



**The Citadel
Military College of South Carolina**

INDEPENDENT PROCUREMENT AUDIT REPORT

**For the Audit Period:
October 1, 2018 to September 30, 2021**

**Office of Audit & Certification
Division of Procurement Services
October 10, 2022**

TABLE OF CONTENTS

| | <u>Page</u> |
|------------------------------------|-------------|
| Abbreviations | 1 |
| Introduction | 2 |
| Scope | 4 |
| Summary of Results | 5 |
| Results of Audit | 7 |
| Certification Recommendation | 17 |

ABBREVIATIONS

| | |
|------------------|---|
| COTS | – Commercially Available Off-the-Shelf |
| CPO | – Chief Procurement Officer |
| DPS | – Division of Procurement Services |
| ITMO | – Information Technology Management Office |
| PI Manual | – Manual for Planning and Execution of State Permanent Improvements |
| MBE | – Minority Business Enterprise |
| MMO | – Materials Management Office |
| OCG | – Office of the Comptroller General |
| OSE | – Office of State Engineer |
| PCA | – Purchasing Card Administrator |
| P-Card | – Purchasing Card |
| PO | – Purchase Order |
| Procurement Code | – SC Consolidated Procurement Code and ensuing Regulations |
| SCEIS | – South Carolina Enterprise Information |
| SMBCC | – Small and Minority Business Contracting and Certification |
| SPO | – Surplus Property Office |
| State PO Policy | – State of South Carolina Statewide Purchase Order Policy |
| The Citadel | – The Citadel Military College of South Carolina’s |

INTRODUCTION

DPS audited The Citadel's internal procurement operating policies and procedures, as outlined in their internal Procurement Operating Procedures Manual, under § 11-35-1230 of the Procurement Code and Reg. 19-445.2020. The primary objective of our audit was to determine whether, in all material respects, The Citadel's system of internal controls over procurement is adequate to ensure compliance with the Procurement Code.

The management of The Citadel is responsible for the agency's compliance with the Procurement Code. Those responsibilities include the following:

- Identifying the agency's procurement activities and understanding and complying with the Procurement Code
- Establishing and maintaining an effective organization structure and system of internal control over procurement activities that provide reasonable assurance that the agency administers its procurement programs in compliance with the Procurement Code
- Establishing clear lines of authority and responsibility for making and approving procurements
- Documenting the agency's procurement procedures including its system of internal controls over procurement activities in an internal procurement procedure manual
- Taking corrective action when instances of noncompliance are identified, including corrective action for the findings of this audit

Because of inherent limitations in any system of internal controls, errors or irregularities may occur and not be detected. Projection of any evaluation of the system to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the degree of compliance with the procedures may deteriorate.

Our review and evaluation of the system of internal control over procurement activities, as well as our overall audit of procurement policies and procedures, was conducted with professional care. However, because of the nature of audit testing, they would not necessarily disclose all weaknesses in the system.

INTRODUCTION

Our audit was also performed to determine if recertification under SC Procurement Code Ann. § 11-35-1210 is warranted.

On May 2, 2017 the State Fiscal Accountability Authority (SFAA) granted The Citadel the following procurement certifications:

| <u>PROCUREMENT AREAS</u> | <u>CURRENT CERTIFICATION LIMITS</u> |
|---------------------------------------|--|
| Supplies and Services | *\$500,000 per commitment |
| Consultant Services | *\$500,000 per commitment |
| Information Technology | *\$500,000 per commitment |
| Construction Contract Award | *\$500,000 per commitment |
| Construction Contract Change Order | \$ 150,000 per change order |
| Architect/Engineer Contract Amendment | \$ 25,000 per amendment |

* Total potential purchase commitment whether single year or multi-term contracts are used.

During the audit, the College did not request an increase in its certification limits.

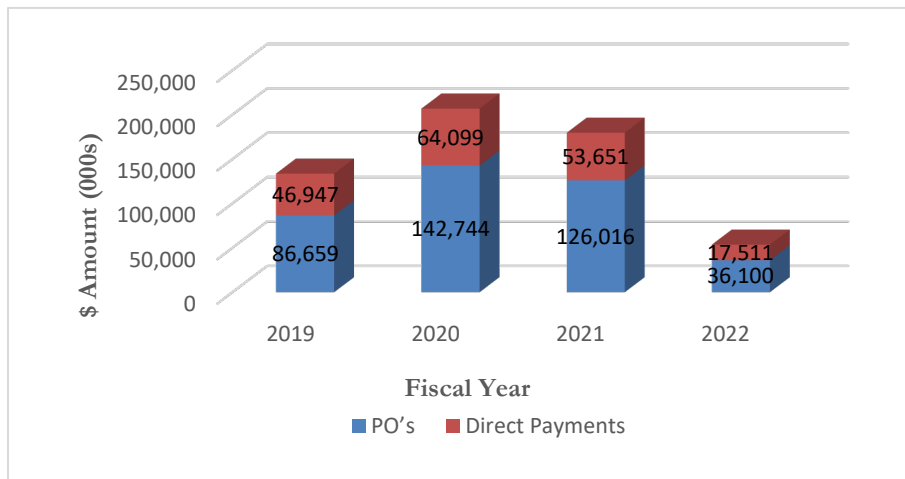
SCOPE

We conducted our audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. Our audit included testing, on a sample basis, evidence about The Citadel’s compliance with the Procurement Code for the period October 1, 2018 through September 30, 2021, the audit period, and performing other procedures that we considered necessary in the circumstances. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Total Expenditures

Based on data The Citadel provided, expenditures¹ were made as follows:

| | \$ Amount (000s) | | | | Total |
|-------------------------|------------------|----------------|----------------|---------------|----------------|
| | Q2,3,4 FY2019 | FY2020 | FY2021 | Q1 FY2022 | |
| POs ² | 86,659 | 142,744 | 126,016 | 36,100 | 391,519 |
| Direct Pay ³ | 46,947 | 64,099 | 53,651 | 17,511 | 182,209 |
| Total Spend | 133,606 | 206,843 | 179,667 | 53,612 | 573,728 |



¹ The Citadel was unable to provide an accurate expenditure listing. See Finding II A

² **POs** represents all expenditures made with a Purchase Order. These are required for most contract purchases by the terms of the contract, and is the preferred procurement instrument when a government unit orders or procures supplies or services from a vendor.

³ **Direct Pays** are made without purchase order based on the State PO Policy for executive agencies and internal Policies for institutions of higher learning. These may occur with purchases of supplies or services that are exempt from the Procurement Code or for such things as payment for P-Card purchases or purchases less than \$2500.

SUMMARY OF RESULTS

| | <u>PAGE</u> |
|--|-------------|
| I. <u>Procurement Manual</u> | 7 |
| <p>The Citadel's internal procurement procedure manual did not contain procedures for the application of key provisions of the Procurement Code.</p> | |
| II. <u>Supplies and Services</u> | |
| A. <u>Inaccurate Expenditure Listing</u> | 8 |
| <p>The Citadel could not provide expenditure listings with accurate Purchase Order and Direct Pay amounts at the beginning of the audit.</p> | |
| B. <u>Inappropriate Use of Commercial Resale Exemption</u> | 8 |
| <p>Items in the Cadet Store and the Tailor Shop were acquired without competition.</p> | |
| C. <u>Inappropriate Use of Exemptions Based on Source of Funds</u> | 11 |
| <p>The Citadel had five procurements totaling approximately \$680k in which exemptions were inappropriately applied.</p> | |
| III. <u>Sole Source and Emergency Procurements</u> | |
| A. <u>Sole Source Procurements Not Reported or Reported Late</u> | 12 |
| <p>The Citadel did not report 50 sole source procurements and reported 66 sole source procurements late.</p> | |
| B. <u>Emergency Procurements Not Reported or Reported Late</u> | 12 |
| <p>The Citadel did not report three emergency procurements and reported 12 emergency procurements late.</p> | |
| IV. <u>Construction</u> | 13 |
| <p>We tested construction, and architectural/engineer and related professional service contracts for compliance with the code. Our testing of construction did not identify any compliance issues.</p> | |
| V. <u>P-Cards</u> | |
| <u>Program Administration</u> | 13 |
| <p>The Citadel had one transaction in which the cardholder acted as his own liaison.</p> | |
| <u>Transaction Testing</u> | 14 |
| <p>The Citadel had one cardholder that purchased professional services which is a prohibited purchase.</p> | |

SUMMARY OF RESULTS

| | <u>PAGE</u> |
|--|-------------|
| VI. <u>Unauthorized or Illegal Procurements</u> | 14 |
| We tested unauthorized and illegal procurements to determine compliance with the Procurement Code. Our testing of unauthorized or illegal procurements did not identify any compliance issues. | |
| VII. <u>Surplus Property</u> | 14 |
| We tested asset disposals to determine compliance with the Procurement Code and State policies and procedures. Our testing of surplus property did not identify any compliance issues. | |
| VIII. <u>MBE Reports</u> | 14 |
| The Citadel did not file four annual utilization plans in a timely manner. | |
| IX. <u>Delays in Access to Procurement Records</u> | 15 |
| We experienced delays in response to request for documentation or explanation during the audit. | |
| Note: The agency's responses to issues raised in this report have been inserted immediately following the recommendations in the body of the report. | |

RESULTS OF AUDIT

I. Procurement Manual

The Citadel's Internal Procurement Procedures Manual, dated May 2021, had not been approved by the CPO. The Citadel's manual did not provide procedures for key provisions of the Procurement Code as required by Procurement Code and Regulation 19-445.2005. Key Provisions not addressed by The Citadel include:

(1) Roles and responsibilities for performance, review, and approval of the various aspects of procurement procedures by position to provide for accountability.

(2) Revenue generating contracts per SC Regulation 19-445.2000.

(3) Contracting audit or legal services. Per SC Code Ann. §§ 11-35-1250 & 11-35-1260.

(4) Requirement of a written determination for the use of source selection method other than competitive sealed bidding.

(5) Designation of approval authority and public notice requirement for sole source procurements per Regulation 19-445.2105.

(6) Proper use of multi-term contracts. Per SC Code Ann. § 11-35-2030.

Recommendation: We recommend The Citadel revise its internal procurement manual to provide procedures for procurement personnel conducting commonly used source selection methods, the assignment of roles and responsibilities, and a consistent filing system. Procurement Services provides a Procurement Manual checklist on its website that may assist in revising the manual. Once the manual has been revised, we recommend The Citadel submit the manual to Audit and Certification for approval as required by SC Code Ann. § 11-35-540 and Reg. 19-445.2005. Upon approval, we recommend retraining staff on the revised procedures.

College Response

The Citadel concurs, and will update the manual with the key provisions and submit to CPO for approval on or before March 15, 2023.

II. Supplies and Services

We audited expenditures exceeding \$10,000 made with POs, and expenditures made without a PO to determine compliance with the Procurement Code. Our review of procurements for the audit period identified the following issues:

RESULTS OF AUDIT

A. Inaccurate Expenditure Listing

The Citadel was unable to provide an accurate population of expenditures made with POs. The expenditure listing provided totaled approximately \$392M. During field work we discovered that the listing provided overstated the actual expenditures by approximately two and one-half times compared to the 71 POs provided. Without an accurate listing of expenditures, we were not able to effectively select expenditures for testing.

The Citadel was unable to provide an accurate listing of expenditures made without POs. The expenditure listing provided totaled approximately \$182M. During field work we found that the direct pay expenditure listing overstated the actual expenditures by approximately three times compared to the 25 invoices provided. Without an accurate listing of expenditures, we were not able to effectively select expenditures for testing.

Recommendation: We recommend that The Citadel evaluate its ERP system's reporting capabilities and its workflow procedures to ensure that key information, such as expenditure amounts, are reported accurately.

College Response

The Citadel concurs, the expenditure report that was generated by the software increased the total amounts. The college will provide training on the platform so that the report does not generate overstated total amounts. The Training will be completed on or before March 15, 2023.

B. Inappropriate Use of Commercial Resale Exemption

We identified approximately \$8.6M of clothing, military supplies and uniform accessories procured for the Cadet Store and approximately \$2.5M of uniforms and accessories procured for the Tailor Shop without competition. The explanation given was "these items were sold for a profit or were self-sustaining."⁴

The Citadel's website states, "The Cadet Store sells shoes, clothing, accessories, and other cadet items." The website states that the tailor shop "offers alterations on both

⁴ The Citadel places reliance on the fact that The Citadel store is a self-supporting auxiliary enterprise. For many years now, various state institutions of higher learning have unsuccessfully petitioned the General Assembly to exempt all procurements by their 'enterprise' operations from the competitive procedures of the Procurement Code.

RESULTS OF AUDIT

military uniforms and civilian clothing and custom embroidery.” The tailor shop also buys, alters, and sells items of clothing such as blazer ensembles.

The Procurement Code “applies to every procurement or expenditure of funds by this State under contract acting through a governmental body as herein defined.” S.C. Code Ann. §11-35-40(2). The Citadel is a governmental body as defined by the Procurement Code. S.C. Procurement Code Ann. §11-35-310(18) Notwithstanding the foregoing, the Procurement Code provides for limited exceptions, a couple of which are cited by the Citadel. Specifically, S.C. Code Ann. §11-35-710 states:

(A) The following exemptions are granted from this chapter:

(6) expenditure of funds at state institutions of higher learning derived wholly from athletic or other student contests, from the activities of student organizations, and from the operation of canteens and bookstores, except as the funds are used for the procurement of construction, architect-engineer, construction-management, and land surveying services.

(8) articles for commercial sale by all governmental bodies.

Nothing in the Citadel’s records indicate that the procurements found in our testing were made using funds derived “**wholly** from athletic or other student contests, from the activities of student organizations,” or “from the operation of canteens and bookstores.”⁵ [emphasis supplied] The fact that these procurements were paid for with “auxiliary funds” does not make the purchases exempt. Purchases are not exempt because they are profit making or self-sustaining.

Therefore, the only question that needs to be addressed is whether the articles, which were the subject of these procurements, were articles acquired “for commercial sale” by the Citadel.

For this audit we have considered, among other things, whether there is an actual commercial market for the items sold; and whether the items are sold without alteration. For example, the typical gift shop meets both conditions. A state park operating a small retail store open to all customers is selling in a commercial marketplace, where customers are free to purchase or not. The items sold—hats, t-shirts, and other items with the park’s

⁵ To the extent that funds generated under 11-35-710 (6) are commingled with funds from other "auxiliary enterprises" not qualified as exempt by their source, the funds from qualified exempt sources would be tainted, and are no longer exempt.

RESULTS OF AUDIT

logo—are purchased specifically for that market and sold in the condition received from the supplier.

Many items sold in the Cadet Store, such as Brasso and shoe polish, are commercial off the shelf products available in the general marketplace and sold by the Cadet Store without alteration. Cadets and their families are not constrained to buy these items only at the Cadet Store. Moreover, the Cadet Store will apparently sell these items to anyone who walks in off the street.

Contrast the foregoing example with Citadel uniforms and accessories sold to cadets. The cadets have little, if any, choice whether or where to buy those items. There is no market in the commercial sense. Not only does the Citadel enjoy a monopoly for those sales, but it also requires cadets to purchase them. Likewise, Citadel uniforms themselves have no real market outside the corps of cadets as they are specifically for Citadel cadets. Items that are only of use to Citadel cadets have no value in a commercial marketplace. Furthermore, as discussed below, the Citadel's Tailor Shop alters many uniform items to fit individual cadets, meaning those items are not sold in the same condition as when they were acquired.

The Tailor Shop offers alterations on both military uniforms and civilian clothing and custom embroidery. Services are available to the facility, staff, students, military personnel, police, and all state agencies. However, the items procured for the Tailor Shop are, by the nature of tailor shop operations, altered prior to sale. To qualify for the commercial sale exemption, the items must be sold unaltered, otherwise they are considered raw materials. The only raw materials exemption in the Procurement Code is for the SC Department of Corrections, Division of Prison Industries. S.C. Code Ann. §11-35-710 (2). Therefore, items purchased for sale in the Tailor Shop and then altered and sold to cadets and members of the public are not exempt.

Because there is no real market for them, items obtained for sale in the Cadet Store that are mandatory for cadets, and only usable by cadets, should be acquired through a competitive process. We note that other agencies, like the SC Department of Public Safety, and the SC Department of Corrections, buy uniforms through competitive procurements. Likewise, items purchased by the Tailor Shop for sale should be acquired through a competitive process. On the other hand, we believe that sundries and similar

RESULTS OF AUDIT

necessities that are sold in the same condition as acquired fall under the commercial sale exemption.

Recommendation: We recommend that The Citadel terminate the practice of procuring the type of supplies described in the forgoing analysis for sale in the Cadet Store and any supplies for sale in the Tailor Shop without competition. We further recommend that The Citadel develop and implement procedures to ensure that items procured for use by Auxiliary Enterprises be acquired in accordance with the SC Consolidated Procurement Code as described in the finding.

College Response

Concur, the Citadel will terminate the use of exemption for commercial resale as a practice of procuring the type of supplies described in the forgoing analysis for sale in the Cadet Store and any supplies for sale in the Tailor Shop without competition. The Citadel will ensure the items procured for use by Auxiliary Enterprises be acquired in accordance with the SC Consolidated Procurement Code as described in the finding effective December 2, 2022.

C. Improper Use of Exemptions Based on Source of Funds

The Citadel made five purchases totaling approximately \$680k which it treated as exempt from competition based on the source of funds. Two purchases were made from trust funds, and three were made from gift funds.

Per SC Code Ann. § 11-35-40 (2) Application of Procurement Code:

Application to State Procurement. This Procurement Code applies to every procurement or expenditure of funds by this State under contract acting through a governmental body as herein defined irrespective of the source of the funds, including federal assistance monies, except as specified in § 11-35-40 (3) (Compliance with Federal Requirements) and except that this Procurement Code does not apply to gifts, to the issuance of grants, or to contracts between public procurement units, except as provided in Article 19 (Intergovernmental Relations).

There are no exemptions from the Procurement Code for acquisitions made using trust funds or gift funds. Therefore, these procurements are in violation of the Procurement Code and must be ratified or terminated in accordance with Regulation 19-445.2015 (A)(1).

RESULTS OF AUDIT

Recommendation: We recommend the Citadel develop and implement procedures to ensure the proper application of procurement exemptions and that procurement personnel be trained on the new procedures. All five purchases should be ratified or terminated and reported to DPS as unauthorized or illegal as required by Regulation 19-445.2015.

College Response

Concur, the Citadel will ratify the purchases and report to DPS the unauthorized purchases on or before February 15, 2023. The procurement procedures will be updated on or before March 15, 2023, and personnel will be trained on the new procedures on or before January 13, 2023.

III. Sole Source Procurements and Emergency Procurements

We evaluated written determinations for all sole source procurements pursuant to SC Code Ann. § 11-35-1560 to assess the appropriateness of the procurement actions and the accuracy of the quarterly reports required by § 11-35-2440. During the audit period The Citadel reported 238 sole source procurements totaling approximately \$11M to DPS. The Citadel reported 61 emergency procurements totaling approximately \$5.5M.

A. Sole Source Procurements Not Reported or Reported Late

The Citadel omitted 50 sole source procurements totaling approximately \$2M from its quarterly reports required by SC Code Ann. § 11-35-2440 and reported 66 sole source procurements totaling approximately \$2.8M late.

B. Emergency Procurements Not Reported or Reported Late

The Citadel omitted three emergency procurements totaling approximately \$105k from its quarterly reports required by SC Code Ann. § 11-35-2440 and reported 12 emergency procurements totaling approximately \$1.6M late.

Recommendation: We recommend The Citadel develop and implement reporting procedures, including management review and approval, to ensure complete, accurate, and timely reporting of both sole source and emergency procurements as required by SC Code Ann. § 11-35-2440.

RESULTS OF AUDIT

College Response

The Citadel concurs with the finding. This is a result from staff turnover. A new process is now in place for all documents to be saved in a central accessible server, so purchases are reported timely moving forward. The change is effective December 2, 2022.

IV. Construction

We tested construction, and architectural/engineer and related professional service contracts for compliance with the Procurement Code and the PI Manual. Our testing of construction did not identify any compliance issues.

V. P-Cards

The Citadel had 128 P-Cards in use during the audit period and spent approximately \$10.1M in 33,090 transactions. Based on the volume of usage, there is increased risk that misuse, or abuse of P-Cards will not be prevented or detected without adequate management oversight.

Program Administration

We reviewed The Citadel's P-Card Policy and Procedures for compliance with the State P-Card Policy and identified one incident of non-compliance. One cardholder acted as the liaison of their own card in violation of State P-Card Policy V(A), Program Compliance, and Section 3 of The Citadel's internal P-Card Manual.

Recommendation: We recommend The Citadel revise its internal P-Card policies and procedures to provide for adequate separation of cardholder, supervisor, and liaison duties. In small departments, this could be accomplished by having the supervisor perform the Liaison review or have a liaison from another department provide oversight.

College Response

The Citadel concurs with the finding. Due to the department set-up, the cardholder is the liaison that reconciles the transactions. The immediate supervisor reviews the transactions and moving forward an additional reviewer/approver will be added to cardholder's monthly transactions. The change is effective in January.

RESULTS OF AUDIT

Transaction Testing

We performed tests of P-Card transactions to ensure compliance with State and agency P-Card policies and procedures. Transaction testing identified areas of non-compliance, which were not identified by the PCAs or supervisor/approvers during the monthly review and reconciliation of cardholder statements.

One cardholder purchased professional services which is a prohibited purchase per State P-Card Policy Section IV.(E) (9) Professional Services.

Recommendation: We recommend The Citadel train employees on the types of purchases that are prohibited. We further recommend that monthly management review address purchases that violate State P-Card Policy.

College Response

The Citadel authorized the transaction and removed the MCC block after discussion with the State's Controller General concerning authorization as a form of payment. The Citadel concurs that the transaction is on the blocked list and failed to obtain the authorization in writing. The training will be provided to the employee to ensure the correct process and documentation is in place. The completion date is January 13, 2023.

VI. Unauthorized or Illegal Procurements

We tested Unauthorized or Illegal Procurements to determine compliance with the Procurement Code and Regulations. Our testing of reported unauthorized or illegal procurements did not identify any compliance issues.

VII. Surplus Property

We tested asset disposals to determine compliance with the Procurement Code and State policies and procedures. Our testing of asset disposals did not identify any compliance issues.

VIII. MBE Reports

We requested copies of the agency's annual MBE utilization plans and quarterly progress reports to assess compliance with the Procurement Code. The Citadel failed to file four annual utilization plans in a timely manner as required by SC Code Ann. § 11-35-5240 (2).

RESULTS OF AUDIT

Recommendation: We recommend The Citadel develop and implement procedures, including management review and approval, to require and assign responsibility for submitting annual MBE utilization plans and quarterly progress reports to the Office of Small and Minority Business Assistance in a timely manner as required.

College Response

The Citadel concurs with finding. The documents were submitted late as a result from reduced staffing and lack of time to ensure completion before the deadlines. The college representative responsible for these reports is no longer employed in a procurement role at the institution. The college has set procedures for completion of these reports and will implement review and approval by the Director of Purchasing to assure the timeliness of the submittal of these reports. The effective date is December 2, 2022.

IX. Delays In Access to Procurement Records

We experienced delays in response to requests for documentation or explanation during the audit. as required by Regulation 19-445.2005(B) requires the Citadel to maintain Procurement records sufficient to satisfy the requirements of external audit. The Citadel's inability to timely provide records calls into question the sufficiency of its filing system for procurement records. While the Citadel experienced significant turnover in key procurement staff in recent years, and the current Procurement Director assumed that position in August of 2021, they should have been able to quickly find documents were the filing system a robust one.

After review of the audit findings with the College, at the conclusion of fieldwork, we were provided substantial additional documentation in July and August of 2022, that had been previously requested during the audit, which started in January 2022:

Nineteen Sole Source Written Determinations provided in July.

Twelve Notice of Intent to Award a Sole Source provided in July.

One Authorized Sole Source Written Determination provided in August.

Board Resolution Authorizing P-Card STL greater than \$2,500 provided in August.

One signed P-Card bank statement provided in September.

Recommendation: We recommend that The Citadel develop and implement procedures that establish a consistent methodology for organizing and locating required documentation of procurement activity as required by the Procurement Code.

RESULTS OF AUDIT

Additionally, we recommend that The Citadel include in these procedures' requirements for the maintenance of documentation sufficient to demonstrate compliance with the Procurement Code and to satisfy the requirements of an external audit.

College Response

The Citadel agrees that due to documents needing to be pulled over a seven-year period which resulted in having to scan many documents to create the pdf to submit via electronic platform. Now, all documents are saved in pdf format and filed electronically for easier access by department staff. The effective date is December 2, 2022.

CERTIFICATION RECOMMENDATIONS

We found The Citadel's system of internal controls over its procurement process was not adequate to ensure compliance with the Procurement Code as described in the audit report and made recommendations for improvement. With the implementation of the recommended corrective actions, The Citadel's procurement process will be adequate to ensure compliance with the Procurement Code.

We recommend that by February 28, 2023 the Citadel submit a corrective action plan regarding organization and filing of procurement workpaper files to the Division of Procurement Services for submittal to the five member Authority.

As provided in SC Code Ann. § 11-35-1210, we recommend that The Citadel's procurement authority to make direct agency procurements be re-certified up to the following limits for three years:

PROCUREMENT AREAS

Supplies and Services⁶

Information Technology⁷

Construction Contract Award

Construction Contract Change Order

Architect/Engineer Contract Amendment

RECOMMENDED CERTIFICATION LIMITS

*\$500,000 per commitment

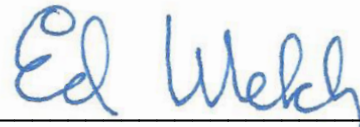
*\$500,000 per commitment

\$500,000 per commitment

\$150,000 per change order

\$25,000 per amendment

* Total potential purchase commitment whether single year or multi-term contracts are used.



Ed Welch, CPA
Audit Manager,
Audit & Certification



Crawford Milling, CPA, CGMA
Director, Audit & Certification

⁶ Supplies & Services includes non-IT consulting services.

⁷ Information Technology includes consultant assistance for any aspect of information technology.