

SUMMARY OF WORK

- Lock out and tag out the main electrical service
- Replace existing equipment with new Carrier 410A refrigerant units of equal tonnage per the equipment schedule listed.
- Disconnect existing electrical wiring, control wiring, drains lines & gas lines serving (9) existing rooftop and (4) split systems
 - Note: If Pelican controls are present, Contractor will be responsible to work with district staff and pelican control representative to assist with the disconnect and reconnections
- Rig existing units off of the roof and dispose of per AQMD requirements
- Rig new units and place/secure on existing or new roof curbs (if needed)
- Reconnect existing electrical wiring, control wiring, drain lines and gas lines serving new HVAC units
- The Contractor will verify the existing electrical and gas connections to the existing RTUs prior to ordering the new units and shall provide a new fused disconnect switch, fused to provide maximum over-current protection required by the new unit and make additional modifications to the circuit breaker and/or electrical feeders serving the unit if a larger breaker and/or feeders are required.
- The Contractor to perform factory startup of all new equipment.
- No overhead lifting of any materials will be allowed onto any roof that has an active school program in the classroom (or wing) below the working area. Therefore, once the Contractor has been selected and has developed a proposed schedule for removal and replacement of the new units, we will work with the M&O Coordinator of EMUHSD and define specific dates to relocate students from the buildings that will have overhead lifting.
- Contractor to confirm that the new equipment will fit the existing curb configuration without needing any curb modifications, flashing or roofing repairs. Contractor to also confirm that the weight of the new unit does not exceed the unit that is being replaced. In the event there is any movement across new roofs, the wheels on the equipment must be air filled and are not allowed to be solid wheels.
- The Contractor responsibility for all roof repairs in the course of this project
- The Contractor will provide curb adapters and all associated roofing required to install new units on existing roof curbs and provide a weather-tight installation of new units
- All installations will be in accordance with manufacturer's recommendations.
- The Contractor is responsible for the start-up and commissioning of the RTUs. All systems must be fully functional and operational after installation. If follow-up work is required to correct installation, the Library District shall not be charged.
- Contractor's bid must include a clear description of the equipment they are proposing to provide for this project. At a minimum, provide manufacturer, model/series, whether units are variable speed or single speed, and manufacturer's specifications (cut sheets) for proposed package units and heat pumps.

Guidance Center, Girls PE, Boys PE and Nursing units

- Remove existing duct work and install new ductwork
- Furnish labor to demo old ductwork complete
- Provide all new ductwork per Title 24 for all 5 systems
- Remove and replace pad cover and with a new 22 GA cap
- Provide and install new supports for duct work on roof as needed throughout. District to approve prior to installation of new supports
- Install per SMACNA standards
- Seal all new connections

Girls PE & Boys PE units

- Roofing:
 - Install roofing around two (2) RTU's duct curb approximately 2'x2'
 - District to approve roofer prior to commencing work

- Contractor to provide crane service needed for this project
- Contractor to provide one (1) year labor and parts warranty
- Contractor responsible for cleanup and proper disposal of all HVAC units
- Work shall consist of furnishing all labor, materials, equipment and services, incidental and implied, for this job. All items not specifically mentioned in the specifications, but which are obviously required to make the renovations complete, shall be included automatically

New Equipment

Mark For	Qty	Model Number	Description
RTU-1 Permanent Guidance (Existing Unit: B2HZ036A)	1	50VT-C36---5	Nominal 3 Ton Small Package HP RTU, 208-230/3/60V Field Installed: <ul style="list-style-type: none"> • Outside Air Intake Hood
RTU-2 Girls Locker (Existing Unit: PGD336)	1	48VLUE360603-TP	Nominal 3 Ton Small Package G/E RTU, 208-230/1/60V <ul style="list-style-type: none"> • Ultra Low Nox • 60,000 BTU/HR • Tin-Plated Indoor Coil Hairpin • Heat Exchanger (Standard) Field Installed: <ul style="list-style-type: none"> • Outside Air Intake Hood
RTU-3 Permanent Nurse (Existing Unit: B1HA048)	1	50VT-C48---5	Nominal 4 Ton Small Package HP RTU, 208-230/3/60V Field Installed: <ul style="list-style-type: none"> • Outside Air Intake Hood • Curb Adapter-To Be Verified
RTU-4 Permanent Guidance (Existing Unit: PHN348)	1	50VT-C48---5	Nominal 4 Ton Small Package HP RTU, 208-230/3/60V Field Installed: <ul style="list-style-type: none"> • Outside Air Intake Hood
RTU-5 Boys Locker Office (Existing Unit: PGD360)	1	48VLUE600903-TP	Nominal 5 Ton Small Package G/E RTU, 208-230/1/60V <ul style="list-style-type: none"> • Ultra Low Nox • 90,000 BTU/HR • Tin-Plated Indoor Coil Hairpin • Heat Exchanger (Standard) Field Installed: <ul style="list-style-type: none"> • Horizontal Economizer

RTU-6 Permanent 76 (Existing Unit: BP12C00)	1	50FCQM12A2A5-0A0A0	Nominal 10 Ton HP RTU, 208-230/3/60V <ul style="list-style-type: none"> • Single Circuit 2 Stage Cooling • Standard Packaging • Dir Drive-EcoBlue-Med Static • Al/Cu - Al/Cu • Electro-Mechanical Ctl Field Installed: <ul style="list-style-type: none"> • Curb Adapter – To Be Verified • Vertical Economizer
RTU-7 Permanent Lion Center (Existing Unit: DH180N)	1	48FCDM16A2A5-0A0A0	Nominal 15 Ton G/E RTU, 208-230/3/60V <ul style="list-style-type: none"> • Low Gas heat • Single Circuit 2 Stage Cooling • Standard Packaging • Dir Drive-EcoBlue-Med Static • Al/Cu - Al/Cu • Electro-Mechanical Ctl Field Installed: <ul style="list-style-type: none"> • Horizontal Economizer
RTU-8 New P-Building (Existing Unit: 48HJD014)	1	50FCQM14A2A6-0A0A0	Nominal 12.5 Ton HP RTU, 460/3/60V <ul style="list-style-type: none"> • Single Circuit 2 Stage Cooling • Standard Packaging • Dir Drive-EcoBlue-Med Static • Al/Cu - Al/Cu • Electro-Mechanical Ctl Field Installed: <ul style="list-style-type: none"> • Curb Adapter – To Be Verified • Vertical Economizer
CU-4 P-Building 3 Ton Split	1	24AHA436A003	Nominal 3 Ton Split A/C Condenser, 208/230-1-60V
EC-4	1	CAPMP3617ALA	Nominal 3 Ton Cased Multi-Poise Evaporator Coil
Furnace	1	58SU0A040E17--12	4-WAY 80% AFUE 40k Btuh Ultra Low NOx Furnace, 115V
ARTU-9 P Permanent P-Building (Existing Unit: 50AK- 025NN)	1	50A7-025ANS241EE	Nominal 25 Ton Cooling Only Applied RTU, 380/3/60V <ul style="list-style-type: none"> • VAV Vertical with Green Speed Intelligence • No Electric Heat • Ultra-Low Leak Economizer • No Convenience Outlet • "Precoated Al/Cu Condenser, Al/Cu Evaporator with Hot Gas Bypass" • Galvanized Drain Pan • 2-inch Filter Track • Line Voltage Terminal Block • No Exhaust • 10 Hp Supply fan motor with Variable Frequency Drive (VFD) without VFD Bypass • Controls Expansion Module (CEM) with Phase Monitor • Standard Ambient • Direct Fit – No Curb Adapter Required Warranty: <ul style="list-style-type: none"> • Start Up • First Year Labor
CU-1,2 VP & Attendance (Existing Units: E1RA036)	2	25HCE436AP06	Nominal 3 Ton Split Heat Pump Condenser, 460-3-60V
FC-1,2	2	FB4CNP036L00	Nominal 3 Ton Fan Coil, 208/230-1-60V
CU-3 Girl's Dance (Existing Units: N2H360)	1	25HCE460AP03	Nominal 5 Ton Split Condenser, 208/230-1-60V
FC-3	1	FB4CNP061L00	Nominal 5 Ton Fan Coil, 208/230-1-60V