PROSPECTUS – ALTERATION
JAMES A. BYRNE U.S. COURTHOUSE
PHILADELPHIA, PA

Prospectus Number: PPA-0278-PH23
Congressional District: 3

FY 2023 Project Summary

The General Services Administration (GSA) proposes a repair and alteration project for the James A. Byrne U.S. Courthouse (Byrne USCH), located at 601 Market St. in Philadelphia, PA. The proposed project will upgrade the heating, ventilation, and air conditioning (HVAC) system, which includes comprehensive repairs or replacement of obsolete air handling units and degraded ductwork, and the installation of enhanced controls and related electrical and life-safety upgrades.

FY 2023 Committee Approval and Appropriation Requested

(Design, Construction, and Management & Inspection).....$83,955,000

Major Work Items

Heating, ventilation and air conditioning (HVAC), electric and life-safety upgrades; demolition; and interior construction

Project Budget

Design	$7,349,000
Estimated Construction Cost (ECC)	71,028,000
Management and Inspection (M&I)	5,578,000
Estimated Total Project Cost (ETPC)	**$83,955,000**

*Tenant agencies may fund an additional amount for alterations above the standard normally provided by GSA.

Schedule	Start	End
Design and Construction	FY 2023	FY 2030

Building

The Byrne USCH, along with the adjoining William J. Green, Jr. Federal Building (Green Federal Building), is part of a 1.7-million gross square foot (GSF) Federal complex in downtown Philadelphia known as the Byrne-Green Complex. It is the largest federally owned complex under GSA's jurisdiction, custody, and control in the Philadelphia area. The Byrne USCH, which comprises approximately 860,000 GSF, was designed along with the Green Federal Building to share common mechanical systems. The first floors are linked by a common circulation area, which includes a ceremonial courtroom and plaza. The complex also shares an underground parking garage.

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Tenant Agencies

Judiciary–Court of Appeals, District Court; Department of Justice–U.S. Marshals Service, Federal Bureau of Investigation; and GSA

Proposed Project

The project proposes to upgrade the deficient HVAC system, including replacement of the impaired air handling units. Portions of the HVAC distribution system will be upgraded to a variable air volume network and the existing perimeter heating systems will be balanced with the new distribution network to enhance control, optimize efficiency, and improve tenant comfort. Ductwork will be replaced or comprehensively repaired to mitigate additional damage that has already caused blockages and air leaks. Secondary boilers will be added to the common mechanical plant to provide hot water for reheat coils in the variable air volume devices. The building automation system (BAS) will be upgraded to integrate the controls for all HVAC components and incorporate control points for all building systems.

Demolition will be required to access the required components being replaced or upgraded. Abatement of asbestos-containing materials will be undertaken in mechanical spaces and around ductwork. Electrical and life-safety upgrades resulting from the HVAC component upgrades and distribution network changes will be undertaken, where required.

GSA will execute the project while the building remains occupied by tenant agencies, coordination with the tenant agencies. Coordination and careful phasing is critical to ensuring that there is no mission disruption. This approach leads to a longer execution timeframe, however it allows GSA and the agencies to avoid the costs associated with buildout and occupancy of leased swing space.

Major Work Items

HVAC Upgrades	$51,710,000
Demolition	8,463,000
Electrical Upgrades	6,062,000
Life Safety Upgrades	2,444,000
Interior Construction	2,349,000
Total ECC	**$71,028,000**

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Justification

The Byrne USCH supports the operations of the U.S. Court of Appeals for the Third Circuit and the U.S. District Court for the Eastern District of Pennsylvania. A majority of the HVAC system components are original to the building and past their useful lives. The air handling unit casings are in very poor condition, with condensate leaking, corrosion, and air leakages, thereby reducing energy efficiency and increasing operating costs. The ductwork is damaged, causing further air leakage and reduced energy efficiency. The duct lining has significant fraying, which has led to obstructions, energy inefficiency, and tenant comfort issues. Current control constraints limit overall system effectiveness, with the BAS using outdated technology and with perimeter and interior HVAC systems inadequately connected to the BAS. Fire and life-safety code deficiencies, recalled sprinkler heads, and outdated sprinkler piping require correction.

Given the condition of the existing HVAC system, there is increasing risk for system failure and outage to portions of floors. These failures would lead to a significant disruption to the judiciary's ability to meet caseload requirements. If tenant agencies were forced to relocate due to a system failure or outage, costly leased space would be required because there is no vacancy within the Byrne USCH.

Summary of Energy, Water, Sustainability, and Climate Risk Compliance

This project will be designed to conform to requirements of the *Facilities Standards for the Public Buildings Service*. GSA will focus on design and construction opportunities to increase energy and water efficiencies to minimize operating costs and greenhouse gas emissions, to incorporate sustainable design principles into projects, and identify and minimize climate risk liabilities above the minimum performance criteria in a manner that is life-cycle cost effective.

Prior Appropriations

None

Prior Committee Approvals

None

Prior Prospectus-Level Projects in Building (past 10 years)

None

Alternatives Considered (30-year, present value cost analysis)

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There are no feasible alternatives to this project. This is a limited scope renovation, and the cost of the proposed project is far less than the cost of leasing or constructing a new building.

Recommendation

ALTERATION

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Certification of Need

The proposed project is the best solution to meet a validated Government need.

Submitted at Washington, DC, on 4/6/2022

Recommended: _____
Commissioner, Public Buildings Service

Approved: _____
Administrator, General Services Administration