

# CITY OF SAN LEANDRO

## ENERGY & IAQ INFRASTRUCTURE NEEDS -PHASE III

### DETAILED ASSESSMENT

11/2/2021

	HEATING, VENTILATION, & AIR CONDITIONING & INDOOR AIR QUALITY (IAQ)				BUILDING AUTOMATION SYSTEM (BAS)				LIGHTING		POOL	SMART CITY TECHNOLOGY
	New High Efficiency HVAC Units w/ Economizers & MERV-13	New High Efficiency Chillers & Pumps	New Air Handling Units (AHU) with MERV-13 Filters	Refurbish Duct Heaters & FCUs including MERV-13 Filters	New BAS	Integrate Economizer Control into Existing BAS	Recommission Existing BAS	Repair Problematic Lighting Control	Interior LED Lighting Modernization	Exterior LED Lighting Modernization	New High Efficiency VFD & Smart Pump Control System	Upgrade & Expand Paradox Controls
Citywide												✓
City Hall	4	3	1	12		✓	✓		✓	✓		
Fire Station #9	1				✓	✓			✓	✓		
Fire Station #10	3					✓	✓		✓			
Fire Station #11	3					✓	✓		✓	✓		
Fire Station #12	5				✓	✓			✓			
Fire Station #13	1				✓	✓			✓	✓		
History Museum	3					✓	✓					
Main (Community) Library	2					✓	✓	✓	✓			
Manor Branch Library	2					✓	✓		✓	✓		
Marina Community Library									✓			
Public Safety (Police)	1	3	4			✓	✓		✓	✓		
Public Works	4				✓	✓			✓	✓		
San Leandro Aquatic Center	4					✓	✓		✓	✓	✓	
Senior Community Center									✓	✓		
South Branch Library	1					✓			✓			

# CITY OF SAN LEANDRO

## PROGRAM SUMMARY – PHASE III

### DETAILED ASSESSMENT

11/2/2021

#### Heating, Ventilation, & Air Conditioning (HVAC ) & Indoor Air Quality (IAQ)



- New Packaged/Split System HVAC Systems with Economizers & MERV 13 Filters at 13 Sites
- New Air Handling Units at City Hall and Public Safety Buildings
- New Central Plant Chillers and Pumps at City Hall & Public Safety Buildings
- Refurbish Duct Heaters/ FCUs at City Hall
- New MERV 17 Portable Air Filtration Systems in Spaces with Limited Fresh Air

#### Building Automation System (BAS)



- New JCI BAS at 4 Sites
- Recommission Existing Metasys BAS at 8 Sites
  - Verify Sequence of Operations – Heating, Cooling, Economizer
  - Verify Proper Operation of Control Valves and Existing Economizers
- Repair Problematic Lighting Control Panel at Main Library

#### LED Lighting



- Interior LED Lighting Modernization at 14 Sites
- Exterior LED Lighting Modernization at 9 Sites

#### Pool Pump VFD & Controls



- New Pool Pump VFD at San Leandro Aquatic Center

#### Street Lighting Controls



- Upgrade & Expand Paradox Controls
  - New Gateways & Nodes on Existing LED Fixtures (995)
  - Integrate New Nodes & Gateways into Existing Paradox CMS
  - Upgrade Existing Paradox System to Neptune Generation

Turnkey Infrastructure Improvements Budget ..... \$4,994,884

#### Funding Sources:



ECAA 1% Funding ..... \$1,284,140



City Capital ..... \$ 395,828



American Rescue Plan (ARP) ..... \$3,314,916