CITY OF LOS ANGELES INTERDEPARTMENTAL CORRESPONDENCE

Date: January 25, 2024

To: Municipal Facilities Committee

From: Steven Fierce, AIA

Principal Architect/Municipal Facilities Program Manager

Bureau of Engineering

Arthur Sales, CISSP ()

Information Systems Manager II

Enterprise Systems & Operations Services

Information Technology Agency

Subject: CITY HALL EAST (CHE) ITA SERVER ROOM UPGRADE PROJECT

UPDATE - CLOSE OUT PHASE I AND AUTHORIZE PHASE II,

COMMITTEE MEETING, JANUARY 25, 2024

It is recommended that the MFC:

- 1. Approve the CHE ITA Server Room Upgrade Phase II (Project No. G1172) scope of work.
- 2. Approve the CHE ITA Server Room Upgrade Phase II (Project No. G1172) estimated project budget of \$2,300,000.
- 3. Approve the CHE ITA Server Room Upgrade Phase II (Project No. G1172) project schedule with a construction completion date of September 30, 2026.

I. Background

As part of the broader effort to upgrade the electrical and mechanical system for the City Hall East (CHE) and City Hall South, on February 25, 2016, the Municipal Facilities Committee (MFC) approved a construction budget of \$8.96 million for the ITA Server Room Upgrade Project based on the recommendation of studies and report of IBI Group (now known as Arcadis IBI Group).

In the course of the construction, additional expenses were incurred from the expanded project scopes, including the relocation of the ITA Staff Offices, hazardous materials abatement, adjustments for ADA upgrades, the ITA data center migration, and other unforeseen site conditions. After reaching 90% completion of the Phase I, the project was halted due to the budget constraints and the need to redefine the remaining scope.

On February 25, 2021, the MFC approved a joint recommendation from the Bureau of Engineering (BOE) and ITA, advising the closure of the project at the end of Phase I. It

was proposed to reevaluate and redesign the remaining construction tasks within Phase II. An additional of \$218,367 was granted to cover the new soffit, ceiling, and flooring tile repairs, painting, and minor Phase I project closing expenses.

As of February 14, 2023, the final inspection for the last open permit (B15LA17239) has been completed, marking the completion of Phase I's scope of work. The commissioning of the chiller plant will be deferred to Phase II, meaning it will not be in operation. However, it will be properly maintained until the rest of the HVAC system for Phase II is in place.

II. Scope

Phase I (Completed)

Phase I of the CHE ITA Server Room Upgrade involves several components, including expansion of the server room and workspace, ADA upgrades, installation of a new independent chiller plant, addition of new Computer Room Air Conditioning (CRAC) units in both the Phase I server room and the new communication room, modifications to the fire alarm and pre-action fire sprinkler system, as well as various upgrades to the associated mechanical and electrical infrastructure.

The final inspection of the chiller was successfully completed on February 08, 2023, and the comprehensive final inspection of the building, including fire and life safety inspections, was subsequently approved on February 14, 2023.

With the last building permit being finalized on February 14, 2023, Phase I Termination has been successfully concluded. To date, the GSD/CFD has completed the construction and inspection of the following:

- a) Phase I Server Room (new) on P4 (2,849 sqft) with a Cold-Aisle Containment System and four Computer Air Conditioning (CRAC) Units.
- b) Communication Room (new) on P4 (1,200 sqft) with two CRAC units.
- c) Workroom and work area (new) on P4 (1,666 sqft).
- d) Mechanical Room (new) on P3 (1,240 sqft).
- e) The Closed Loop Free Cooling Chiller Plant (new) in the new mechanical room on P3.
- f) The Double Interlocked Pre-Action Fire Sprinkler System and the fire alarm system both on the P3 and P4 levels.
- g) The soffit to separate the open deck area from the suspended ceiling area.
- h) The floor and ceiling repairs in the construction area.







Picture 03: Completed Soffit and Painted Ceiling



Picture 04: Installed Chiller Plant & Completed Mechanical Room on P3



Picture 05: Equipment Component Inside the Chiller Plant

Phase II

Due to the rapid advancement of cloud computing and data processing technology, the new servers installed are more efficient and produce less heat than initially assumed in the design. This updated technology has reduced the heat load to the point where it no longer meets the minimum operational conditions of the original chiller plant design, rendering the chiller plant non-operational. Consequently, despite all tests and the final inspection being approved, the chiller plant remains offline.

Given these new operating conditions, installation of the remaining four CRAC units per the original plan is no longer necessary. They will either be stored as backup units or utilized in other projects.

During the Phase I closeout process, it became evident that repurposing the remaining server room areas (C402-A and C402-B) is no longer a priority for the client department. As a result, the initial proposal to conduct a feasibility study for repurposing this space has been removed from the scope of the revised Phase II.

As previously outlined, the revised Phase II scope (Project G1172/W.O. E1908895) aims to ensure that all equipment installed in Phase I functions as intended.

In summary, the Phase II revised scope will include the following:

- 1. Electrical scope to provide power redundancy to the existing communication room C404 and connect the 1200 amp Circuit Breaker to the MSW North.
- 2. Mechanical scope to provide cooling to the existing communication room C404 and reroute the existing cooling system on P4 Level to accommodate additional heat loads and meet the minimum operational requirements of the installed chiller plant.
- 3. Commissioning of the installed mechanical and electrical equipment in Phase I and II, with adjustments and repairs as necessary.
- 4. Addressing operation and maintenance concern items identified on Oct 11th, 2022, including:
 - a. Applying a water-resistant floor coating within the chiller plant room and UPS room.
 - b. Clearly delineating the emergency exit route from the UPS room to the exit door of the chiller plant room by marking the floor and removing signage from the UPS room side to eliminate confusion.

III. Budget and Funding

Funding History

On February 25, 2021, the MFC approved the Phase I project closeout cost of \$340,000. This amount covered the remaining balance of the project, as well as an additional \$218,367 for the added scope during the closeout process.

In the "2020-21 Fourth Construction Projects Report" (Council File No. 20-1021-S3, dated April 7, 2021), final funding adjustments for Phase I were detailed, including the authorization of an additional \$218,367 in Municipal Improvement Corporation of Los Angeles (MICLA) funding.

In the "2020-21 Fifth Construction Projects Report – Addendum" (Council File No. 20-1021-S4, dated May 20, 2021), \$188,367 from the Capital Improvement Expenditure Program (CIEP) was allocated to the budgetary accounts of the GSD.

In the Mayor's 2021-22 Budget, \$1,250,000 was designated for Phase II Improvements under the Office Development and Capital Program. This funding was appropriated to the GSD and assigned to account 298/40/40V26K.

In the Mayor's 2023-24 Budget, an additional \$1,174,712 was approved for Phase II Improvement under the Capital and Technology Improvement Expenditure Program.

Phase I Project Budget Status:

Project Phases	Amount Appropriated	Total Expenditure	Balance
Design	\$443,404.82	\$421,373.64	\$22,031.18
Construction	\$6,595,404	\$6,595,403.47	\$0.53
Total	\$7,038,808.82	\$7,016,777.11	\$22,031.71

Phase II Project Budget

1. Project Cost Estimate of the Phase II

Item Description	Cost
Pre-Design	\$79,000
BOE Cost	\$192,000
Design Cost	\$196,000
Design Cost Total	\$467,000 ¹
Construction	\$1,370,000
Construction Contingency	\$206,000
Other Direct Cost (Permit, Inspection, etc.)	\$58,000
Construction Cost Total	\$1,634,000
Project Escalation ²	\$199,000
Project Total	\$2,300,000

2. Available Funding

Funding Source	Fiscal Year	Amount
MICLA	2021-22	\$1,250,000
MICLA	2023-24	\$1,174,712
Total		\$2,424,712

IV. Schedule

Phase I

Phases	Original	Dates	Actual	Dates
Design	06/15/2015	03/01/2017	06/15/2015	03/01/2017
Construction	10/04/2017	06/03/2020	10/04/2017	02/14/2023
Post Construction	06/04/2020	11/04/2020	02/15/2023	09/30/2023

Phase II

Phase	Start	End
Predesign	10/01/2023	03/31/2024

¹ BOE staff cost may be absorbed by the Bureau or alternative funding source identified by CAO. ² Escalation is calculated at 12% to the mid-point of the construction.

Design	04/01/2024	03/31/2025
Bid & Award	04/01/2025	10/01/2025
Construction	10/02/2025	09/30/2026
Post Construction	10/01/2026	03/30/2027

V. Project Status

Phase II design scope will be provided by the BOE in-house design team, and the predesign is 80% complete. Based on the schedule, the project will go into the design phase in the month of April 2024.

An amount of \$66,065 has been transferred to GSD's budgetary accounts in the first CPR of fiscal year 2023-24 to fund the additional design support during the pre-design of Phase II. GSD staff will aid in the data collection, as-builts, and any field investigation as needed.

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