City of Camden
Request for Bid
Robert Mills Courthouse HVAC System

Project Overview

The City of Camden invites qualified contractors to submit bids for the repair and replacement of HVAC units and related equipment at the Robert Mills Courthouse, located at 607 Broad Street. The Robert Mills Courthouse, originally referred to as the Kershaw County Courthouse, was designed by famed South Carolina architect Robert Mills and built in 1826.

Scope of Work

- Replace of PTAC units on first and second floors of building
- Replace dedicated bathroom exhaust fans
- Install dedicated outdoor air unit (DOAU) for first floor
- Install building automation system for system controls

See attached MEP report on the building for additional information.

Project Timeline

- Sealed bids are due **Wednesday, September 30, 2026 by 1:00 PM.** A bid opening will be held at City Hall at 1:00 PM.
- Project Start Date: January 2027
- Completion Date: No later than 6 months from start date.

Submission Requirements

- Detailed cost proposal including labor, materials, equipment, and any other associated costs.
- Project schedule showing a commitment to the timeline.
- References from previous projects.
- Certificate of Insurance verifying the Contractor has Workman's Compensation Insurance. The certificate of insurance shall name the City of Camden as the "Additional Insured."
- Certificate of Insurance verifying the contractor has General Liability Insurance in the amount of $1,000,000 or the equivalent in excess or umbrella insurance.
- Certificate of Insurance for company that supplies any crane or lift that verifies they have Workman's Compensation Insurance and General Liability Insurance in the amount of $1,000,000.

Bid Submission

Sealed Proposals shall be delivered via mail or hand-delivery, as follows:

By Mail:
City of Camden
Attention: Shawn Putnam
Post Office Box 7002
Camden, SC 29021

Hand-Delivery
City of Camden
Attention: Shawn Putnam
1000 Lyttleton Street
Camden, SC 29020

Any questions regarding this RFB should be directed in writing, via e-mail, to Shawn Putnam, Planning & Development Director, at the following email address: putnam@camdensc.org. All questions will be answered via e-mail with a copy to each firm.

Appendix No. 4

Mechanical, Electrical, and Plumbing Report

By RMF, Inc.

Table of Contents

Division No. 22 -

Plumbing

22.1 Existing Conditions

The existing plumbing systems for the courthouse consist of a public men's and women's restroom on both the first and second floor, a janitor's closet with a mop sink on the first floor, a private bathroom on the first floor that appears to be limited to staff use only, and a kitchenette with a dedicated stainless steel sink. Hot water is provided to each sink / lavatory by a 30-gallon electric tank-type Rheem water heater located in the second-floor table storage room. Generally, most fixtures are in fair condition and could be considered for re-use in the upcoming renovation with minor exceptions. Each fixture was tested at the time of RMF's visit to confirm operation and that each lavatory / sink received hot water within approximately 30 seconds. Wall hydrants for landscaping were additionally observed around the perimeter of the building to facilitate landscaping.

Multiple observations were made of uninsulated domestic hot and cold piping present in finished areas. Pictures have been provided below of existing systems and fixtures.

Existing 30-Gallon Electric Tank Water Heater

(Second-Floor Storage)

Existing Plumbing Fixtures (First and Second Story)

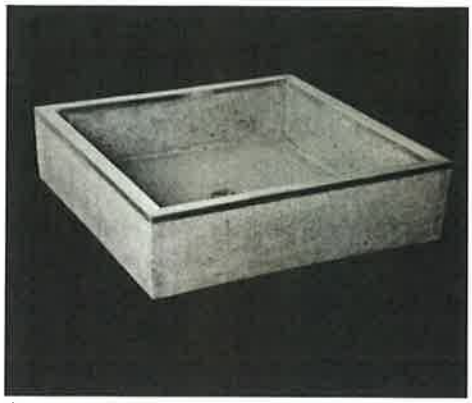
Janitor's Mop Sink and Kitchenette Sink

22.2 RMF Recommended Changes

The exposed domestic cold and hot water piping dedicated to the mop sink and water heater is recommended to be insulated to limit heat transfer to/ from the respective spaces as well as reduce temperature loss from the domestic water systems. Additionally, it is recommended that the mop sink in the janitor's closet be replaced. The fixture itself shows signs of wear, and the dedicated drain appears to be clogged from years of use. Additionally, HVAC condensate has been routed to the mop sink location but does not terminate into the sink itself. The condensate is located on the adjacent wall and allowed to pour over the wall prior to terminating in the mop sink. This is recommended to be corrected by extending the condensate line such that the

condensate from the HVAC system's termination is limited to the basin of the sink. A proposed new mop sink fixture is shown below:

TERRAZZO
MOP SERVICE BASIN
12" DEPTH CONTINUOUS



Shown: TSB500

Example Plumbing Fixture for the Janitor's Closet

Division No. 23 -

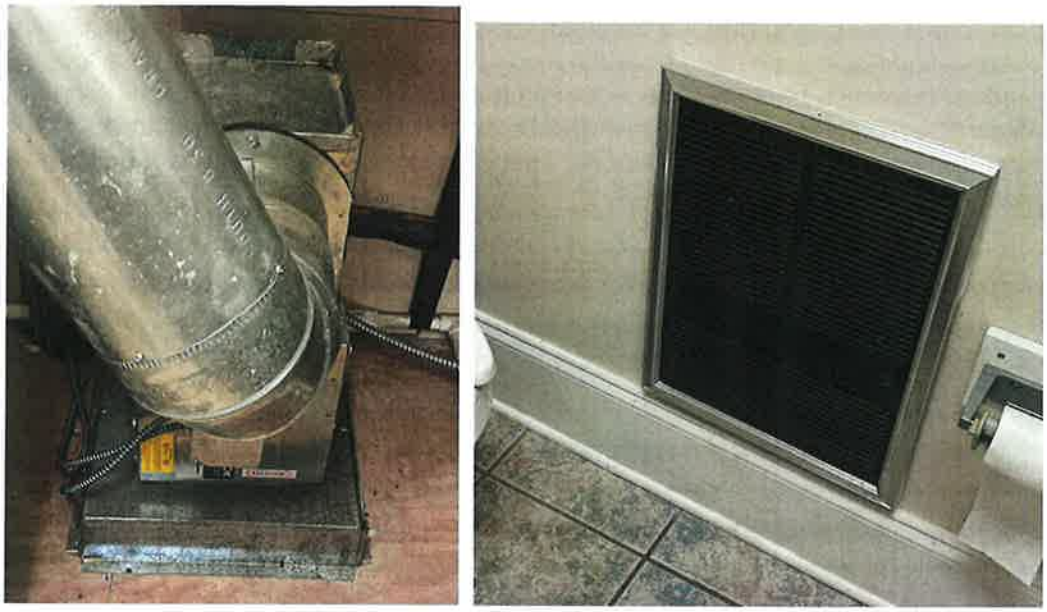
Heating, Ventilation and Air Conditioning (HVAC)

23.1 Existing Conditions

The existing first floor spaces are heated and cooled using through-wall Packaged Terminal Air Conditioners (PTACs) mounted on the exterior wall of the respective spaces. There is a total of six (6) 0.75-ton PTACs for the first floor with one of the PTACs serving the 2002-renovated portion of the building, and the other five serving the original building footprint. At the time of the visit, it appeared that four of the five PTACs serving the original building footprint were not operational with the only operational PTAC serving the occupied first floor office. Spot mobile coolers were observed to be provided on the first floor to cool the space at the time of the visit in lieu of the non-operational PTACs. Holes have been punched through the building exterior walls to allow condensate to terminate to the outside. The exterior penetrations do not appear to be water tight. RMF additionally noted that no outdoor air was observed to be delivered to the first floor. There is additionally a PTAC on the second floor of the building that serves the renovated portion of the building. This PTAC was operational at the time of the visit.

Unoperational PTAC and Spot Cooler

The existing bathroom groups on the first and second floor are provided with unit heaters and exhaust fans for heat during the winter and removal of unclean air from the space respectively. The heaters appeared to be in fair condition but were not observed to be operational at the time of the visit as the bathrooms did not require heat. Five (5) bathroom dedicated exhaust fans were observed, with only two of the observed fans operating at the time of the visit. Fan start-up is tied to light switch operation in each space.



Bathroom Dedicated Exhaust Fan and Unit Heater

When the building was renovated, a wall mounted mini split was added to the new elevator machine room to condition the space when the space exceeds an acceptable temperature for the machinery to run. The air-cooled condenser for the mini split is located in the mechanical yard immediately adjacent to the building elevator machine room. The original date of manufacture of the mini-split system is 2003 and it was observed to be operational at the time of the visit.

Elevator Machine Room Mini Split System

The second floor of the courthouse is served by four (4) ducted split system air conditioners. The indoor units are located in the attic storage room and the attic area above the main courthouse space. Two units are in the attic storage area serving the courtroom adjacent spaces, with the other two located in the attic above the courtroom serving the courtroom itself. The two units provided above the courtroom have been provided with wooden unit access platforms for maintenance. Each indoor unit has a dedicated outdoor condensing unit located in one of the two exterior mechanical yards,

with refrigerant piping running between the indoor and outdoor units respectively. Each second-floor indoor air handler additionally has outdoor air ducted from a roof mounted outdoor air intake hood into the return path of the air conditioners. At the time of the visit, all air handling equipment appeared to be operational and controlled through space mounted single-zone thermostats. All interior and exterior split system units are listed to have been manufactured in 2003.

23.2 RMF Recommended Changes

After observation of the existing systems, RMF proposes the following changes to be made in the upcoming renovation of the courthouse:

1. **Replacement of the PTAC Units:**

    - Replacing the PTAC units for the courthouse will allow the first floor of the building to be cooled / heated using the through wall air conditioners. The PTACs will be able to handle the sensible heating / cooling loads within each respective space. This replacement will eliminate the need for the currently utilized spot coolers and allow each room to independently heat / cool as required to maintain space set point temperature.

2. **Replacement of the Bathroom Dedicated Exhaust Fans:**

    - Replacement of the dedicated exhaust fans will allow 2021 International Mechanical Code minimum exhaust airflow to be provided to each bathroom when in use. Currently, only two of the five exhaust fans are operating, and the fans that are still operating are past their ASHRAE Equipment Life Expectancy and are recommended to be replaced.

3. **Introduction of Outdoor Air to the First Floor**

    - While walking the first floor during RMF's observation, it was observed that humidity issues were present and that the building was not positively pressurized, allowing outdoor air to enter the building where openings are present in the envelope and whenever a door to the exterior is opened. Additionally, proper ventilation is not being provided to the first floor for the building to be compliant with current mechanical codes. To fix this, RMF recommends that a dedicated outdoor air unit (DOAU) be provided for the first floor to adequately dehumidify the space, handle the latent load present on the floor that the PTAC units cannot effectively address, and provide code minimum outdoor air ventilation and positive pressurization for the first floor of the courthouse. Outdoor air is proposed be distributed to each space utilizing exposed spiral ductwork.

4. **Replacement of the Second-Floor Split System Air Conditioners**

    - Replacement of the second-floor split systems is recommended. The existing split system units were manufactured in 2003, putting the equipment age at ~22 years. ASHRAE's Equipment Life Expectancy for commercial split system air

handling equipment is listed at 19 years. To prevent equipment failure / excessive maintenance, RMF recommends the replacement of this equipment with additional outdoor air control to better modulate fresh air to the space when required and economize when possible.

In addition to the recommendations above, a general controls upgrade is recommended by RMF to observe the HVAC systems using a new Building Automation System. The existing system is outdated and requires replacement.

Division No. 26 -

Electrical

26.1 Existing Conditions

The Electrical system consists of a 1000Amp 208V/120V 3 phase 4 wire. Panel LM is rated 1000 Amps and feeds Panels A/AA and B along with the HVAC equipment OHP-1 through OHP-5. Panel A is rated 400 Amps. Panel AA is also rated 400 Amps. The panels are located in a closet that is accessible from the women's restroom. The panels are manufactured by Square-D. The date on the panel schedule indicates the panels were installed in 2004.

Panel LM

Panel A

Panel AA

Panel B/BB is located in the attic space. Panel B is rated 400 Amps and Panel BB is rated 100 Amps which is fed from Panel B with a 100 Amp branch breaker. The panels are manufactured by Square-D and the panel schedule indicates they were installed in 2004.

Panel B/BB

Lighting in the building is primarily incandescent pendants and fluorescent lights. The building also has LED exit signs and emergency lights.

The building has a fire alarm system. The main panel is located in a closet under the stairs to the second floor. The fire alarm panel is an ADEMCO panel.

26.2 RMF Recommended Changes

After observation of the existing systems, RMF proposes the following changes to be made in the upcoming renovation of the courthouse:

1. **Test emergency lights and exit signs:**

    - The existing emergency lights and exits should be tested to confirm they operate properly. Any units found to be nonfunctional should be replaced.

2. **Replace incandescent lamps with LED:**

   - Incandescent lamps should be replaced with comparable LED versions.

3. **Repair exterior receptacles.**

   - Several receptacles installed in exterior light poles are broken and need to be repaired.

PTAC Unit Specifications