

From: [Jensen, Janelle](#)
To: [Evans, Kelsey](#)
Subject: FW: Milw. County Parks File 20-771 Item #40 WP72901 Boerner Garden House Boiler Replacement
Date: Tuesday, October 20, 2020 7:34:29 AM
Attachments: [image001.png](#)
[WP7130_BoernerGardenHouseBoiler_Charter.20200519.docx](#)

Referral Response from Friday.

From: Lucas, Jeremy <Jeremy.Lucas@milwaukeecountywi.gov>
Sent: Monday, October 19, 2020 2:43 PM
To: Haas, Jason <Jason.Haas@milwaukeecountywi.gov>; Johnson Jr, Willie <Willie.Johnson@milwaukeecountywi.gov>; Moore Omokunde, Supreme <Supreme.MooreOmokunde@milwaukeecountywi.gov>; Taylor, Sequanna <Sequanna.Taylor@milwaukeecountywi.gov>; Czarnezki, Joseph <Joseph.Czarnezki@milwaukeecountywi.gov>; Rolland, Shawn <Shawn.Rolland@milwaukeecountywi.gov>; Sumner, Liz <Liz.Sumner@milwaukeecountywi.gov>
Cc: Smith, Guy <Guy.Smith@milwaukeecountywi.gov>; Petersen, Emily <Emily.Petersen@milwaukeecountywi.gov>; Cady, Steve <Stephen.Cady@milwaukeecountywi.gov>; Jensen, Janelle <Janelle.Jensen@milwaukeecountywi.gov>
Subject: Milw. County Parks File 20-771 Item #40 WP72901 Boerner Garden House Boiler Replacement

Members of the Finance Committee,

Proposed project WP72901 Boerner Garden House Boiler Replacement includes funding for *planning & design* to replace the existing steam boiler (with piping and steam radiation) with a new hot water boiler including new hot water piping and new radiation in the amount of \$105,418 from GO bonds. Subsequent appropriations are currently estimated at \$676,680.

Attached is the project charter and the link to the narrative in the proposed capital budget can be found [here](#). According to the project charter

- The current steam boiler system requires \$6,000 – 8,000 / year maintenance expenses in staff time and rebuilding equipment as it fails.
- The entire building smells musty due to improper ventilation. This odor limits the attractiveness for venue rentals.
- The existing steam system is more hazardous to work with than other options and therefore present a safety problem and possibly higher insurance risk

Parks staff comments inform us that the boiler has a leak at startup and the gasket should hold under this circumstance but does not. This boiler has been replaced twice and it is parks experience that all boilers manufactured by this company have failed in steam service. A more cost effective approach is to replace the steam system with a hot water boiler system.

The proposed funding is for planning and design. Under the design first guidelines of the Capital Improvements Committee the earliest this boiler will be addressed is in the 2022 capital budget.

Below is a picture of the boiler existing condition:



If you have additional questions please contact me!

Jeremy Lucas
Director of Administration & Planning

Milwaukee County Parks

T: 414-257-4775 / 414-639-5848

Jeremy.Lucas@milwaukeecountywi.gov

countyparks.com



CAPITAL PROJECT CHARTER

Project Name: Boerner Garden house Boiler Replacement
Project Number: WP71301
Client Department: Department of Parks, Recreation and Culture
Project Manager: Vijay Mehta
Charter Last Update Date: 05/19/2019

1. Scope overview:
 - a. Remove existing steam boiler. Replace with a new HVAC system that complies with building code requirements. Include AC for first and second floors and improved ventilation.
 - i. Possible split / nonstandard system for the different floors.
2. Why is the project required?:
 - a. VFA Requirements:
 - i. The boiler and gas piping repairs being rated 1-curently critical with a suggestion action date of 2015.
 - ii. The boiler condensate piping is listed as 2-potentially critical with a suggested action date of 2017.
 - iii. The combustion air intake is listed as 2-potentially critical with a suggested action date of 2017.
 - iv. The thermostat controls are listed as 2-potentially critical with a suggested action date of 2017.
 - b. The current steam boiler system requires \$6,000 – 8,000 / year maintenance expenses in staff time and rebuilding equipment as it fails.
 - c. The current steam boiler burner firing rate is higher than the calculated load causing short cycling.
 - d. The entire building smells musty due to improper ventilation. This odor limits the attractiveness for venue rentals. By improving ventilation, staff anticipates an additional 10 – 20 rentals per year at approximately \$500/rental (\$5,000 - \$10,000 annually).
 - e. The existing steam system is more hazardous to work with than other options and therefore present a safety problem and possibly higher insurance risk.
3. Background (Additional project details if necessary):
 - a. See Appendix A for VFA reports.
4. Schedule:
 - a. Projected project schedule TBD: Tentative 2021 design, winter 2023 construction.
 - b. Best construction time for Boerner is January – March.



CAPITAL PROJECT CHARTER

- i. Other times possible with advanced planning with Boerner staff (Shirley).
 - c. Basement work could be completed at any time.
- 5. Success criteria (How will we know the project is successful?):
 - a. No musty odor on ground floor
 - b. Increase in facility rentals
 - c. Less system maintenance.
 - d. Easier to use system.
- 6. Risks:
 - a. Risks if project is delayed.
 - i. Steam is a safety hazard.
 - ii. Ongoing O&M costs to operate existing system.
 - iii. Less revenue from rentals.
 - iv. Asbestos remains in building.
 - b. Risks with accomplishing the project.
 - i. Unknown abatement costs of asbestos pipe wrap.
 - ii. Old building
 - 1. Thick walls
 - 2. Structural considerations for upgrades.
 - 3. This building is a County Historical Building (it says “landmark” on building). This may limit what the project can alter.
 - iii. Construction delays could impact rentals.
 - iv. Removing steam boiler may mean the project needs to consider de-humidification of basement.
 - v. Unsure ADA status of building and bathrooms. Unsure of this project would trip upgrade requirements.
 - 1. ADA ramp in back, but not front. Bathrooms are not ADA accessible.
 - vi. Building envelope may need to be updated based on code requirements.
- 7. Assumptions (What is in/out of the scope, etc.):
 - a. The ground level and second floor would be “occupied space”.
 - i. 2nd floor is infrequently occupied throughout the year, but heavily used for special events such as China Lights.
 - b. The basement would be “storage”.
 - i. County staff would move the basement label machine to 2nd floor or other location.
 - c. No Metasys system to be installed.
 - d. County might want to salvage the old radiators from the building for Charles Allis, etc..
- 8. Constraints (Consider prioritizing: Scope, Schedule, Quality, Budget):
 - a. Ranked in order of importance: scope, budget, schedule then quality.



CAPITAL PROJECT CHARTER

9. Budget

(Who is paying and how much?):

- a. Capital
- b. Possible friends group funding. Unlikely.
 - i. What is a strategy to identify if this is possible?

10. Other required resources (People, equipment, services, etc.):

- a. NA

11. Operations & Maintenance (O&M and total lifecycle considerations and costs):

- a. Maintenance costs of existing system very high. New system would significantly reduce maintenance costs.
 - i. The current steam boiler system requires \$6,000 – 8,000 / year maintenance expenses in staff time and rebuilding equipment as it fails. (Any thoughts on how much O&M costs for the new system? Would we reduce annual maintenance in half?)
- b. Project would allow for an increase in rental revenue.
 - i. By improving ventilation, staff anticipates an additional 10 – 20 rentals per year at approximately \$500/rental (\$5,000 - \$10,000 annually).
- c. Possible reduction in insurance liability of using a steam-based system. (Email in to Megan Rogers to see if Risk can quantify this).

12. Stakeholders (Client department rep, key contacts, regulator key contacts, etc.):

- a. Shirley Walczak – Boerner Director
- b. Friends group
- c. Parks maintenance
 - i. Dayton Davenport – Heating Supervisor
 - ii. Blake Prusak – Mech Services Manger
- d. Park visitors
- e. Facility renters
- f. Parks marketing – could possibly market this building for more rentals.
- g. Historic building advocates
- h. Regulators

Client Department Signature:

Capital Planning Manager Signature: