Legislation Text

File #: 19-0327, **Version:** 1

TO:
Honorable Mayor and Members of the City Council

THROUGH:
Bruce Moe, City Manager

FROM:
Stephanie Katsouleas, Public Works Director
Prem Kumar, City Engineer
Mamerto Estepa Jr., Senior Civil Engineer

SUBJECT:
Consider Approving Amendment No. 1 to the Professional Services Agreement with Kitchell/CEM, Inc. for $182,784 for Design Services to Repair/Upgrade the City Hall Heating, Ventilation, and Air Conditioning (HVAC) System (Public Works Director Katsouleas).
ADOPT RESOLUTION NO. 19-0087

RECOMMENDATION:
Staff recommends that City Council approve Amendment No. 1 to the Design Services Agreement with Kitchell/CEM, Inc. (Kitchell) for an additional $182,784 for design services for the City Hall Heating, Ventilation, and Air Conditioning (HVAC) system based on Improvements Package 1 (with Additive Items) recommendations identified in the City Hall HVAC Improvements Final Report dated July 2, 2019.

FISCAL IMPLICATIONS:
The HVAC System Repair/Upgrade Project is included in the Fiscal Year (FY) 2019-2020 approved Capital Improvement Program (CIP) and sufficient funds are available to complete the design services scope of work for $182,784. The Budget and Expenditure Summary is attached.

BACKGROUND:
Manhattan Beach City Hall was built in 1974 and consists of two levels with approximately 27,500 square feet of office, administrative, and public spaces. The configuration of office space within and utilities serving the building have been modified multiple times through the years, including an HVAC retrofit in 1985.

The existing HVAC system consists of multiple air handling units, air cooled chillers, hydronic pumps, exhaust fans, and variable air volume systems (VAV). This equipment has reached the end of its expected useful service life and is now experiencing operational problems, including periodic system failures and irregular temperature controls. The rusted internal components of the HVAC systems have begun to fail, leading to an increased number of maintenance calls during normal work hours and after hours r to address thermal discomfort. This has, in turn, created problems for the working

environment of nearly 100 employees located in City Hall.

In response to these system failures, the City issued Request for Proposal (RFP) 1182-19 to complete an assessment of City Hall's existing HVAC system's performance, the prioritization of critical system improvements into manageable budget packages, and the development of alternative system improvement options. Design and construction phase services were not included in the scope of services. However, the RFP was prepared in anticipation of needing design services, and respondents were evaluated based on their ability to provide those services. The City reserved the right to add both design and construction support services to the original awarded contract through amendments. Kitchell was awarded $49,900 to complete the assessment based on its experience, team, responsiveness to the RFP, and its ability to provide these additional design and construction support services.

Additionally, prior to Kitchell's assessment of City Hall's HVAC system, the City hired American Air Balance Company, Inc. (AABC) to measure the existing performance of City Hall's HVAC systems as well as document the condition of the existing equipment as a basis for understanding what repair, upgrade and system modification options were possible.

DISCUSSION:
The City's HVAC system components have reached the end of their expected useful life and are now in need of replacement. Corrosion is observed throughout the three air handler units (Attachment). Continued operation of the existing equipment is causing further deterioration and approaching the point where the equipment will no longer function properly to provide the needed thermal comfort for City Hall employees. In addition, the HVAC control system is outdated and has exceeded its effectiveness in managing variable air volume (VAV) boxes and other system components that are involved in the distribution of cooled air to the building.

A number of VAVs measured showed that there was no air flow. Some were due to a lack of controls being connected to the VAV box, while others were due to incorrectly installed ductwork and diffusers, and some VAVs had bad controllers.

Kitchell prioritized the needed system improvements into three categories:

1. Package 1: Critical replacement items and additive alternate items;
2. Package 2: Impending replacement items; and
3. Package 3: Maintenance items.

Package 1 identifies the mechanical equipment that is necessary to replace in order to keep the building HVAC system operational. It provides the greatest impact on improving thermal comfort, overall mechanical performance and energy usage. Package 1 calls for replacing old equipment with new equipment in a like-for-like fashion. It also identifies additional items that could be installed, but may also be deleted from the scope of work depending on the bids received and available funding for the project.

Package 2 builds upon the improvements specified in Package 1 by identifying for replacement the components related to the ductwork and air distribution devices that deliver cooled air to the building. These components would also be replaced in a like-for-like fashion.

Package 3 identifies maintenance items that can be performed by the City's in-house staff, such as the replacement of bird screens. There is no additional CIP cost to implement these measures and they can be accomplished within existing resources.

For cost comparative purposes, Kitchell also estimated how much it would cost to design and install a completely new system that would give employees the largest flexibility of individual office thermal comfort control and greatest enhancement to the building's system and energy performance. A new HVAC system was much more expensive than Packages 1, 2, and 3 combined.

The estimated cost for each Package is as follows:

Package 1 with Additive Alternate Items	$1,358,937
Package 2	$332,639
Package 3	$277,962
Completely New System	$3,282,687

Package 1 provides the highest overall benefit when considering both cost and features (see Executive Summary Page 6). Furthermore, the cost of Package 1 is less than half of the cost for a completely new, optimized HVAC system.

The next step in repairing/upgrading the City Hall's HVAC system is to proceed with design services to develop plan and specifications for the project. Kitchell has submitted a proposal for design services for Package 1, as well as for bidding and construction support for the project, for a total of $182,784. Design of the project involves development of detailed construction documents (plans, specifications, and engineer's estimate) for the project. These construction documents will be used for obtaining the necessary approvals and permits from the City's Community Development Department, as well as for bidding the project. During bidding, Kitchell will assist the City in responding to all Requests for Information (RFIs), issuing addenda, and reviewing the bids. Once the construction bids are received, the information will be provided to City Council for construction award determination.

PUBLIC OUTREACH:
No public outreach was conducted in preparation of recommending approval of this amendment. Public outreach will occur at the appropriate time as plans are developed and we near bidding and construction.

ENVIROMENTAL REVIEW:
The City has reviewed the proposed project for compliance with the California Environmental Quality Act (CEQA) and has determined that the project qualifies for a Categorical Exemption pursuant to Section 15301 Class 1 (repair and maintenance of existing public facilities, involving negligible or no expansion of use) of the State CEQA Guidelines.

LEGAL REVIEW:
The City Attorney has reviewed this report and determined that no additional legal analysis is necessary.

ATTACHMENTS:

1. Resolution No. 19-0087
2. Amendment No. 1 - Kitchell/CEM, Inc.
3. Agreement - Kitchell/CEM, Inc. (2019)
4. Budget and Expenditures
5. City Hall HVAC Improvements (Executive Report)
6. Existing Conditions Photos
7. City Hall HVAC Improvements Final Report