit of Senate Underground Garage Renovations and Landscape Restoration Project's Contract Modifications

September 25, 2020

Objective

To assess the effectiveness of contract modifications to the Architect of the Capitol's (AOC's) Contract No. AOC16C3008-T002 for the Senate Underground Garage Renovations and Landscape Restoration (SUG). Specifically, we assessed whether contract modifications and Potential Change Orders (PCOs) to the contract were: 1) reasonable, authorized, supported and complied with contract requirements; and 2) effectively awarded and administered. Our review included contract modifications and PCOs executed from October 1, 2017 to September 30, 2019.

Construction and contract audits are included in the AOC Office of Inspector General (OIG) audit and evaluation plan.

Findings

We determined that overall, the contract modification process for the SUG project was effective. The contract modifications and PCOs were generally 1) reasonable, authorized, supported and complied with contract requirements; and 2) effectively awarded and administered by the SUG project team. Our assessment included selecting a sample of modifications and PCOs and reviewing the sufficiency of the supporting documentation, as well as, the PCOs' reasonableness and adherence to contractual requirements, policies and procedures. While we determined that the SUG project team properly issued the contract modifications and PCOs, we found their review and documentation of the PCO proposals we reviewed needed some improvements.

Our review determined that the PCO proposals were generally supported by required documentation and negotiation correspondence up to final approval of the PCO; however, we found management's final decisions on the PCO proposal costs were not fully documented and some unallowable costs and markups were approved. Specifically, the SUG project team did not thoroughly

Findings (cont'd)

review and/or document the re-categorization of costs, markups, and changes allowed by the SUG project team, and there were a few approved PCO proposals that included a total of \$9,344 of unallowable costs and \$39,768 of unallowable markups.

Recommendations

We made four recommendations to address the identified areas of improvement. Specifically, we recommend:

1. The SUG project contract file include all the documentation to support the final decisions and/or approvals for potential change orders, and all the support documentation is properly managed and maintained to be readily available for examination.
2. To the extent legally and administratively possible, we recommend that the SUG project team recover the \$9,344 of unallowable costs and the \$39,768 of unallowable markups identified in our review.
3. The Acquisition and Material Management Division clarify language in the AOC52.243-1 Changes – Supplement subpart (c) Allowable Mark-ups, dated June 2014, to provide better guidance on how the contractor and subcontractor should calculate the overhead and profit markups.
4. The SUG project team strengthen the PCO proposal review process to ensure proposals properly categorize costs and unallowable costs and markups are not included in the approved PCO amounts.

Management Comments

The AOC was provided an opportunity to comment in response to this report.

The AOC provided comments on September 22, 2020, see Appendix E. Overall, AOC management agreed with the conclusion that while we determined that the SUG project



Results in Brief

Audit of Senate Underground Garage Renovations and Landscape Restoration Project's Contract Modifications

Management Comments (cont'd)

team properly issued the contract modifications and PCOs, we found their review and documentation of the PCO proposals we reviewed needed some improvements. AOC management concurred with the AOC OIG's four recommendations.

Please see the Recommendations Table on the following page.

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Architect of the Capitol; Chief, Acquisition and Material Management Division; and Director, Planning and Project Management	NONE	1, 2, 3 and 4	NONE

The following categories are used to describe agency management's comments to individual recommendations:

- **Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** – The OIG verified that the agreed upon corrective actions were implemented.



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UNITED STATES GOVERNMENT

MEMORANDUM

DATE: September 25, 2020

TO: J. Brett Blanton
Architect of the Capitol

FROM: Christopher P. Failla, CIG 
Inspector General

SUBJECT: Audit of Senate Underground Garage Renovations and
Landscape Restoration (SUG) Project's Contract
Modifications (Report No. OIG-AUD-2020-06)

The AOC OIG is providing this final audit report on the SUG project's contract modifications (OIG-AUD-2020-06).

AOC management has agreed with the report conclusion that overall, the contract modification process for the SUG project was effective. AOC management concurred with the four recommendations in this report.

In our review of AOC Management Comments, we determined that the proposed corrective actions do meet the intent of our recommendations. The next step in the audit resolution process is for AOC management to issue a Notice of Final Action that outlines the actions taken to implement the agreed upon recommendations. This notice is due one year from the date of report finalization, September 25, 2021.

We appreciate the courtesies extended to the staff during the audit. Please direct questions to Erica Wardley, Assistant Inspector General for Audits at 202.593.0081 or erica.wardley@aoc.gov.

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Introduction

Objective

This report presents the results of our audit of modifications to the AOC's Contract No. AOC16C3008-T002 for the SUG. The objective of the audit was to assess the effectiveness of contract modifications. Specifically, we assessed whether the contract modifications and PCO to the contract were: 1) reasonable, authorized, supported and complied with contract requirements; and 2) effectively awarded and administered. Our review included contract modifications and PCOs executed from October 1, 2017 to September 30, 2019.

We conducted this performance audit in Washington, D.C. from October 2019 through July 2020, in accordance with Generally Accepted Government Auditing Standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

See Appendix A for a discussion of the scope and methodology, review of internal controls, use of computer-processed data and prior audit coverage related to the objective.

Background

The AOC is undertaking a multi-year project to renovate the SUG and Senate Park because the garage, fountains, reflecting pool and associated systems have exceeded their life expectancy and are in need of renovation and restoration. Continued accumulation of damage increases the long-term effects on the building, including loss of historical fabric and significant increases in restoration and repair costs. The project seeks to prevent further infiltration of moisture-causing damage and erosion, as well as preserve the historic importance of the facility and park. The project includes:

- Interior rehabilitation of the garage
- Rehabilitation of the central fountain, reflecting pool, planters and surrounding pavement area

- Restoration of the exterior stonework and plaza walkway
- Excavation for major concrete and waterproofing repairs to the 20' underground garage south wall
- Waterproofing repairs of the fountains and upper plaza (directly over the garage) and the pedestrian tunnel under Delaware Avenue.

The SUG and a large portion of Senate Park will remain inaccessible throughout the project, which is expected to be completed by January 19, 2021.

An acquisition plan developed in October 2016 determined utilizing an existing Indefinite Delivery/Indefinite Quantity (IDIQ) Multi-Award Construction Contract (MACC) for various construction projects would be the best option. The MACC contractors are screened to ensure they meet the qualifications needed for a project. An IDIQ vehicle reduces the AOC labor hours required to find a successful awardee.

The MACC contractors provide their Architectural Engineer design firm's qualifications to ensure that the designers are adequate. If the AOC performed a full and open acquisition, it would require a two-step request for proposal (RFP) process, which would add additional time and requirements to the AOC staff and the design builder. Further, with full and open competition, the AOC incorporates additional risk into the schedule and cost because the eventual design builder is not a known entity to the AOC. Further, the AOC exposes itself to the possibility of a bid protest. The project requires highly specialized construction and repair work. Using the MACC contract, the AOC is already assured that potential bidders demonstrate exceptional technical capability to perform the necessary tasks.

Modification and PCO Process

There are two types of contract modifications: unilateral and bilateral. A unilateral modification is a contract modification that is signed by the contracting officer (CO) only. Unilateral modifications are used to make administrative changes, issue change orders under the changes clause, make changes authorized by other contract clauses (options) and issue termination notices. Bilateral modifications (supplemental agreements) are contract changes requiring mutual consent by both the CO and the contractor.

The SUG Project Management Plan (PMP) established a Change Management Plan (CMP) that documented how the SUG project team would identify, evaluate and institute changes for the SUG project. The SUG project team based these procedures

on the AOC's entity-wide change management instructions, as documented in the AOC Contracting Manual, Order 34-1, revised September 29, 2017, and on provisions of the base contract and task order.

The SUG modification and PCO starts by identifying a needed change to the contract. It can be identified by AOC contract representatives (solicited change) or by the general contractor (unsolicited change). During bi-weekly internal PCO meetings, the SUG project team determines whether the PCO is a legitimate request that will move forward through the modification and PCO process. Meeting attendees include the Contracting Officer's Technical Representative (COTR)/Senior Project Manager, Project Engineer, Senior Construction Manager (CM) and Senate Project Coordinator.

If the PCO is determined to be a legitimate need/request; then an Independent Government Cost Estimate (IGCE) is developed by the SUG project team that will be used as a basis to determine whether the contractor's proposed cost is fair and reasonable. The AOC can also use an offsite cost estimator who assists with IGCEs for large complex changes. Once the IGCE is complete, the Project Manager (PM) verifies if the funds are available for the PCO.

The CO prepares and sends the RFP to the contractor requesting a proposal. The contractor's proposal must address all requirements outlined in the RFP, and respond to the technical evaluation and price factors. Contractor proposals for changed requirements to the contract must include a brief description of the change, a breakdown of costs and a time impact (critical path) analysis. If the contractor believes that changed requirements affect the contract period of performance, and thereby a scope change, an appropriate substantiation must be submitted. Requests for an adjustment of contract time shall include a narrative description of the time impact created by the changed requirements supported by a Critical Path Method analysis of the schedule impact.

Upon receipt of the contractor's proposal, the SUG project team drafts the Pre-Negotiation Memorandum (PNM). The PNM documents the AOC's objective for the negotiation and the dates/outcomes of all discussions to get to a Final Price settlement. The negotiation process with the contractor is also documented through written correspondence that is kept in the contract file. The CO compares the proposal to the contract statement of work to ensure that there are no unallowable costs or charges for work/materials that are already accounted for in the base contract. The CO will provide the Government position to the contractor, which can include a

counter-offer if the proposed price does not seem reasonable or accurate. The CO can also request that costs within a proposal be removed. The PNM documents the dates and the discussions that occurred to get to the mutually agreed upon work and negotiated price. Once all parties in the negotiation process settle on a final price, it is documented in the PNM.

Once the PNM is finalized, the PCO is prepared and incorporated into a modification for final approval. The approval process begins with completing the Change Board Approval form, which summarizes the PCO included within the modification and the final negotiated amounts and the appropriate officials needed for approval. The Change Board Approval form includes the following individuals for approval based on the total proposed costs:

Branch Chief (Project Management Branch for Design and Construction Management Branch for Construction) - Approval Threshold: All Modifications up to \$50,000

Superintendent Project Coordinator - Approval Threshold: All Modifications up to \$50,000

Jurisdiction Assistant or Deputy Superintendent - Approval Threshold: All Modifications between \$50,000 and \$250,000

Director, Project Management Division - Approval Threshold: All Modifications between \$50,000 and \$250,000

Director, Planning and Project Management Division - Approval Threshold: All Modifications over \$250,000 or any changes that result in time extension

Jurisdiction Superintendent - Approval Threshold: All Modifications over \$250,000 or any changes that result in time extension

The SUG project team prepares a binder with all of the backup for the modification to include: the requisition, PCO Notification Form, Change Board Form, IGCEs, PNM, Summary of Contingency, RFPs and proposals, which becomes part of the contract file. The CO arranges the information into folders for their own back-up (a folder is prepared for each modification that includes all pertinent supporting documentation for each PCO). The CO prepares, issues and executes the modification, which incorporates the PCO into the contract.

As of October 1, 2019, the AOC had executed approximately eight modifications that incorporated 46 PCOs amounting to \$13,153,189 into the contract.

Internal Controls

We reviewed internal controls to obtain an understanding of the AOC's process for reviewing and approving contract modifications and PCOs. We obtained our understanding by reviewing AOC policies and contract specifications and interviewing SUG project team members from the AOC to determine if controls were properly implemented and working as designed, individually or in combination with other controls. We determined that the controls over the AOC's contract modification and PCOs review and approval process were adequate; however we identified areas for improvements to ensure that management's final decisions are fully documented and further reduce the SUG project's exposure to unallowable costs and markups.

Criteria

We used the below criteria to assess whether the contract modifications and PCOs to the contract were: 1) reasonable, authorized, supported and in compliance with contract requirements; and 2) effectively awarded and administered.

AOC Order 34-1, Contracting Manual, dated September 29, 2017, incorporates current legislation, federal regulatory requirements, and AOC policies, orders and best practices. It prescribes uniform policies for the acquisition of supplies, services, construction and related services; and guides personnel in applying these policies.

IDIQ MACC, awarded March 9, 2016, used to accomplish critical Construction, Repair, Alterations and Renovations Services in support of the Capitol complex facilities management. The AOC currently has six IDIQ MACC firms, which are used by all jurisdictions for these efforts.

Task Order No. AOC16C3008-T002 for Senate Underground Garage Renovations and Landscape Restoration, dated March 23, 2017, documents how to renovate the SUG and Senate Park garage, fountains, reflecting pool and associated systems. The project will prevent infiltration of moisture-causing damage and erosion, as well as preserve the historic importance of the facility and park.

The SUG PMP documents how the team identifies, evaluates, and institutes changes on the project. The PMP outline the roles and responsibilities for the plan, study,

design and construction phases. The plan is a living document and includes risk identification, project charter and project controls. The PMP is an effective tool for communicating information about the project to the project team and providing the team a reference document for use during project execution and during key transition meetings between phases. The AOC based these procedures on the AOC's entity-wide change management instructions, as documented in the AOC Contracting Manual and provisions of the base contracts.

The following are excerpts that are relative to the findings:

Government Accountability Office (GAO) Standards for Internal Control in the Federal Government (Green Book)

Appropriate documentation of transactions and internal control - Management clearly documents internal control, all transactions and other significant events in a manner that allows the documentation to be readily available for examination...

Documentation and records are properly managed and maintained.

AOC52.243-1 Changes - Supplement (June 2014)

(c) Allowable Mark-ups.

(1) The overhead and profit mark-up allowed to the Contractor for work performed solely by the Contractor with its forces shall be a reasonable amount not to exceed 10 percent overhead, and 10 percent profit, based upon the Contractor's costs of labor, materials, and equipment.

(2) The overhead and profit mark-up allowed to a Subcontractor for work performed solely with its own forces shall be a reasonable amount not to exceed 10 percent for the Subcontractor's overhead and 10 percent for the Subcontractor's profit, based upon the Subcontractor's costs of labor, materials and equipment.

(3) For work performed by a subcontractor solely with its own forces, the Contractor is entitled to a reasonable mark-up for combined overhead and profit, not to exceed 10 percent of the cost of the Subcontractor's materials, equipment and labor.

(4) No additional fees, overhead, or profit in any amount will be allowed for subcontractors below first tier.

(d) Examples of allowed overhead costs. Allowed overhead is deemed to include, but not limited to, the following:

(1) Field Overhead Items...

(iv) Contractor's and subcontractor's superintendence-when required by the changed requirements;

(v) Small construction equipment such as drills and nail guns, small tools (under one-hundred dollars (\$100) each); and consumable materials such as rags, rope and cleaning compounds...

(ix) Job site safety aids...

(xi) Field office automobiles and trucks used for transportation and routine duties

Audit Results

We determined that overall the contract modification process for the SUG project was effective. The contract modifications and PCOs were generally 1) reasonable, authorized, supported and complied with contract requirements; and 2) effectively awarded and administered by the SUG project team. However, we determined that the SUG project team's review of PCO proposal costs could be improved. Our assessment included selecting a sample of modifications and PCOs and reviewing the sufficiency of the supporting documentation, as well as, the PCOs' reasonableness and adherence to contractual requirements, policies and procedures.

From October 1, 2017, through September 30, 2019, the AOC approved approximately 46 PCOs totaling \$13.1 million that were executed within eight contract modifications. We judgmentally selected the largest contract modification and its PCO amounting to \$9,333,553 (71 percent of total PCOs for the period reviewed). We determined that the SUG project team established and administered an effective PMP, which clearly defined the roles and responsibilities of the team members. The review and approval process that was in place required a review and approval from the appropriate AOC personnel. Overall, the documentation we reviewed during the audit generally supported appropriate reviews and approvals of the project's contract modifications and PCOs for the project.

While we determined that the SUG project team had properly issued the contract modifications and PCOs, we found their review and documentation of the PCO proposals we reviewed needed some improvements. Our review determined that the PCO proposals were generally supported by required documentation and negotiation correspondence up to final approval of the PCO; however, we found management's final decisions on the PCO proposal costs were not fully documented and some unallowable costs and markups were approved. Specifically, the SUG project team did not thoroughly review and/or document the re-categorization of costs, markups and changes allowed by the SUG project team, and there were a few approved PCO proposals that included a total of \$9,344 of unallowable costs and \$39,768 of unallowable markups.

Based on the results of our testing, it is our conclusion that strengthening the process for reviewing PCO proposals will ensure that management's final decisions are fully documented and reduce the risk of unallowable costs and markups within the construction costs over the remaining months of the SUG construction project. The

SUG project team should continue to ensure that PCO proposals are fair and reasonable, retain the required cost detail, and exclude unallowable costs and markups.

We made four recommendations to improve the SUG project team's review and approval process for contract modifications and PCOs.

Finding

The SUG Project Team's Review and Documentation of PCO Proposal Costs Can Be Improved

During the audit, we determined that the SUG project team's review and documentation of the PCO proposals under review needed some improvements. The SUG PMP describes the policies and procedures for reviewing and approving PCOs related to the SUG project. These procedures include reviewing the contractor and subcontractor proposals for the PCO work to ensure that the proposed costs are reasonable and do not include contractually unallowable costs or markups. While we determined that the PCO proposals were generally supported by required documentation and negotiation correspondence up to final approval of the PCO, we found management's final decisions on the PCO proposal costs were not fully documented and some unallowable costs were approved. Specifically, the SUG project team did not thoroughly review and/or document the re-categorization of costs, markups, and changes allowed by SUG project team, and the approved PCO amounting to \$9,333,553 included \$9,344 of unallowable costs and \$39,768 of unallowable markups.

The SUG project team issued a RFP to the general contractor for waterproofing the South Wall of the Senate Garage. The general contractor submitted a formal proposal in September 2018 for \$9,997,056. The negotiation process started in August 2017, and throughout the next year, the SUG project team held several negotiation meetings that were well documented in the contract file. The extensive negotiations with the general contractor resulted in an approval of a large and complex PCO that included seven subcontract proposals from various vendors. The general contractor submitted its final proposal on November 29, 2018, and the SUG project team approved it on November 30, 2018.

Proposal Approved with Re-categorized Costs

The general contractor's initial formal proposal was submitted in September 2018 for \$9,997,056. The proposal lacked justification of costs along with several assumptions and requests for clarifications. Over the next eight weeks, The SUG project team worked to address each of the assumptions and required clarifications through several emails and meetings with the general contractor.

The PNM states all line items of the proposal were discussed and settlement amounts on specific items were confirmed. However, the SUG project team also directed the general contractor to provide additional back up documentation and revise their proposal to incorporate negotiated settlement amounts and comply with the contract Changes clause AOC52.243-1. In addition, the SUG project team directed the general contractor to make proposal revisions, to include:

- Remove all allowable overhead costs (field office pick-up trucks, small tools and superintendence) because these costs are considered to be included in the overhead mark-up percentage.
- Break-out crane services cost and adjust mark-ups. As determined by the CO, the crane operator is considered a subcontractor, the crane itself is considered rental equipment. Apply 10 percent overhead and five percent profit to crane rental costs only.

According to the PNM, the general contractor submitted a revised proposal on November 29, 2018. The SUG project team reviewed and accepted the general contractor's revised proposal amounting to \$9,333,553 on November 30, 2018. Our analysis of the general contractor's proposal and supporting documentation determined that the general contractor did not remove all allowable overhead costs, charged as direct costs, and adjust overhead markups as requested by the SUG project team.

Specifically, we found that the general contractor submitted two proposals on November 29, 2018. However, the PNM does not document that a second proposal was submitted the same day. We noted, the first proposal was for \$9,333,553, which included the costs and markups that the SUG project team requested the general contractor to remove or adjust before submitting the final proposal. Our review of the second proposal noted that the total cost remained the same (\$9,333,553) with the requested costs removed. However, we identified increased costs in other line items within the proposal that were equivalent to the costs that were requested to be removed. The SUG project team requested the removal of pickups trucks, small tools and superintendent costs for two subcontractor proposals. The general contractor's second revised proposal re-categorized the costs associated with these line items as follows:

Table 1. Subcontractor

PROPOSAL 1 LINE ITEM CATEGORY	COST	PROPOSAL 2 LINE ITEM CATEGORY	COST
PICKUP TRUCKS	\$23,825*	STAKE BODY & SERVICE TRUCKS	\$106,614*
SMALL TOOLS	\$82,789*		
SUPERINTENDENT	\$57,388	FOREMAN	\$57,388
SUBCONTRACTORS TOTAL	\$164,002		\$164,002

* Proposal 1 Pickup Trucks and Small Tools total \$106,614 (\$23,825 + \$82,789) was combined and moved to Stake Body and Service Trucks.

Table 2. 2nd tier subcontractor

PROPOSAL 1 LINE ITEM CATEGORY	COST	PROPOSAL 2 LINE ITEM CATEGORY	COST
PICKUP TRUCKS	\$5,250	LOADER SKID STEER	\$5,250
SMALL TOOLS	\$32,807	CRANE	\$32,807
SUPERINTENDENT	\$72,940*	FOREMAN	\$29,176*
		SKILLED LABORER	\$43,764*
SUBCONTRACTORS TOTAL	\$110,997		\$110,997

* Proposal 1 Superintendent total \$72,940 (\$29,176 + \$43,764) was divided between Foreman and Skilled Laborer categories.

The SUG project team was not aware that these costs were re-categorized. In addition, we noted the second revised proposal still included the same markups the SUG project team directed the general contractor to adjust. We posed questions to the SUG project team as to why these costs and markups were approved in the final proposal when the general contractor was required to remove or adjust.

Why were the proposal allowable overhead costs re-categorized:

When we initially questioned the inclusion of superintendent and small tools on the proposal, the SUG project team stated:

“Given the magnitude and highly technical operation associated with this change, a full time site superintendent was... required... The superintendent was on site 100 percent of the time... it is considered a direct cost. After additional investigation, we realized that transferred small tools in the amount of \$58,880 and pick-up trucks in the amount of \$18,829 into the line for stake body and service trucks for a total of \$87,545. However, we did not allow the costs for the small tools or pick-ups at the time, and further, did not see that they had been moved into other line items. After researching these two items, we determined the costs are allowable despite the inaccurate labeling.”

The SUG project team response only included a portion of the small tools and pickup trucks costs; however, we note that the SUG project team’s conclusion

was that these costs were allowable now but were not allowable during initial review.

Why were the ██████ proposal allowable overhead costs re-categorized:

“Given the magnitude and highly technical operation associated with this change, a full time site superintendent was... required... The superintendent was on site 100 percent of the time... it is considered a direct cost. ██████’s classification of small tools does not align with the definition of small tools in the MACC (under one-hundred dollars). ██████’s small tools include oxyacetylene torches, augers and welding machines, all of which exceed a cost of \$100... all of the costs identified were allowable. It would have been clearer had the general contractor accurately labeled these items to begin with instead of transferring them to an existing item. The SUG contracting officer has directed the general contractor to accurately label items in future proposals.

As it is documented in the PNM, the AOC advised ██████ to remove the costs for small tools in the amount of \$32,807, superintendence in the amount of \$72,940, and pick-up trucks in the amount of \$5,250. We allowed superintendence at the time of the negotiations and did not expect that amount to be deleted. However, we did not allow the costs for the small tools or pick-ups at the time and did not see that they had been moved into other line items. However, after researching these two items, we determined the costs are allowable despite the inaccurate labeling.”

Why was ██████’s Crane proposal profit marked up 10 percent instead of the negotiated five percent:

Per the SUG project team, the general contractor was allowed to take a 10 percent profit markup instead of the negotiated five percent profit mark-up. This ten percent increase in profit was not documented, however it is allowable by the MACC. The SUG project team further stated, when negotiating a firm fixed price proposal, the CO doesn’t have to justify the cost of every individual item. The CO only has to find the total price fair and reasonable and that no unallowable costs were present and markups were properly applied.

We acknowledged the SUG project team’s efforts to investigate and obtain explanations and documentation from the general contractor regarding our inquiries.

However, it is important for the SUG project team to properly review all contract cost proposals to ensure that the approved proposals are fully supported by documentation. As the SUG project team initially identified these costs as allowable overhead costs not direct costs during the negotiation process.

Proposal Approved with Unallowable Costs

During our review, we found the proposal was approved with unallowable costs for small tools and safety equipment in subcontract proposals submitted by [REDACTED] and [REDACTED]. Specifically, the subcontracts' proposals included the following unallowable costs:

- [REDACTED] included \$7,220 for small tools;
- [REDACTED] included costs for safety of \$255 and expendable tools & storage of \$252.

Small tools and safety equipment are items included in the Changes clause as allowable overhead items, which means they should not be included on proposals as direct line item costs. In addition, the overhead and profit markups for those items must be included in the total unallowable costs calculation. Based on our data analysis, the total unallowable costs is \$9,344, as illustrated in the table below.

Table 3. Unallowable Costs

Cost Category		
Materials	\$7,220	\$507
Overhead (10%)	\$722	\$51
Profit (10%)	\$794	\$56
Bond (2%)		\$12
TOTAL	\$8,718	\$626

Combined total: \$9,344 (\$8,718 + \$626)

The AOC52.243-1 Changes - Supplement (June 2014) clause provides examples of allowed overhead costs. Section D. of the clause states: "Allowed overhead is deemed to include, but shall not be limited to, the following: (1) Field Overhead Items... (v) Small construction equipment such as drills and nail guns, small tools (under one-hundred dollars (\$100) each); and consumable materials such as rags, rope and cleaning compounds; ... (ix) Job site safety aids." Per AOC's written response to our proposal questions, the unallowable costs were an oversight by the SUG project team.

Proposals Approved with Unallowable Markups

The general contractor proposal was approved with markups that did not comply with the contract Changes clause. To further our understanding of the clause and how it

was implemented to calculate overhead and profit markups, we met with the SUG project team, to include legal counsel. After further review, we determined that the SUG project team approved the PCO with overhead and profit markups that were incorrectly calculated. According to the Changes clause:

(c) Allowable Mark-ups...

(2) The overhead and profit mark-up allowed to a Subcontractor for work performed solely with its own forces shall be a reasonable amount not to exceed 10 percent for the Subcontractor's overhead and 10 percent for the Subcontractor's profit, based upon the Subcontractor's costs of labor, materials and equipment.

(3) For work performed by a subcontractor solely with its own forces, the Contractor is entitled to a reasonable mark-up for combined overhead and profit, not to exceed 10 percent of the cost of the Subcontractor's materials, equipment and labor.

(4) No additional fees, overhead or profit in any amount will be allowed for subcontractors below first tier.

During our review, we determined that three subcontractor proposals (██████████, ██████████ and ██████████) incorrectly calculated their overhead and profit markups. We initially questioned the inclusion of overhead markups in the calculations for the subcontractor's profit markups. We found that the calculation used for the profit markup included the overhead markup, which increased the profit percentage to 11 percent. Per the Changes clause noted above, the overhead and profit allowed shall be a reasonable amount not to exceed 10 percent for the subcontractor's overhead and 10 percent for the subcontractor's profit, based upon the subcontractor's costs of labor, materials, and equipment. The clause implies that the overhead and profit markups are calculated as a percentage of labor, materials and equipment. However, after consulting with the SUG project team, OIG Counsel and industry experts, it is accepted as an industry standard for profit markups to be calculated as a percentage of the direct costs and overhead markup.

After further review of the general contractor and subcontractors' cost proposals, we continued to have concerns with the calculations used for the overhead and profit markups, specifically when 2nd tier subcontract costs were included. The Changes clauses states that for work performed by a 2nd tier subcontractor, the subcontractor one level above is entitled to a reasonable mark-up for combined overhead and profit, not to exceed 10 percent of the cost of the 2nd tier subcontractor's materials,

equipment and labor. Analysis of the subcontract proposals determined that each of the three subcontractors calculated their overhead to include 2nd tier subcontract costs. Although the Changes clause does not prohibit this, based on discussions with the SUG project team the subcontractor's overhead is limited to their labor, material and equipment costs. The 2nd tier subcontract costs for labor, material and equipment should be included in the calculation of the subcontractor's profit markup, not the overhead markup.

In addition, our analysis determined that one subcontractor did not exclude overhead and profit markups from the 2nd tier subcontract when calculating their markups. As stated above, the subcontractor is only allowed a reasonable markup not to exceed 10 percent of the 2nd tier subcontractor's labor, material and equipment costs.

After significant analysis and consultation with the SUG project team, it was concluded that \$39,768 was an unallowable markup within the three subcontractors' proposal.

Table 4. Unallowable Markups

Name	PCO Proposal (column A)	Recalculations (column B)	Total (A-B)
████████ Subcontract	\$248,771	\$248,622	\$149
████████ (Cranes) Subcontract	\$2,164,709	\$2,159,785	\$4,924
████████ Subcontract	\$3,889,187	\$3,854,492	\$34,695
Subcontractors Total	\$6,302,667	\$6,262,899	\$39,768

The SUG project team stated that due to the large number of line items, the need for the work to progress, and the emphasis on an overall fair and reasonable price, some unallowable costs and markups were missed during the review process.

Conclusion

We determined that the SUG project team negotiation process for the PCO was well-documented. We reviewed meeting notes and emails that supported the rejection of unallowable costs and requests to adjust markups. However, the SUG project team was unable to fully explain or provide documentation to support inclusion of certain costs on the approved proposal until they performed their own investigation.

Although the SUG project team found the costs to be allowable after further inquiries with the general contractor, it is important to note that the SUG project lacked the documentation to fully support the general contractor's approved proposal. According

to the GAO Green Book, management is required to clearly document all transactions and other significant events in a manner that allows the documentation to be readily available for examination. Documentation and records should be properly managed, maintained, and available for examination.

In addition, due to different interpretations of the Changes clause in AOC52.243-1, several recalculations were performed to determine whether markups on the seven subcontract proposals were calculated accurately. While noting that we only identified a small percentage of unallowable costs and markups (\$9,344 and \$39,768 respectfully) on this \$9.3 million PCO, we conclude that by not strengthening the PCO review process, future PCO proposals could result in increased unallowable costs and markups within the construction costs over the remaining months of the construction project.

Recommendations

Recommendation 1

We recommend the SUG project team should ensure:

- a. The SUG project contract file includes all the documentation to support the final decisions and/or approvals for potential change orders, and
- b. All the support documentation is properly managed and maintained to be readily available for examination.

AOC Comment

Concur. The project team will document final decisions and approvals and include this documentation and related documents in the contract file for the remainder of the project.

OIG Comment

We recognize the AOC's concurrence with the recommendation. The AOC's proposed actions to document final decisions and approvals and include this documentation and related documents in the contract file are responsive to the recommendation. Therefore, the recommendation is considered resolved and will be closed upon completion and verification of the proposed action.

Recommendation 2

We recommend that the SUG project team, to the extent legally and administratively possible, recover the \$9,344 of unallowable costs and the \$39,768 of unallowable markups identified in our review.

AOC Comment

Concur. As recognized in the recommendation, recovering these funds is complicated due to legal and administrative issues associated with government claims involving recovering funds from contractors. Despite this challenge, the AOC will attempt recovery from the contractor.

OIG Comment

We recognize the AOC's concurrence with the recommendation. The AOC's proposed action to recover funds from the contractors is responsive to the recommendation. Therefore, the recommendation is considered resolved and will be closed upon completion and verification of the proposed action.

Recommendation 3

We recommend the Acquisition and Material Management Division clarify language in the AOC52.243-1 Changes - Supplement (c) Allowable Mark-ups, dated June 2014, to provide better guidance on how the contractor and subcontractor should calculate the overhead and profit markups.

AOC Comment

Concur. AMMD revised the Changes - Supplement clause in July 2020. This revision clarifies contractor and subcontractor markups.

OIG Comment

We recognize the AOC's concurrence with the recommendation. The AOC revised the Changes – Supplement clause in July 2020 that clarifies contractor and subcontractor markups. AOC's action is responsive to the recommendation. Therefore, the recommendation is considered resolved and will be closed upon verification of the proposed action.

Recommendation 4

We recommend that the SUG project team strengthen the PCO proposal review process to ensure proposals properly categorize costs and unallowable costs and markups are not included in the approved PCO amounts.

AOC Comment

Concur. The SUG project team will develop and use a contractor proposal review checklist that will include steps to review cost categorization, inclusion of unallowable costs, application of proper markups and proposal changes to be made by the contractor following the AOC review process.

OIG Comment

We recognize the AOC's concurrence with the recommendation. The AOC's proposed actions to develop and use a contractor proposal review checklist that will include steps to address cost categorization, unallowable costs, markups, and proposal changes following the AOC review process are responsive to the recommendation. Therefore, the recommendation is considered resolved and will be closed upon completion and verification of the proposed action.

Appendix A

Scope and Methodology

The scope of this performance audit was the contract modifications and PCOs issued to the AOC's Contract No. AOC16C3008-T002 (awarded March 23, 2017) for the SUG project. The SUG project approved 46 PCOs totaling \$13,153,189 executed within eight contract modifications from October 2017 to September 2019. We judgmentally selected a modification and its PCO in the amount of \$9,333,553 (71% of the PCO costs for the period under review). We conducted this performance audit of the Senate Office Buildings located in Washington, DC from October 2019 through July 2020 in accordance with (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We reviewed and analyzed the SUG's contracts, contract modifications, PCOs and project management documentation. Throughout the audit, we interviewed SUG project team members from the AOC who were responsible for reviewing and issuing contract modifications and PCOs; however, we did not interview officials representing the contractors/subcontractors.

Construction and contract audits are included in the OIG audit and evaluation plan.

Review of Internal Controls

Government Auditing Standards require auditors to obtain an understanding of internal controls that are significant within the context of the audit objectives. For internal controls that are significant within the context of the audit objectives, auditors should assess whether the internal control has been properly designed and implemented and should perform procedures designed to obtain sufficient and appropriate evidence to support their assessment about the effectiveness of those controls. Information system controls are often an integral part of an entity's internal control. The effectiveness of significant internal controls is frequently dependent on the effectiveness of information systems controls. Thus, when obtaining an understanding of internal controls significant to the audit objectives, auditors should also determine whether it is necessary to evaluate information systems controls.

We reviewed internal controls to obtain an understanding of the AOC's processes for modifying the SUG project contract and for reviewing and approving modifications and PCOs. We obtained our understanding by reviewing AOC policies and contract specifications and interviewing SUG project team members from the AOC to determine if controls were properly implemented and working as designed, individually or in combination with other controls.

The AOC Contracting Manual documents uniform entity-wide policies and practices for processing contract modifications and change orders on AOC projects, while the PMP documents policies and practices specific to the SUG project. We determined that overall, the controls over the project's contract modification and PCO review and approval process were sufficient. The PCO proposals were generally supported by required documentation and negotiation correspondence up to final approval of the PCO; however, we found management's final decisions on the PCO proposal costs were not fully documented and some unallowable costs and markups were approved.

Use of Computer-Processed Data

We did not use a material amount of computer-processed data to perform this audit.

Prior Coverage

During the last five years, the AOC OIG issued a report on its performance audit of one Cannon House Office Building Renewal (CHOB_r) Project audit.

AOC OIG

Report No. 2019-AUD-004-A, "Audit of the Cannon House Office Building Renewal Project's Contract Modifications," dated April 24, 2020:

The audit assessed the effectiveness of contract modifications to the AOC's Contract No. AOC13C2002 for Construction Manager as Constructor services on the CHOB_r Project. Overall, the contract modification process for the CHOB_r Project was effective. However, the report noted several instances in which the CHOB_r Project team approved PCO proposals that included unallowable costs and found that cost analysis documentation was not always retained. The report issued five recommendations to improve the CHOB_r Project team's review and approval process for contract modifications and PCOs.

Appendix B

Announcement Memorandum



Office of Inspector General
Fairchild Bldg.
499 S. Capitol St., SW, Suite 518
Washington, D.C. 20515
202.593.1948
www.aoc.gov

United States Government
MEMORANDUM

DATE: October 8, 2019

TO: Thomas J. Carroll III
Acting Architect of the Capitol

FROM: Christopher P. Failla, CIG
Inspector General 

SUBJECT: Announcement Memo for the Audit of Senate Underground Garage Renovations and Landscape Restoration, Senate Office Buildings Contract Modifications (2020-AUD-001-A)

This memorandum serves as notification that the Office of Inspector General (OIG) plans to initiate a construction audit of the Senate Underground Garage Renovations and Landscape Restoration, Senate Office Buildings Contract Modifications. The objective is to assess the effectiveness of contract modifications. Specifically, the audit will determine whether the change orders are reasonable, authorized, supported, and comply with contract requirements.

An OIG auditor will be in contact with your office to set up an audit entrance conference. If you have any questions, please contact Erica Wardley, Assistant Inspector General for Audit, at 202.593.0081.

Distribution List:

Lawrence Barr, Acting Superintendent Senate Office Buildings
Peter W. Mueller, Director Planning & Project Management
William O'Donnell, Chief Administrative Officer
Jason Baltimore, General Counsel
Mary Jean Pajak, Senior Advisor to the Chief Operating Officer

Appendix C

Management Comments



Architect of the Capitol
U.S. Capitol, Room SB-16
Washington, DC 20515
202.228.1793
www.aoc.gov

DATE: September 22, 2020

TO: Mr. Chris Failla
Inspector General

FROM: J. Brett Blanton
Architect of the Capitol

SUBJECT: Official Response to Audit of Senate Underground Garage Renovations and Landscape Restoration Project's (SUG) Contract Modifications, Project No. 2020-AUD-001-A

The Architect of the Capitol (AOC) thanks you for the opportunity to review and provide a response on the Office of Inspector General (OIG) draft report in accordance with sections 5.2.6 and 8 of AOC Order 40-1.

The AOC concurs with your overall assessment that the AOC's contract modification process for the SUG project was effective. The AOC also concurs with your finding that the project team needs to improve its review and approval process for and documentation of potential change orders (PCO). Below is our response to the recommendations in the report.

Recommendation 1

We recommend the SUG project team should ensure:

- a. The SUG project contract file includes all the documentation to support the final decisions and/or approvals for potential change orders, and
- b. All the support documentation is properly managed and maintained to be readily available for examination.

AOC Response

We concur. The project team will document final decisions and approvals and include this documentation and related documents in the contract file for the remainder of the project.

Recommendation 2

We recommend that the SUG project team, to the extent legally and administratively possible, recover the \$9,344 of unallowable costs and the \$39,768 of unallowable markups identified in our review.

AOC Response

As recognized in the recommendation, recovering these funds is complicated due to legal and administrative issues associated with government claims involving recovering funds from contractors. Despite this challenge, the AOC will attempt to recover with the contractor.

Recommendation 3

We recommend the Acquisition and Material Management Division (AMMD) clarify language in the AOC 52.243-1 Changes - Supplement (c) Allowable Mark-ups, dated June 2014, to provide better guidance on how the contractor and subcontractor should calculate the overhead and profit markups.

AOC Response

We concur. AMMD revised the Changes - Supplement clause in July 2020. This revision clarifies contractor and subcontractor markups.

Recommendation 4

We recommend that the SUG project team strengthen the PCO proposal review process to ensure proposals properly categorize costs and unallowable costs and markups are not included in the approved PCO amounts.

AOC Response

We concur. The SUG project team will develop and use a contractor proposal review checklist that will include steps to review cost categorization, inclusion of unallowable costs, application of proper markups, and proposal changes to be made by the contractor following the AOC review process.

Thank you for the opportunity to provide comments on the draft report. Please contact Peter Mueller at 202.226.4119 or pmueller@ao.gov if you have any questions.

Doc. No. 200903-18-01

Acronyms and Abbreviations

AOC	Architect of the Capitol
████	██
CHOB	Cannon House Office Building Renewal
CM	Change Management
CMP	Change Management Plan
CO	Contracting Officer
COTR	Contracting Officer's Technical Representative
GAGAS	Generally Accepted Government Auditing Standards
GAO	Government Accountability Office
IDIQ	Indefinite Delivery/Indefinite Quantity
IGCE	Independent Government Cost Estimate
MACC	Multi-Award Construction Contract
OIG	Office of Inspector General
PCO	Potential Change Order
PMP	Project Management Plan
PNM	Post-Negotiation Memorandum
RFP	Request for Proposal
SUG	Senate Underground Garage Renovations And Landscape Restoration project



INSPECTOR GENERAL

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