





Attachment A
Scope of Work

Administrative Center


Lighting

-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.

Controls




-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information, locations, and schedule of operations.

Solar PV


-  Install a new roof-mounted solar photovoltaic (PV) system. The site currently receives 100% of its electricity from the utility company. The system will help reduce electricity cost, avoid future cost increases, protect the existing roofing system, and reduce the environmental impact of electricity generation. The new system shall include 5 years of system services and maintenance. Please refer to the Solar PV System Submittal for further details of system location and information.

Arroyo Seco Junior High


Lighting

-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.


Mechanical

-  Replace (6) Multi-Zone Units (MZU) with multiple individual gas / electric package units. Individual units will allow for each zone to have separate temperature setpoints and schedules, increasing occupant comfort and providing energy savings. Replacement shall include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the Mechanical Systems Attachment for specific equipment information, locations, capacities and ages.

Controls


-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

Solar PV


-  Install a new car port and roof-mounted solar photovoltaic (PV) system. The site currently receives 100% of its electricity from the utility company. The system will help reduce electricity cost, avoid future cost increases, protect the existing roofing system, and reduce the environmental impact of electricity generation. The new system shall include 5 years of system services and maintenance. Please refer to the Solar PV System Submittal for further details of system location and information.

Canyon High School

Mechanical



-  Replace (9) Multi-Zone Units (MZU) with multiple individual gas / electric package units. Individual units will allow for each zone to have separate temperature setpoints and schedules, increasing occupant comfort and providing energy savings. Replacement shall include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the Mechanical Systems Attachment for specific equipment information, locations, capacities and ages.

Controls


-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

Golden Oak and TLC


Lighting

-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment.

Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.




-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.

Controls


-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

Golden Valley High School

Lighting

-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.




Controls

-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed


amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

Hart High School



Lighting

-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.

Mechanical


-  Replace (52) HVAC units with new high efficiency units of similar size and capacity. Replacement shall include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the Mechanical Systems Attachment for specific equipment information, locations and capacities.

Controls

-  Install network based smart thermostats to control the simple HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.
-  Install an Energy Management System (EMS) to control the complex HVAC equipment. The new system shall be a networked system with a single point of access to adjust equipment schedules and space temperature setpoints. Heating




and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. The new EMS shall follow a revised, efficient sequence of operations to ensure optimal equipment performance, efficient energy use, and occupant comfort. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

Solar PV


-  Install a new car port and roof-mounted solar photovoltaic (PV) system. The site currently receives 100% of its electricity from the utility company. The system will help reduce electricity cost, avoid future cost increases, protect the existing roofing system, and reduce the environmental impact of electricity generation. The new system shall include 5 years of system services and maintenance. Please refer to the Solar PV System Submittal for further details of system location and information.

La Mesa Junior High


Lighting

-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.


Mechanical

-  Replace (73) HVAC units with new high efficiency units of similar size and capacity. Replacement shall include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the Mechanical Systems Attachment for specific equipment information, locations and capacities.

Controls




-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

Envelope


-  Re-roof existing roofing system. The existing roof is in poor condition and suffers from leaks and poor energy efficiency. Re-roofing will reduce maintenance calls, minimize leaks, and increase energy efficiency. Refer to the Envelope Systems Attachment for specific equipment information.

Placerita Junior High


Lighting

-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.


Mechanical

-  Replace (39) HVAC units with new high efficiency units of similar size and capacity. Replacement shall include demolition of existing equipment and turn-key installation of new equipment with start-up / testing of the new installation. Refer to the Mechanical Systems Attachment for specific equipment information, locations and capacities.

Controls


-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

Solar PV

-  Install a new car port solar photovoltaic (PV) system. The site currently receives 100% of its electricity from the utility company. The system will help reduce electricity cost, avoid future cost increases, protect the existing roofing system, and reduce the environmental impact of electricity generation. The new system shall include 5 years of system services and maintenance. Please refer to the Solar PV System Submittal for further details of system location and information.


Rancho Pico Junior High

Controls

-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.




Rio Norte Junior High

Controls



-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

Saugus High School

Lighting


-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.

Controls

-  Install network based smart thermostats to control the simple HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.
-  Install an Energy Management System (EMS) to overlay and integrate into the existing EMS control system. The new EMS shall consolidate the controls to a single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. The new EMS shall follow a revised, efficient sequence of operations to ensure optimal equipment performance, efficient energy use, and occupant comfort. Refer to the Controls Systems Attachment for specific equipment information and control parameters.




Sierra Vista Junior High

Controls


-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

West Ranch High School

Lighting



-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Install occupancy sensors in select areas to automatically turn off the lighting systems when no activity is detected after an extended amount of time. Refer to the Lighting Systems Attachment for specific quantities and locations.

Controls


-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.

William S Hart District Copy Center

Lighting

-  Replace identified existing interior fluorescent and/or incandescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.
-  Replace identified existing exterior high intensity discharge (HID) and/or fluorescent lighting systems with high efficiency light emitting diode (LED) systems. Installation includes disposal of existing lighting systems and installation of new equipment. Refer to the Lighting Systems Attachment for identified fixtures, specific quantities, and locations.

Controls

-  Install network based smart thermostats to control the HVAC equipment. The new smart thermostats shall be a networked system with a web-based single point of access to adjust equipment schedules and space temperature setpoints. Heating and cooling setpoints will be adjustable by the user within a preprogrammed amount during occupied times. Refer to the Controls Systems Attachment for specific equipment information and control parameters.