

CAPITAL BUDGET PROJECT REQUEST FORM as of 3 Jan 20 (page 1 of 3)

Please provide the following information regarding your project request:

Name: Chris Sampite Date: 12/17/2020
 Title: _____ Phone No: 5286
 Department: Jackson Hall HVAC/Facilities Email Address: csampite@centenary.edu

SCOPE:

Building and Room No (s): Jackson Hall Mechanical Room

Briefly Describe Project: This request is to replace the fresh air system/correct duct work to increase air exchanges in the building. To improve air quality.

- Type of Project:** (check all that apply):
- Office Renovation
 - Classroom
 - Landscaping
 - Lab Renovation
 - Residence Hall
 - Building Repairs
 - Feasibility Study
 - IT
 - Deferred Maint.
 - Other (please describe) _____

SCHEDULING/COST:

Requested Completion Date: 07/01/2021 Est. Cost: 225000

AUTHORIZED SIGNATURES:

IT Related Approval: Scott Merritt / 1/15/2021 / Scott Merritt
For IT purchases
 Facilities Approval: Chris Sampite / 1/13/2021 / Chris Sampite
Building renovations/modifications
 Department Head: _____ / _____ / _____
Signature Date Print Name
 Vice President: _____ / _____ / _____
Signature Date Print Name

(Forward to VPFA@centenary.edu)

Date of Cabinet Approval _____

F/O/A/P: _____

DocuSigned by:
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PROJECT REQUEST FORM (page 2 of 3)

Please provide the following additional information regarding your project

All new project requests must be approved by the Cabinet and be included in the FY 21 budget before work can begin.

To facilitate the project review process, the following questions in this two-page Appendix are now required to accompany all new Project Request Form (PRF) submissions. The Appendix is an opportunity for you to explain the significance and value of the project you wish to pursue for your Department. The questions listed below are questions that must be answered for each new PRF. Incomplete forms will not be included in the capital budget schedule.

If your answers are unable to fit in the space allotted below, please feel free to provide the information in a separate document attached with your PRF submission or in an email accompanying your submission.

Q1. What is the intended funding source of this project?

Capital Budget Funds Operating Budget Funds

Specify: Capital Project Funds

Q2. What is your overall estimated cost for this project? If this PRF is for a preliminary/feasibility study for a larger project, please include your best estimate of what the larger project will cost. Please do *not* answer this question with "TBD" or "unknown" or "request an estimate" or a similar type of response. \$: 225000

Engineering study has been completed. This is phase 2 of 3 for system upgrades to address poor air quality and continuing mold issues. Futures phase 3 involves new ac units in each office/classroom with heating, cooling on demand and all new piping estimated at \$900,000.00

Q3. What is the academic need or business need that this project will fulfill?

Because of continuing mold and air quality issues for more than 10 years, faculty continue to be concerned about the environment. We do annual air quality test and it continues to show poor air quality and at times mold issues. Should an office stay closed up for any period of time, mold begins to show on furniture and books due to limited air exchanges. We run the HVAC 24 hours per day in the summer to help keep control of the mold raising our energy cost. High humidity is very noticeable in the building. We replaced the chiller November 2020 to increase it's capacity based on engineering recommendations.

Facilities Director's Comments:

IT Director's Comments:

PROJECT REQUEST FORM (page 3 of 3)

APPENDIX

Please provide the following additional information regarding your project

Q4. What are the current limitations of the existing space? (In other words, why is this project request necessary?)
Health concerns due to poor air quality from low air exchanges.

Q5. Why is it important that this project happen *this FY* (as opposed to happening in a future FY)?

To address air quality and mold.

Q6. Does this project request support a new initiative, new position, or new employee? If yes, please briefly describe and include the names and positions of the new hires/candidates if known at this time.

No

Q7. If this project request is not approved, what effect will this have on your operation?

continued poor air quality and mold growth causing unhealthy teaching environment.

Q8. Is this a one-time annual cost? YES NO If NO, will it require additional on-going annual funding and do you have those funds and VP support for those annual costs? YES NO



HVAC SYSTEM REVIEW

**Centenary College
Jackson Hall**



PURTLE + ASSOCIATES, L.C.
Louisiana Registered Engineering Firm #2354

Purtle + Associates Job #20062

March 13, 2020

For Review

A walk through was conducted of the reference building with Chris Samplite and maintenance staff to review the existing HVAC (heating, ventilation, and air conditioning) systems. The following are general observations from the walk through, review of existing plans from a 1987 renovation, and discussions with maintenance personnel. This is not an exhaustive review.

Existing Conditions

The building HVAC system consists of a two-pipe hydronic system with a 65 ton air-cooled chiller and an 840 MBH gas-fired boiler. A pair of 78 gpm pumps distribute either chilled water in cooling mode or heating water in heating mode through a two-pipe distribution system to individual fan coil units (FCU) located throughout the building. Each fan coil unit provides conditioned air to the zone it serves. Outside air is provided to the building through a dedicated ventilation air handling unit located on the second floor. Outside air is supplied into the plenum space above the corridor ceiling on each floor through a system of ductwork.

A central exhaust fan believed to be located on the roof, serves the building restrooms and does not appear to be working.

The existing control system in the building is pneumatic.

Findings:

The fan coil units have exceeded their useful life and replacement parts have become obsolete. The fan coil units utilize the corridor ceiling space as part of the return air path which is not allowed by current code. The distribution system piping is in poor condition with frequent repairs needed. The ventilation air handling unit does not have the capacity to dehumidify the outside air supplied to the space on hot days. The unit also supplies ventilation air into the ceiling space instead of into the occupied spaces as required by current code.

Recommendations:

Option 1: Replace the Outside Air System

Provide new chiller and outside air unit with distribution ductwork to each zone or fan coil unit. The existing chiller does not have the capacity needed to dehumidify the required amount of outside air for the building. Additional chiller capacity is needed.

Opinion of probable construction cost: \$289,900

Option 2: Replace FCUs w/4-pipe system

In addition to Option 1, include new FCUs with new 4-pipe chilled water and heating water piping.

Opinion of probable construction cost: \$915,000