

CITY HALL AND POLICE BUILDING

DRAFT CONDITION ASSESSMENT REPORT MAY 2022

Greg Armendariz, PE
Project Executive, SMC

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EXECUTIVE SUMMARY

The City Hall and Police building was built approximately in 1977 and has served the City well over the last 45 years. There have been some tenant improvements in the Police Department, some office expansion in the Engineering area of City Hall, replacement of one air handler, and structural seismic retrofit work to the building. Overall, the entire facility is in good condition, with normal wear and tear, and some infrastructure that is reaching its' design life. Recommended improvements include a combination of infrastructure replacement, code upgrades and modernization improvements.

This assessment effort is to provide the City with a snapshot condition assessment of these facilities, recommended improvements, and most important, a preliminary cost estimate for program level budgeting in the City's Capital Improvement Program (CIP).

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1. BUILDING SYSTEMS & ELEMENTS

Our review of the facility included the following building elements:

- Mechanical – HVAC system
- Electrical – power and lighting
- Plumbing
- Life Safety – Fire Suppression and Fire Alarm
- ADA
- Telecommunications & Technology
- Office Environment including conference rooms and Council Chambers
- Site – parking lot and access
- Building shell

The following items are Not included in our review and are recommended for engineering review and analysis, by the appropriate consultants are:

- Structural system
- Geotechnical review

For purposes of providing the City with a comprehensive program budget, we have included some assumed costs for these two items, which would be adjusted, upon completion of the recommended engineering evaluations.

2. INITIAL ASSESSMENT:

- a) Building Code Upgrades – Since the original construction of this facility, there have been numerous Building Code revisions. The following Building Code evaluations and upgrades are recommended to be included in a Program Budget:
- i) Fire Suppression System – Add new system on both floors, this includes installation of a new fire service line to the building from the street.
 - ii) ADA – restrooms and exterior walkways to entries. Restroom ADA improvements will require modifications to increase the floor space areas; and the exterior walkways will require reconstruction with more gentle slopes and platforms.

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iii) Electrical Vehicle Charge Stations for public and employees – we estimate 6 to 8 charge stations are required with the current building code. However, this number will increase significantly, with the next Building Code revision. This also does not consider the library needs, as this was not part of this scope.

iv) Seismic Analysis to determine if additional seismic retrofit work is required. Although the building was seismically retrofitted over 10 years ago, this analysis is highly recommended because City Hall/PD is an Essential Facility and needs to remain operational after a major seismic event.

b) Soil Settlement at northwest building corner – The City Hall and Police building is founded on a fill embankment, and over the years, some settlement has occurred at the northwest corner of the building which has caused some cracks on the concrete floor slabs and wall. A geotechnical evaluation is required to assess other possible settlement areas below the foundation, which are not visible nor currently known. There may be some repairs of the fill required, before repairing the cracked concrete areas. This can include low pressure grout injection, below the foundation.



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c) Infrastructure Replacement

- i) IT – upgrades to the building fiber optic cabling, high speed data service drops to all offices, workstations and conference rooms, servers, terminations, and racks are needed. In addition, the Main IT room is too small for additional servers/rack systems, and improvements to cooling system are required. Relocation of the Main IT room to an adjacent larger room is possible with some room modifications.



- ii) HVAC system – two of the rooftop HVAC units are approaching the end of their service life. The HVAC system air supply and return zones in several office spaces require “re-zoning” and adding more zones. This will improve the air supply and air return capacity and provide more complete and frequent air exchanges. The work would involve adding more supply and return registers and ductwork modifications, and Variable air Volume (VAV) boxes, to provide better temperature controls, and more importantly to improve the air exchanges in these spaces.

Replacement of the roof top HVAC units, with higher capacity units. These new HVAC units will improve the quality of the air supply with higher filtration and air disinfection using UV lamps, to disinfect the “return air” into the office spaces. The

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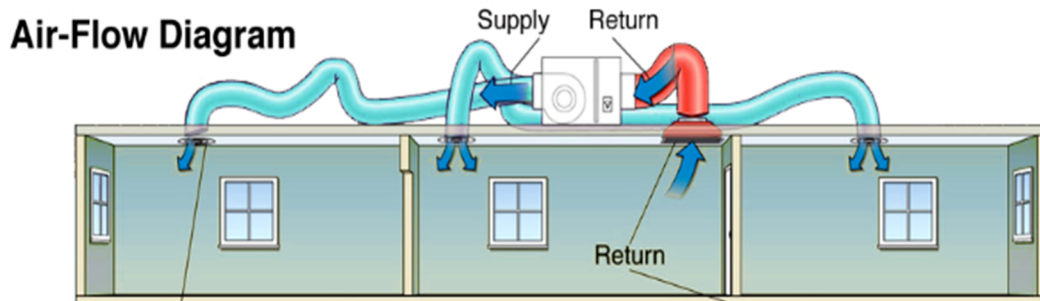
additional zones and VAV boxes will also eliminate the “hot spots” at offices with window exposure, and cold spots at other locations.



two aging HVAC rooftop units and ductwork



Low Ceiling and tall partitions



Need to increase the air exchanges in office spaces by adding more supply and return registers. This will also provide improved temperature control.

- iii) Electrical/backup Generator – the emergency backup power system did not perform as intended, during the last utility power outage event. Some retrofit work may be required to ensure that the emergency backup power system functions in a “fail-safe” mode at all times. In addition, the City would also like to increase the building services areas with emergency power, during a major power outage event. Additional building electrical work will be required.
- iv) Office Lighting – office lighting in some office spaces is poor, and replacement of all lighting fixtures is recommended once the ceiling is removed for other infrastructure

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work. New LED lighting fixtures are far more energy efficient, with dimming controls, room occupancy sensors, ambient outdoor light sensors, all providing significant energy savings.

- v) Tile ceiling replacement – with all the “above ceiling” infrastructure work, the existing tile ceiling will require replacement and will enhance the office atmosphere. Some hard ceilings may also require replacement due to the above ceiling work.

3. HIGH PRIORITY IMPROVEMENTS

The following are high priority items currently being addressed and will eventually be removed from the overall building renovation program:

- Emergency Generator and issues – Discussion with staff on proposed upgrades to issues with backup generator. Generator controls failed to perform during a recent utility power outage, and staff identified the need to perform a diagnostics test, which may lead to some controls or electrical modifications, to insure a “fail-safe” performance.

In addition, the emergency generator powers only a portion of the building, and an electrical load and capacity engineering analysis is required, to enable design modifications to the building electrical system to expand the service areas powered by the emergency generator.

Atrium Garden water leak issues – The City Hall lobby atrium garden is on the floor deck above the 1st floor police department. The subdrain system has become plugged with plant root intrusion, and it also appears that the waterproofing membrane has failed, so consequently this has resulted in water leaks in the ceiling above PD offices.

The atrium planter material, irrigation & subdrain system and waterproofing membrane requires removal and reconstruction. This problem will only worsen and deferring this work may cause more disruptive problems in the police offices below. The retractable roof will also need to be inspected for leaks and repaired if needed.

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4. **APPROACH FOR IMPLEMENTING IMPROVEMENTS**

Ideally, these improvements are done as a single project, due to the integration of all these systems. More specifically, many of the recommended improvements are above the ceilings, in the office spaces. These include HVAC ductwork, VAV boxes, registers, plumbing and controls, Fire sprinkler system, electrical system, lighting, and telecommunications fiber optic cabling, ceiling mounted WAPs, fire alarm detection and annunciation systems.

Our recommendation is to proceed with a top-down approach. This sequence for each phase can be as follows:

- Demolition of Ceiling and all above ceiling infrastructure
- Install all new infrastructure including fire sprinkler & fire alarm systems, lighting fixtures, electrical power and telecom systems and ceiling
- Paint walls and refinish all woodwork (doors and veneer walls)
- Install new carpeting
- Install new cubicle stations

Secondly, the work can proceed while City Hall and PD remain in operation, with a two (2) phase approach for each floor, combined with off-hour construction for all disruptive work.

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Infrastructure above tiled ceiling



Analog duct pressure meters are outdated



Aging Electric Control Panels

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Conference room – Lighting, HVAC, skylight, and Audio/Visual and telecom improvements are needed.

If a funding plan for a single project approach, is not feasible, an alternative option for consideration, is for the City to establish a budget restricted reserve fund in the City Budget, with annual deposits, to safeguard against unexpected or emergency building expenses.

SCHEDULE & FUNDING

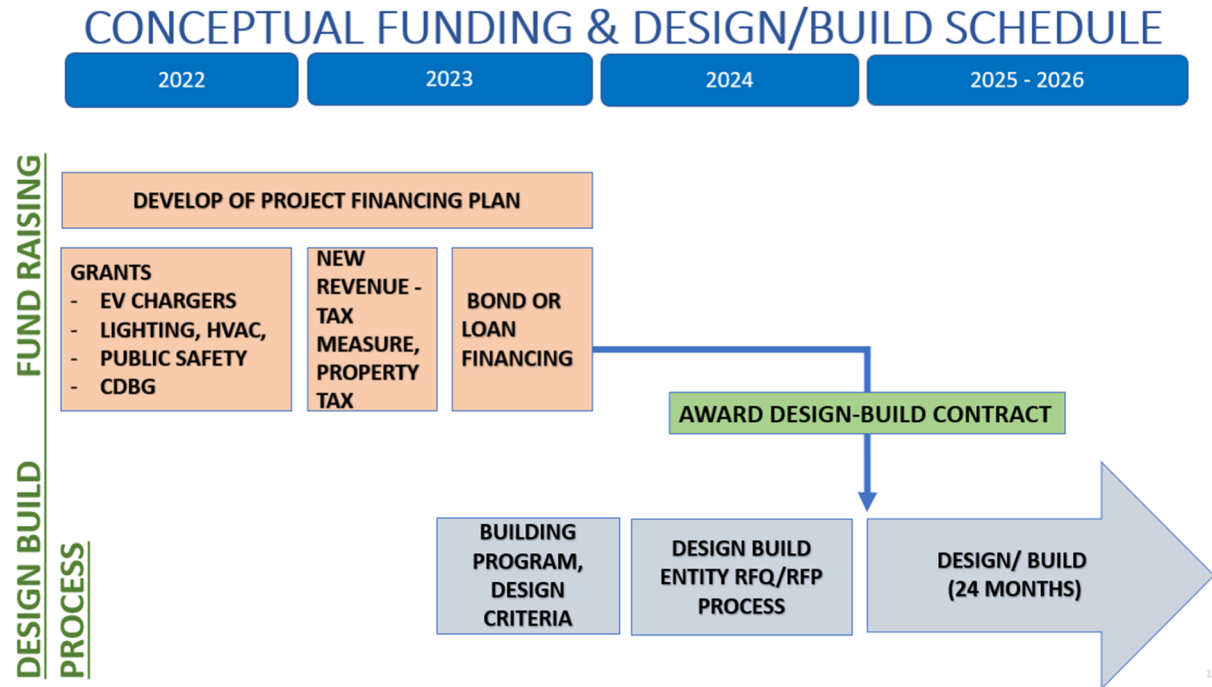
The following is a conceptual overview of a possible Project schedule, if an aggressive funding strategy is developed to provide a financing plan by mid- 2023 and a Design/Build project delivery method is implemented. Several funding sources will be required and could include external grants, new revenue generation such a new tax measure and/or parcel tax, use of “fair share” enterprise funds.

Design & permitting duration is 12 months and Construction duration is another 12 months.

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COST ESTIMATE

Cost estimate spreadsheet workbook – A workbook has been prepared for costing of all the identified and recommended improvements. The cost estimate includes all fully burdened construction costs (benchmarked with recent similar work,) and include all soft costs for implementing these improvements as well as contingencies for unforeseen work.

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City of Union City Building Assessment Summary by Priority. (DRAFT 5.25.22)

	Constr. Cost Estimate	Indirect Const Cost (general conditions)	Soft Cost (Design, PM/CM, testing, insp)	Cost Escalation (1 yr)	Contingency	Sub-total Costs
Code Compliance						
ADA Access at Entrance & walkways (work during off hours)	\$ 150,000.00	\$ 37,500.00	\$ 65,625.00	\$ 32,900.00	\$ 25,300.00	\$ 311,325.00
ADA Restrooms	\$ 200,000.00	\$ 50,000.00	\$ 87,500.00	\$ 43,875.00	\$ 33,750.00	\$ 415,125.00
Fire Suppression System (incl. new fire main line from street)	\$ 1,459,195.00	\$ 364,800.00	\$ 547,200.00	\$ 308,300.00	\$ 237,100.00	\$ 2,916,595.00
Sismic Retrofit (assumed)	\$ 1,500,000.00	\$ 375,000.00	\$ 562,500.00	\$ 316,900.00	\$ 243,800.00	\$ 2,998,200.00
EV Chargers and transformer	\$ 270,000.00	\$ 67,500.00	\$ 118,125.00	\$ 59,200.00	\$ 45,600.00	\$ 560,425.00
	\$ 3,579,195	\$ 894,800.00	\$ 1,380,950.00	\$ 761,175.00	\$ 585,550.00	\$ 7,201,670.00
Priority Repairs						
Atrium garden reconstruction (work during off hours)	\$ 56,500.00	\$ 14,125.00	\$ 24,718.75	\$ 12,400.00	\$ 9,500.00	\$ 117,243.75
Repairs to Slab on Grade @ Police	\$ 148,200.00	\$ 37,050.00	\$ 64,837.50	\$ 32,500.00	\$ 50,000.00	\$ 332,587.50
Retrofit Emergency Generator/transfer switch	\$ 50,000.00	\$ 12,500.00	\$ 21,875.00	\$ 11,000.00	\$ 16,900.00	\$ 112,275.00
Plumbing Repairs (atrium)	\$ 25,000.00	\$ 6,250.00	\$ 10,937.50	\$ 5,500.00	\$ 4,200.00	\$ 51,887.50
	\$ 279,700.00	\$ 69,925.00	\$ 122,368.75	\$ 61,400.00	\$ 80,600.00	\$ 613,993.75
Priority Upgrades						
HVAC System	\$ 1,902,500.00	\$ 475,625.00	\$ 832,300.00	\$ 417,400.00	\$ 321,000.00	\$ 3,948,825.00
New Ceilings & raise low ceilings	\$ 276,575.00	\$ 69,143.75	\$ 121,000.00	\$ 60,700.00	\$ 46,700.00	\$ 574,118.75
Lighting, Electrical & Access Control	\$ 895,550.00	\$ 223,887.50	\$ 391,800.00	\$ 196,500.00	\$ 151,100.00	\$ 1,858,837.50
Fire Alarm System	\$ 283,975.00	\$ 70,993.75	\$ 106,500.00	\$ 60,000.00	\$ 46,100.00	\$ 567,568.75
Telecom Upgrades incl. Main IT room	\$ 289,950.00	\$ 72,500.00	\$ 126,900.00	\$ 63,600.00	\$ 48,900.00	\$ 601,850.00
	\$ 3,648,550.00	\$ 912,150.00	\$ 1,578,500.00	\$ 798,200.00	\$ 613,800.00	\$ 7,551,200.00
Office Improvements						
Cubicles & furniture	\$ 853,250.00	\$ 42,700.00	\$ 44,800.00	\$ 122,300.00	\$ 94,100.00	\$ 1,157,150.00
Carpet & reseal lobby tile flooring	\$ 142,800.00	\$ -	\$ -	\$ 5,000.00	\$ 2,000.00	\$ 149,800.00
Interior Painting	\$ 80,000.00	\$ 5,000.00	\$ 5,000.00	\$ 2,500.00	\$ 5,000.00	\$ 97,500.00
Window Film - to minimize heat gain	\$ 20,000.00	\$ 5,000.00	\$ 9,000.00	\$ 4,400.00	\$ 3,400.00	\$ 41,800.00
File Storage Room	\$ 11,925.00	\$ 3,000.00	\$ 5,200.00	\$ 2,600.00	\$ 2,000.00	\$ 24,725.00
Re-finish wood doors and wood veneer walls	\$ 100,000.00	\$ 25,000.00	\$ 6,250.00	\$ 17,000.00	\$ 13,125.00	\$ 161,375.00
	\$ 1,207,975.00	\$ 80,700.00	\$ 70,250.00	\$ 153,800.00	\$ 119,625.00	\$ 1,632,350.00
Total Improvements	\$ 8,715,420.00	\$ 1,957,575.00	\$ 3,152,068.75	\$ 1,774,575.00	\$ 1,399,575.00	

GRAND TOTAL = \$ 16,999,213.75

Grand TOTAL SAY = \$17,000,000

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BUILDING REPLACEMENT COMPARISON

Based on building age (45 years), the cost to tear down and construct a new building, should always be compared to cost of Major Improvements being considered. Rule of thumb is to build a new facility when the costs of major improvements reach or exceed 50% of replacement costs.

- For a new replacement building assume 40,000 square feet,
- The current costs for a new replacement are **\$60 million**

In this case, the cost of Major Renovations @ \$17 million is only 28% of a New building. Therefore, it is far more economical to invest in major renovations of this facility, if this facility is still the “right” size, for the foreseeable future.

Whether the City invests in major improvements to extend the life and usefulness of the existing building or elects to construct a new building, new funding sources will be required. At a minimum, it is recommended that the City develop a financial sinking fund, to reserve funds for infrastructure replacement and improvements as they become due for replacement in the future. A building valuation analysis based on actual equipment and improvements installed, would determine annual deposits into a sinking fund, but generally, for this size building, it would be in the order of \$300,000 to \$600,000.

FINAL RECOMMENDATIONS

If a Project financing plan is not feasible at this point, it is recommended that the City develop a Building Improvement Reserve Fund (Sinking Fund), to be funded annually, specifically for the upcoming infrastructure replacements. Ideally, infrastructure can be replaced “just in time”, prior to catastrophic failure. However, careful monitoring and tracking of system performance, is critical with this strategy.

A Facilities Master Planning effort is also recommended, to assess current staffing areas, overflow issues, and future growth needs. This will also provide for strategic planning of City operations and influence the decisions and scope of building improvements, replacement, or repurposing.