

Memorandum



CITY OF DALLAS

DATE April 21, 2023

TO Honorable Mayor and Members of the City Council

SUBJECT **Dallas City Hall Heating System Upgrades**

The Building Services Department (BSD) has been working with the City Manager's Office (CMO) and Office of Budget and Management Services (BMS) to plan and fund needed upgrades to Dallas City Hall's (City Hall) heating system. A comprehensive plan has been developed to make the required repairs over the summer and early fall.

City Hall's current steam boiler system and associated piping is original to the facility's construction in 1976, and carried an original expected useful service life of approximately 30 years. As a result, the current heating infrastructure can no longer efficiently heat the facility as required, and the deteriorated condition of the steam piping system has already led to failures and flooding, requiring costly cleanup and repairs.

To ensure timely and efficient completion of this project, prior to the onset of cold weather, BSD will be utilizing an existing HVAC master services agreement, previously approved by City Council to complete this project. The project is estimated to cost approximately \$4.5M; BSD will use major maintenance funds supplemented by American Rescue Plan Act (ARPA) funds, for qualifying expenses, as allowable and appropriate. Additional appropriations, required to fund this project, will be included as a part of BMS' FY23 mid-year budget ordinance.

Major components of this project's scope include:

- Environmental remediation and disposal of asbestos insulation
- Demolition and removal of existing steam piping infrastructure (main loop)
- Installation of new hot water piping infrastructure (main loop)
- Demolition, removal, and disposal of existing steam boilers (3)
- Installation of new high-efficiency hot water boilers (4)
- Replacement/modernization of air handler units serving the heating system
- Commissioning of new heating system

Potential street and/or parking lot closures required for crane installation, and/or helicopter equipment delivery, will be scheduled after-hours and communicated to all necessary stakeholders in advance. Every effort has been made to minimize impact and noise created by the required project. The most disruptive and noisy portions of work will be scheduled after-hours, however, given the very tight deadline and large scope of this project, some disturbances, including those during business hours, will be unavoidable.

The tentative timeline for this projects is:

Date	Activity
April 2023	<ul style="list-style-type: none"> • Equipment ordered • Environmental abatement
May 2023	<ul style="list-style-type: none"> • Environmental abatement • Demolition of boilers, electrical, and piping
June – July 2023	<ul style="list-style-type: none"> • Roof support installations • Pipe delivery • Coring and pipe installation • Installation of air handlers, coils, and pumps • Piping insulation
August 2023	<ul style="list-style-type: none"> • Boiler installations
September 2023	<ul style="list-style-type: none"> • Boiler installations • Heating system commissioning

Once completed, these upgrades will markedly improve City Hall’s heating capabilities, occupant comfort, and provide additional energy efficiency and cost savings to the City.

Benefits from this upgrade include, but are not limited to:

- Reduction of natural gas usage at City Hall (~20% annually)
- Elimination of outdated and inefficient systems (steam to hot water exchangers)
- Reduction of chemical water treatments, required by current steam system
- Eliminate need to run boilers in summer months (current system runs year-round)
- Restores equipment redundancy, improving efficiency, and allowing for maintenance and repairs to be completed without impacting facility heating
- Eliminates problematic steam traps which require excessive staff time to manually identify and address
- Reduced work orders and staff complaints related to building temperature
- Boiler equipment is covered by manufacturer’s 25 year warranty

Due to previously deferred maintenance, additional upgrades to City Hall’s HVAC infrastructure will be required in the coming years, such as: piping replacement for the secondary water loop, engineering studies and retrofits to address air handling issues on levels L1 and L2, installation/upgrade of HVAC controls to aid in building automation, and continued conversion to environmentally-friendly refrigerant for non-compliant equipment.

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Should you have any questions or require additional information, please contact John Johnson, Director, Building Services Department at john.johnson2@dallas.gov.



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