OCCC – Central County Campus

The Central County Campus building is a two story 80,000 sf facility that includes classrooms, science labs, nursing labs, the campus commons, facility staff and administration offices. Roofs are framed with wood trusses. Walls are a mix of wood framing and CMU. The Roof system is asphalt composition shingle, and the siding systems are a mix of brick and cement fiber siding.

Roof Systems

Issue Description:

- Existing roofs are leaking in numerous locations as detailed under a separate attached report

Issue Resolution

- Remove existing asphalt shingle roof system
- Inspect existing plywood for damage and replace – assume 100 sheets of ½" plywood.
- Install continuous adhered air vapor barrier
- Install new flashing systems
- Install stainless steel saddles at all
- Install new prefinished aluminum standing seam roof

Quantification: Entire roof needs to be replaced.

Cost: $1,250,000

Seismic Joint

Issue Description:

- Existing seismic joint is leaking

Issue Resolution

- Remove seismic joint cover and flashing
- Repair gasket
- Replace cover
- Seal all joints
- Install new pre-finished aluminum flashing cover with standing seam joints over the repaired system.

Quantification: Entire length of seismic joint

Repair Gypsum Board Wall and Paint below

Cost: Joint	$12,500
Cost: Wall Repair	$8000

Exterior Cement Fiber / Cedar Siding Systems

Issue Description:

- All cement fiber siding and soffits need to be repainted.
- Repainting needs to occur every 8 years going forward.

Issue Resolution

- Remove all flaking paint
- Remove and reinstall all sealant associated with the siding system
- Prime entire surface with an elastomeric paint system intended for cement fiber siding and cedar trim.

Quantification: All

Cost: $137,700

Exterior Brick Systems

Issue Description:

- Brick needs to be resealed every 8 years going forward
- Brick control joints need to be replaced every 12 years

Issue Resolution

- Power wash brick and reseal.
- Remove silicone control joints and replace

Quantification: All

Cost: $32,400

Exterior Wood With Clear Finish

Issue Description:

- Finish has aged, cracked and peeled. Wood is stained and has grayed.
- Wood with clear finish should be recoated every three years and sanded and refinished every 12 years as needed

Issue Resolution

- Sand down wood to remove finish and as much of the staining as possible.
- Apply a wood stain remover product
- Apply three coats of clear spar urethane varnish – satin finish

Quantification: All

Cost: $16,700

Repaint Exterior Steel

Issue Description:

- Exterior steel needs to be repainted every 8 years

Issue Resolution

- Remove flaking paint and abrade surfaces of intact paint
- Apply a DTR paint system intended for galvanized metal surfaces. Color to match existing.

Quantification: All

Cost: $10,500

Removable Mullions at exterior doors

Issue Description:

- Prefinished removable mullions are beginning to rust.

Issue Resolution

- Remove as much rust as possible with wire brush, abrade the rest of the surface
- Repaint with a DTR paint system. Color to match existing.

Quantification: All

Cost: $4800

Corner Guards

Issue Description:

- Interior outside corners at numerous locations are damaged.

Issue Resolution

- Repair corners and paint if exposed
- Provide 2”x2” x4’-0” Stainless Steel adhered corner guards

Quantification: Provide where needed – assume 50 guards

Cost: Guards	$4000
Cost: Repair	$2000

Broken Tile at Shower Rooms

Issue Description:

- Substrate has heaved at shower rooms

Issue Resolution

- Remove loose tile and adjacent adhered tiles
- Grind substrate smooth
- Reinstall tile system to match existing

Quantification: approximately 5 SF

Cost:	$3700

VCT at Entry

Issue Description:

- Vinyl tile at entry has become wet and no longer lays flat.

Issue Resolution

- Remove, verify slab is flat, apply leveler if necessary and replace with a sheet product and appropriate adhesive for wet locations

Quantification: 35 SF

Cost: $2500

Damaged Ceiling Tile

Issue Description:

- Tile has been damaged from roof leaks

Issue Resolution

- Replace with new after roof has been replaced

Quantification: 200 2x4 ceiling tiles

Cost: $2500

Windows at first floor corridor

Issue Description:

- One window is cracked and one window has broken seals in the first floor corridor near the ramp.

Issue Resolution

- Replace

Quantification: 2 glazing units

Cost $2500

Carpet Transitions at Commons

Issue Description:

- Carpet transitions shrunk lengthwise over time, creating gaps at joints.

Issue Resolution

- Replace with new

Quantification: 200 linear feet

Cost $1800

Interior joint sealant at windows

Issue Description:

- Sealant joint between window frames and aluminum window trims have failed at the second floor windows at the commons NE side.

Issue Resolution

- Remove and replace with a color matched STPE sealant system

Quantification: 20 linear feet

$400

Loose Weatherstripping

Issue Description:

- Weather stripping at window heads is loose

Issue Resolution

- Apply a rubber compatible adhesive and reinsert weatherstripping

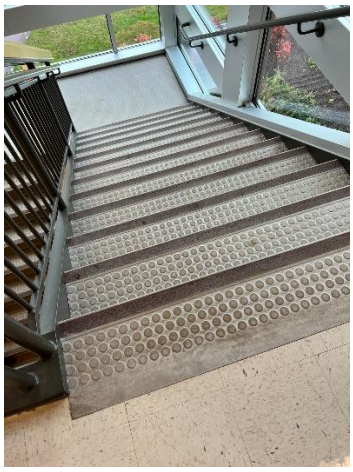
Quantification: 10 linear feet

Cost: $400

Rubber Stair Tread Appearance

Issue Description:

- Rubber treads have developed a chalky appearance.



Issue Resolution

- This is an aesthetic issue. A conditioner can be used to rejuvenate the appearance.

Quantification: Stair treads that receive sunlight

Cost $800

Leak at North Second Floor Corridor Window

Issue Description:

- Window is leaking and sill is receiving water

Issue Resolution

- Exterior window sealants should be removed and replaced.
- Water is likely coming from roof leaks and should be resolved once roof is replaced.

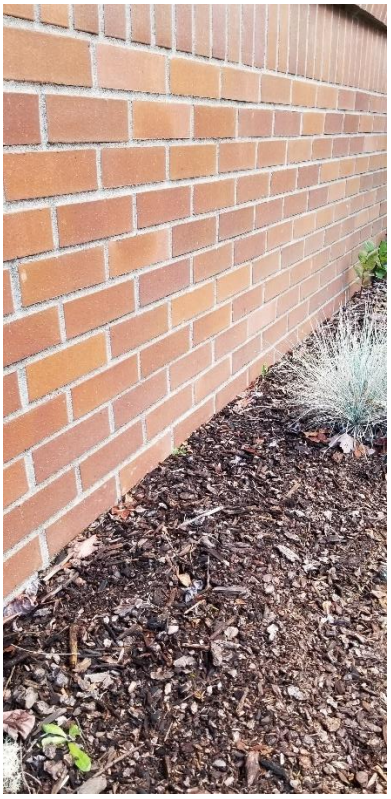
Quantification: All around window

Cost $1200

Perimeter Soil Buildup

Issue Description:

- Soil has built up over time at the perimeter of the building, blocking brick weeps and causing potential rot / decay at siding systems.



Issue Resolution

- Remove excess soil to expose weeps at brick and provide 2” minimum clear at cement fiber siding and cedar trim.

Quantification: All around perimeter of building

Cost $1500

HVAC - Controls

Issue Description:

- Current control system (Sunbelt Reliable) stopped receiving updates in 2014.
- Current control sequences lead to undesirable or incorrect equipment operation (lead lag issues, backup systems do not come online when primary equipment fails, etc.).

Issue Resolution

- Update controls to Sunbelt’s latest (cloud based).
- In update, scrub all sequences of operation (or develop from scratch) to ensure appropriate operation.

Quantification: Controls update should include all of OCCC's buildings, including Central County Campus, Aquarium Science, Lincoln City, and Waldport

Cost – can vary widely – Allowance: $300,000

HVAC – Air Handling Unit Component Replacement

Issue Description:

- Some existing air handlers have severely rusted sections due to high humidity and coastal conditions.
- Some unit's coil connections show corrosion due to joining of different metals.

Issue Resolution

- Provide new filter sections and coils for affected units.
- Remove corroded pipe and replace with new pipe of same material, or provide dielectric union.
- Provide new moisture sensor in bottom of intake louver plenums to detect standing water pooling in plenum/clogged drain.
- Provide new mist elimination filter at outside air intake louver.

Quantification:
New filter section and coils for AHU-6, AHU-8, and AHU-10.
Replace corroded pipe on AHU-4 and AHU-8.
New moisture sensor and mist elimination filter at two outside air plenums/louvers serving eastern mechanical room.
Replace eastern rusted louver plenum.
Cost: $70,000

HVAC – Boilers condensation issue

Issue Description:

- During some operating conditions, Boiler #1 has severe condensation in the exhaust flu which has caused flooding in the mechanical room.

Issue Resolution

- Revise control sequences based on operation manual to ensure boiler operates within manufacturer's recommended setpoints.
- Provide floor-mounted water dam or re-slope floor of mechanical room to direct condensation to floor sink.

Quantification:
Condensation problem is currently limited to Boiler #1, but campus facilities has noted the boilers do not operate in a lead/lag configuration as intended. It is possible the issues may affect Boiler #2 if lead/lag operation is corrected. Recommend issue resolutions are provided for both boilers.

Cost – controls sequence elsewhere $200

Lighting Systems – Luminaire Upgrade

Issue Description:

- Interior lighting is fluorescent.
- Building mounted exterior lighting is Metal Halide
- Pole lights are High Pressure Sodium
- These older technologies are costly to maintain, requiring regular lamp and/or ballast replacement.
- Controllability for these fixtures is also limited, minimizing energy savings potential through lighting controls.

Issue Resolution:

- Replace and/or retrofit interior lighting with dimmable LED fixtures/lamps.
- Replace and/or retrofit exterior lighting with LED fixtures/lamps.
- Consider luminaires with Luminaire Level Lighting Controls (LLLC). See Lighting Controls section for more information.

Quantification: Full interior and exterior replacement.

Cost: Includes new control system	$980,000
Site Lighting – Add $900 per pole light Assume 40	$36,000

Lighting Systems – Lighting Controls

Issue Description:

- In enclosed spaces such as offices, classrooms, conference rooms, etc., controls primarily consist of standalone on/off controlled rooms with automatic override by motion sensors and photocells. Dimming control is not provided in most spaces.
- A Powerline Communications Inc. lighting control panel serves circulation spaces and common areas. This manufacturer is no longer in operation and the product is no longer directly supported.
- Limited staff is available to monitor, adjust, and service equipment. Having remote access to network settings through a networked system can help to streamline this effort.
- Consider replacing with a networked lighting controls solution that can be monitored and adjusted remotely.

Issue Resolution:

- Upgrade the lighting controls system to a currently supported system by a reputable and locally represented manufacturer.
- Provide dimming control of luminaires in enclosed spaces.
- Consider Luminaire Level Lighting Controls (LLLC) as a solution for greatest rebates, flexibility, and remote accessibility for maintenance personnel.

Quantification: Full interior and exterior replacement. Replace central lighting control panel with networked solution by a reputable, locally supported manufacturer. Under the Luminaire Upgrade, elect to provide fixtures with Luminaire Level Lighting Controls (LLLC). The 5-8% cost premium for these luminaires can be offset with utility rebates. Controls components required will also be minimized as they will primarily be integrated withing replacement luminaires. Include cost of the manufacturer to generate a system map to easily navigate device settings in each space from a helpful graphical user interface.

Cost: (included in lighting)

Emergency Power Systems – Central Battery Uninterruptible Power Supply (UPS)

Issue Description:

- Existing 120kVA UPS has been reported to have a failure of its non-volatile memory storage, making the system vulnerable during extended power outages.
- Getting onsite service from the manufacturer has been challenging.
- UPS batteries are nearing end of life and are due for replacement.

Issue Resolution

- Repair or replace existing UPS system.

Quantification: Full replacement of 120kVA battery UPS with maintenance bypass.

Cost (assume replacement) $50,000

Arc Flash Hazard Analysis

Issue Description:

- Electrical equipment is not provided with arc flash hazard labels. This poses life safety risks for personnel performing maintenance on the electrical system.

Issue Resolution:

- Perform an arc flash hazard analysis and label equipment.

Quantification: Whole building study, report, and equipment labels.

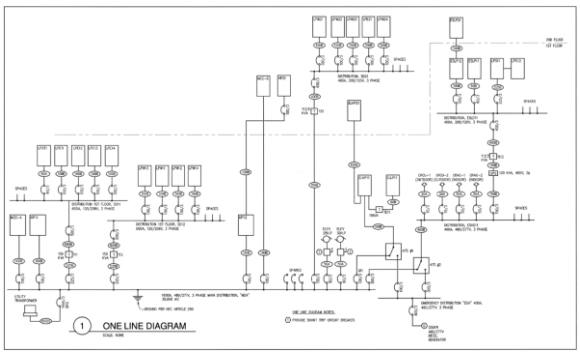
Cost $40,000

Power Distribution System Maintenance and Testing

Issue Description

- Periodic testing of electrical system components is recommended to monitor regular deterioration of equipment, devices, connections, and conductors over the system's useful life. Monitoring the electrical system helps to predict and determine scheduled

replacements of system components, minimizing operational downtime and improving worker safety.



Issue Resolution:

- Develop preventative maintenance schedule per ANSI/NETA recommendations.
- Visually inspect equipment condition, connections, anchorage, and alignment.
- Perform electrical and mechanical test and inspect operation, connections, conductor insulation, and tap settings.
- Clean and lubricate equipment.

Quantification: Whole building assessment and reporting. Include professional services for developing routing maintenance and reporting process.

Cost – ongoing maintenance

Emergency Operations Center (EOC) Power

Issue Description:

- The Central Coast Campus has been designated as an EOC and is the main southeast beach evacuation site. Additional power devices are needed to support this operation.

Issue Resolution:

- Extend the existing standby power system to serve additional convenience power and kitchen equipment for community support during a large-scale emergency event.

Quantification: Include approximately (10) 20A/1P receptacle branch circuits, (2) 30A/2P circuits for cooking appliances.

Cost: $15,000

Access Control System Replacement

Issue Description:

- The existing Millennium Expert access control system is past the end of its useful life and is no longer supported by the manufacturer.

Issue Resolution (paragraph and / or bullet points)

- Replace existing access control system and provide new, compatible field devices.

Quantification: Whole building system replacement. Currently controls (4) sets of exterior doors. Include (5) additional electrified doors.

Cost: (9 doors) $18,000

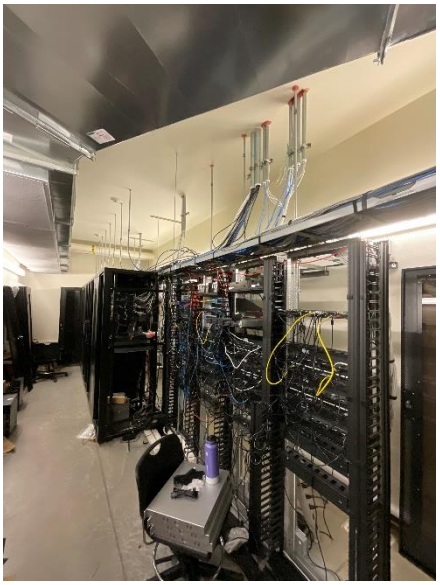
Telecommunications System Improvements

Issue Description:

- Cabling within the MDF/IDF spaces is lacking labeling and wire management.
- Cabling is Category 5E which is still loosely supported but is becoming obsolete.

Issue Resolution:

- Provide labeling and cable management within MDF/IDF rooms.
- Further evaluate infrastructure upgrades necessary to support upgrade of network cabling from CAT5E to CAT6 as the outside diameter of these cables will increase.



Quantification: End-to-end testing, labeling, and cable management for whole building. Include professional services to develop implementation plan for conversion to CAT6A cabling.

Cost: Dependent on further evaluation Allowance: $450,000

Building Telephony Replacement

Issue Description:

- Existing Panasonic phone system is antiquated and unsupported. The current license capacity has been

exceeded which has presented challenges for onboarding new staff.

Issue Resolution:

- Replace existing phones with new, system agnostic, VOIP based phone system.

Quantification: Full replacement of existing phone system.

OCCC to provide cost

Classroom and Conference Audio-Visual (AV) Improvements

Issue Description:

- As remote learning becomes more prevalent, audio-visual systems within these spaces will need to be updated to support the application.

Issue Resolution:

- Develop updated AV standards for classrooms and conference spaces.
- Provide new projectors and supplemental video displays in classrooms and conference rooms to provide adequate visual coverage of the space.
- Provide integrated video and microphone systems to allow for improved remote and hybrid learning environments.

Quantification: Full AV upgrades for all classroom and conference room spaces. Include additional monitor displays for large rooms.

Cost dependent on further evaluation

Fire Alarm System Reprogramming

Issue Description:

- It has been noted that some alarm sequences are not programmed correctly in the current fire alarm system.

- An example of this is that the sump pump alarm is an indication of low pressure in the dry portions of the fire protection system.

Issue Resolution:

- Audit the fire protection system connections and programming and revise system as required for correct sequence of operations.

Quantification: Include professional services for auditing existing system and time to reconfigure up to (5) system connections.

Cost dependent on further evaluation

Fire Alarm System Upgrade

Issue Description:

- The building is served by a traditional horn/strobe fire alarm system. As codes have changed since the building was originally constructed, facilities with occupancies over 1000 require voice evacuation fire alarm systems. It is unlikely that a fire marshal will require the system to be upgraded unless major renovations or additions are planned for the facility.

Issue Resolution:

- Consider upgrading the building fire alarm system to a voice evacuation system in accordance with currently adopted codes.

Quantification: Include whole building upgrade to voice evacuation fire alarm system.

Cost: $196,000

Nurse Call System Replacement

Issue Description:

- The nurse call system installed to serve the OCCC Nursing Program is not operational.

Issue Resolution:

- Recommission and/or replace the system.

Quantification: Include cost to replace system.
Cost: $5500

Intrusion Detection System Nuisance Alarms

Issue Description:

- The Honeywell intrusion detection/burglar alarm system has provided nuisance alarms. Currently, signal from any individual sensing device (door contacts, motion sensors, etc.) triggers the alarm.

Issue Resolution:

- Add a motion sensor at each door and configure the system to go into alarm when both a door contact and motion sensor are triggered.

Quantification: Security system motion sensor at each exterior door, programming support to revise operating sequence of alarm system.
Cost: $84,000

Cost Summary – Central Campus

Item	Cost
Roof	$1,250,000
Seismic Joint	$12,500
Seismic Joint Wall Repair	$8,000
Paint Siding	$137,700
Brick Clean and Seal	$32,400
Exterior Wood Finish	$16,700
Exterior Steel Paint	$10,500
Removable Door Mullions	$4,800
Corner Guards	$4,000
Corner Repair	$2,000
Tile at Shower Rooms	$3,700
VCT at Entry	$2,500
Damaged Ceiling Tile	$2,500
Corridor Windows	$2,500
Carpet Transitions at Commons	$1,800
Interior Joint Sealant at Windows	$400
Loose Weather Stripping	$400
Rubber Stair Tread	$800
Leak at North Corridor Window	$1,200

Perimeter Soil Buildup	$1,500
HVAC Controls	$300,000
HVAC Component Replacement	$70,000
Boiler Condensation (see HVAC Controls)	$200
Lighting System Upgrade	$980,000
Site Lighting	$36,000
Lighting Controls (see lighting)	$0
Emergency Power Systems	$50,000
Arc Flash Hazard Analysis	$40,000
Power Distribution System Maintenance and Test	$0
Emergency Operations Center Power	$15,000
Access Control System Replacement	$18,000
Telecommunications System Improvements	$450,000
Building Telephone System Replacement (cost by OCCC)	$0
Classroom AV Improvements (Cost dependent on further analysis)	$0
Fire Alarm System Replacement	$196,000
Nurse Call System Replacement	$5,500
Intrusion Detection System Upgrade	$84,000
Subtotal	**$3,740,600**
Soft Costs 27%	$1,009,962
Contingency 10%	$374,060
Inflation to Spring 2025 8%	$299,248
Total Cost	**$5,423,870**

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OCCC – Aquarium Science

The Aquarium Science facility is on the same site as the Central Campus in Newport. It is a 9,270 SF building that houses programs that teach students about aquaria operation maintenance and animal husbandry.

Exterior Cement Fiber / Cedar Siding Systems

Issue Description:

- All cement fiber siding and soffits need to be repainted.
- Repainting needs to occur every 8 years going forward.

Issue Resolution

- Remove all flaking paint
- Remove and reinstall all sealant associated with the siding system
- Prime entire surface with an elastomeric paint system intended for cement fiber siding and cedar trim.

Quantification: All

Cost $12,000

Exterior Brick Systems

Issue Description:

- Brick needs to be resealed every 8 years going forward

Issue Resolution

- Power wash brick and reseal.

Quantification: All

Cost: $4500

Floor Slab Surface Erosion Near Tanks

Issue Description:

- Near tanks where there is water spillage, the concrete floor slab surface has become rough due to erosion caused by the properties of the tank water.

Issue Resolution

- Recommend appropriate floor prep and an epoxy coating that will need to be replaced on a regular basis. (approximately every 5-6 years).

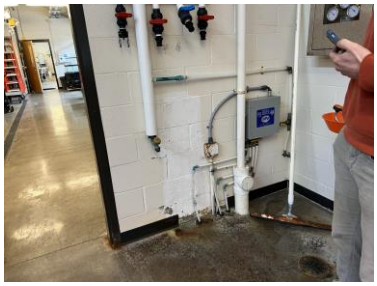
Quantification: Only areas where the erosion is occurring – approximately 3000sf

Cost: $9000

Door Frame Rust

Issue Description:

- Interior door frames are rusted through at the bottoms in several locations



Issue Resolution

- Remove and replace with HDG heavy duty frames pre-paint prior to install. Reuse existing wood doors. Replace rusted hardware

Quantification: 7 locations

Cost: $17,500

Water Damage at Cabnetry

Issue Description:

- Cabinetry with plywood legs has swelled due to water infiltration in two areas.

Issue Cut cabinetry leg off 6” above floor and install stainless steel fabricated legs.

-

Quantification: two locations

Cost: $2000

Rust at Overhead Door Stiffeners

Issue:

- Horizontal stiffeners and track at overhead door are corroding.

Issue Resolution

- Contract with Overhead Door Co or approved to remove stiffeners and replace with aluminum if possible and remove track and replace. If steel is required, all steel should be hot dip galvanized after fabrication.

Quantification: All

Cost: $6000

Door Hardware is Corroding

Issue Description:

- Steel parts on panic devices are corroding

Issue Resolution

- Clean corrosion off of aluminum and stainless portions and replace steel components.

Quantification: 3 doors

Cost: $3000

Fasteners at door hardware corroding

Issue Description:

- Fasteners at door hardware at numerous locations have corroded.

Issue Resolution

- Remove and replace with matching size, but in stainless steel.

Quantification: All

Cost: $2000

Shield Exterior Lights

Issue Description:

- Exterior lights sine inside and disrupt animals

Issue Resolution

- Add a PVC L shaped shield mounted to the soffit that cuts off direct light from the exterior soffit lights

Quantification: 2 locations one at each overhead door

Cost: $400

HVAC - Controls

Issue Description:

- Current control system (Sunbelt Reliable) stopped receiving updates in 2014.
- Current control sequences lead to undesirable or incorrect equipment operation (boilers inexplicably turn off without alarm, HRU-1 inexplicably shuts down, etc.)

Issue Resolution

- Update controls to Sunbelt's latest (cloud based).
- In update, scrub all sequences of operation (or develop from scratch) to ensure appropriate operation.

Quantification: Controls update should include all of OCCC's buildings, including Central County Campus, Aquarium Science, Lincoln City, and Waldport

Cost: $60,000

Plumbing – Hot Water Recirculation Pump

Issue Description

- DP-1 (domestic water pump) not operational, resulting in long wait times at fixtures for hot water.

Issue Resolution (paragraph and / or bullet points)

- Replace pump and integrate into existing/new controls.

Quantification: One pump in mechanical room.

Cost: $600

Aquarium Systems – Effluent System

Issue Description

- Control panel display is not calibrated, does not display correct water level in holding tank.
- System was not installed per original design documents.

Issue Resolution (paragraph and / or bullet points)

- Recalibrate, repair, or replace existing control panel to display correct information.

Quantification: One control panel and associated programming.

Cost: $3200 (allowance)

Lighting Systems – Luminaire Upgrade

Issue Description:

- Interior lighting is fluorescent.
- Building mounted exterior lighting is Metal Halide
- Luminaires within Teaching Lab are note rated for the saltwater environment. Ballasts often fail and luminaires are corroding.
- Exterior lighting on the south side of the building has been noted to spill into the interior Animal Holding area. This has been noted as having negative impacts on the welfare of animals stored in that space.

- These older technologies are costly to maintain, requiring regular lamp and/or ballast replacement.
- Controllability for these fixtures is also limited, minimizing energy savings potential through lighting controls.

Issue Resolution:

- Replace and/or retrofit interior lighting with dimmable LED fixtures/lamps.
- Replace and/or retrofit exterior lighting with LED fixtures/lamps.
- Modify south exterior lighting to prevent light spill into the Animal Holding area.
- Consider luminaires with Luminaire Level Lighting Controls (LLLC). See Lighting Controls section for more information.

Quantification: Full interior and exterior replacement. Luminaires in Lab spaces, Animal Holding, and Tank Storage to be marine grade, sealed and gasketed.

Cost: $180,000

Lighting Systems – Lighting Controls

Issue Description:

- General area lighting in the Teaching Lab does not operate in a manner that is conducive to the welfare of marine animals housed in the space.
- A complete row of lights is on an emergency circuit. When normal power is lost to the facility, this row of luminaires will automatically come to full brightness, which may cause issues for marine animal welfare in the space.
- Additional lighting appears to be controlled via an astronomical timeclock located in Animal Holding. This system was not indicated on record drawings and requires further study. If it provides timeclock control of luminaires on the egress path, revisions will be required to the lighting control system to ensure egress lights are brought to full brightness upon loss of power.

Issue Resolution:

- Recommission or replace lighting controls in the Teaching Lab. Lighting to be configured for manual-on, automatic-off operation. Initial light level to be at a low setting upon manual-on activation and raised by user input.

- Recircuit row of emergency luminaires to the normal lighting circuit in the space. Provide sealed and gasketed emergency lighting units to provide target illumination on the egress path.
- Review complete control of lighting serving the egress path. Ensure the system utilizes the central Wattstopper control module rather than distributed points of automatic control.

Quantification: Lighting controls and circuiting revisions in Teaching Lab. Upgrade central Wattstopper controller and revise controls for luminaires served by standalone timeclock to be centrally controlled with other luminaires.

Cost – see lighting above

Lighting Systems – Networked Lighting Controls

Issue Description:

- Automatic control of common areas, circulation spaces, and exterior lighting is currently provided via a legacy Wattstopper controller.
- Limited staff is available to monitor, adjust, and service equipment. Having remote access to network settings through a networked system can help to streamline this effort.
- Consider replacing with a networked lighting controls solution that can be monitored and adjusted remotely.

Issue Resolution:

- Provide new networked lighting controls system that can be monitored and adjusted remotely.

Quantification: Replace central lighting control panel with networked solution by a reputable, locally supported manufacturer. Under the Luminaire Upgrade, elect to provide fixtures with Luminaire Level Lighting Controls (LLLC). The 5-8% cost premium for these luminaires can be offset with utility rebates. Controls components required under the Lighting Controls section, above, will also be minimized as they will primarily be integrated withing replacement luminaires. Include cost of the manufacturer to generate a system map to easily navigate device settings in each space from a helpful graphical user interface.

Cost – see lighting above.

Emergency Power Systems – Generator Reliability

Issue Description:

- The facility is currently backed up via a 150kW diesel generator. There have been several instances in which the equipment has not successfully started. When the generator does fire, it is often after a failed startup cycle.
- The generator servicer has reviewed the equipment and the resolution has been unclear.
- It is possible that the generator is mis-firing due to equipment inrush currents. A study should be performed to analyze the startup characteristics of connected equipment.
- If the startup characteristics of connected equipment are within the equipment ratings, the equipment may require replacement.

Issue Resolution

- Provide an additional backup power source to serve critical loads – refer to the following section on Standby Power and Central Battery UPS.
- Conduct a study of connected loads to confirm compatible equipment ratings. Provide motor soft starters for connected equipment to limit inrush current upon equipment startup. Account for planned future loads.
- If equipment persists to misfire after studying and adjusting motor startup currents, replace the generator with new.

Quantification: Include professional services to perform a load study and analyze startup of connected loads. Add motor soft starters to motor loads. If the issue persists, replace the existing generator with new. A larger generator may be required to support the connected loads. For pricing purposes, assume the same size genset will be provided.

Cost: Further investigation needed $20,000 (Allowance)

Standby Power Systems – Central Battery Uninterruptible Power Supply (UPS)

Issue Description:

- Specialized systems within the Aquarium Science Building serve as life support for marine wildlife studied in this facility. Reliability of the current standby power system is tenuous and has posed risks to the welfare of these animals.

Issue Resolution

- Provide additional uninterruptible power supply (UPS) to support critical systems.

Quantification: Assume 150kVA battery UPS with maintenance bypass.

Cost: $60,000

Corrosion Resistant Power and Data Devices

Issue Description:

- Power and Data device boxes and raceways installed in areas subject to saltwater exposure are showing signs of corrosion.
- Devices mounted above counter and/or in casework appear to be sustaining their condition.

Issue Resolution:

- Replace surface mounted conduit pathways and boxes in Teaching Lab, Work Room, Animal Holding, and Culture Lab with marine grade stainless steel. Replace devices and termination hardware with marine grade equivalent. Consider increasing the mounting height of devices installed near the floor. Provide with weather protected in-use covers to further limit exposure, as seen in areas such as Food Prep and the Water Quality Lab.

Quantification: Replace approximately (2) power/data devices and associated boxes and raceway. Extent of the replacement is limited to the affected spaces. Portions of electrical and raceway systems extending beyond the affected areas are suitable to remain.

Cost: $3000

Arc Flash Hazard Analysis

Issue Description:

- Electrical equipment is not provided with arc flash hazard labels. This poses life safety risks for personnel performing maintenance on the electrical system.

Issue Resolution:

- Perform an arc flash hazard analysis and label equipment.

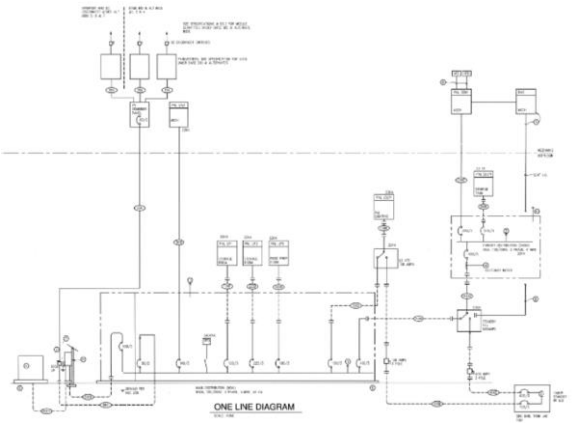
Quantification: Whole building study, report, and equipment labels.

Cost: $25,000

Power Distribution System Maintenance and Testing

Issue Description

- Periodic testing of electrical system components is recommended to monitor regular deterioration of equipment, devices, connections, and conductors over the system's useful life. Monitoring the electrical system helps to predict and determine scheduled replacements of system components, minimizing operational downtime and improving worker safety.



Issue Resolution:

- Develop preventative maintenance schedule per ANSI/NETA recommendations.
- Visually inspect equipment condition, connections, anchorage, and alignment.
- Perform electrical and mechanical test and inspect operation, connections, conductor insulation, and tap settings.
- Clean and lubricate equipment.
- Include inspections, testing, and servicing of rooftop solar photovoltaic array and associated components.

Quantification: Whole building assessment and reporting. Include professional services for developing routing maintenance and reporting process.

Cost to be determined TBD

Access Control System Replacement

Issue Description:

- The existing Millennium Expert access control system is past the end of its useful life and is no longer supported by the manufacturer.

Issue Resolution (paragraph and / or bullet points)

- Replace existing access control system and provide new, compatible field devices.

Quantification: Whole building system replacement. Currently controls (1) set of exterior doors. Include (3) additional electrified doors.

Cost (4 doors)

$10,000

Telecommunications System Improvements

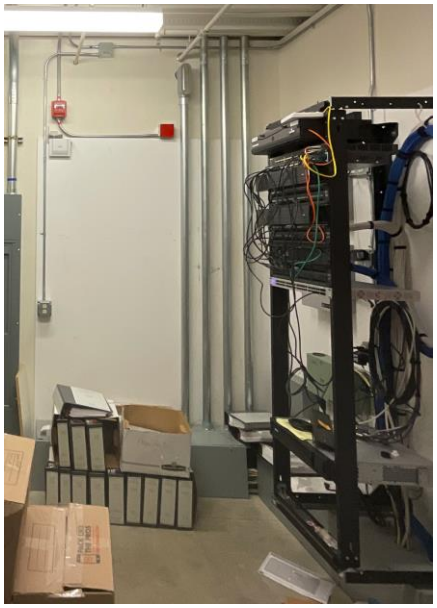
Issue Description:

- Cabling is Category 5E which is still loosely supported but is becoming obsolete.

Issue Resolution:

- Further evaluate infrastructure upgrades necessary to support upgrade of network cabling from CAT5E to CAT6 as the outside diameter of these cables will increase.

Quantification: Include professional services to develop implementation plan for conversion to CAT6A cabling.



Cost: Dependent on further evaluation

$100,000 (Allowance)

Building Telephony Replacement

Issue Description:

- Existing Panasonic phone system is antiquated and unsupported. The current license capacity has been exceeded which has presented challenges for onboarding new staff.

Issue Resolution:

- Replace existing phones with new, system agnostic, VOIP based phone system.

Quantification: Quantification: Full replacement of existing phone system
Cost: OCCC To provide cost

Intrusion Detection System Nuisance Alarms

Issue Description:

- The Honeywell intrusion detection/burglar alarm system has provided nuisance alarms. Currently, signal from any individual sensing device (door contacts, motion sensors, etc.) triggers the alarm.

Issue Resolution:

- Add a motion sensor at each door and configure the system to go into alarm when both a door contact and motion sensor are triggered.

Quantification: Security system motion sensor at each exterior door, programming support to revise operating sequence of alarm system.

Cost: 16,000

Cost Summary

Item	Cost
Repaint Exterior	$12,000
Reseal Exterior Brick	$4,500
Floor Slab Epoxy	$9,000
Door Frame Rust	$17,500
Water Damage at Cabinetry	$2,000
Corrosion at Overhead Door	$6,000
Corrosion at Panic Devices	$3,000
Corrosion at Fasteners	$2,000
Shield Exterior Lights	$400
HVAC Controls	$60,000
Recirc Pump	$600
Aquarium Systems Effuent Systems	$3,200
Lighting Systems	$180,000
Lighting Controls (see Lighting Systems)	$0
Networked Lighting Controls (see Lighting Systems	$0

Emergency Power Generator (allowance)	$20,000
UPS	$60,000
Corrosion Resistant Power and Data Devices	$3,000
Arc Flash Hazard Analysis	$25,000
Power Distribution System Maintenance and Testing	TBD
Access Control	$10,000
Telecommunications System Improvements (allowance)	$100,000
Building Telephony Replacement	TBD
Intrusion Detection System Nuisance Alarms	$16,000
Subtotal	**$534,200**
Soft Costs 27%	$144,234
Contingency 10%	$53,420
Inflation to Spring 2025 8%	$42,736
Total Cost	**$774,590**

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Repaint Exterior	$12,000
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Soft Costs 27%	$144,234
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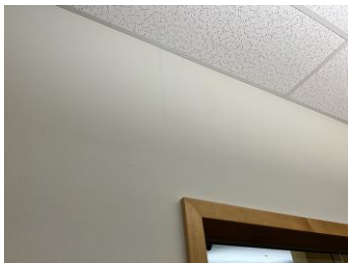
Total Cost	**$774,590**

OCCC – North Campus, Lincoln City

The North Campus serves the Lincoln City area and provides support to Taft High School, a short walk to the east of the building. The facility is 24,000 SF and house classrooms, science labs, nursing labs, administrative offices and a commons area for students and staff.

Cracks in Gypsum Board at Foyer



Issue Description:

- Cracks have appeared in the gypsum board at the foyer in numerous locations, primarily at the interior relite to room 110, at the openings into Reception 103 and at the beam saddle in the north wall of Upper Lobby 201 near gridline 6. Recurring cracks in these types of locations are typically caused by differential settlement.
- Cracks have also occurred in the hallway at both floors. Control joints should have been installed in continuous gypsum board runs that exceed 30'. Joints should be added in the hallways where the cracks have occurred.
- Recurring cracks in these types of locations are typically caused by differential settlement. But can also be caused by shrinkage due to drying wood framing.
- Differential settlement of up to ½" is indicated in the Geotechnical Report from URS dated January 16, 2006 which is enough to cause cracking.

Issue Resolution

- Add vertical "V" shaped control joints in the gypsum board that extend down to the substrate at all locations where cracking has occurred. Joint should be USG Control Joint 093 or similar.
- Gypsum board will need to be refinished and repainted.
- In some cases, an additional stud may need to be installed to support the joint.

Quantification: 200 linear feet of control joint installation

Cost: $75/linear foot $15,000

Nursing Completion

Issue Description:

- Nursing needs curtains and simulator equipment for each station.

Issue Resolution

- Install medical style curtains and tracks for three stations
- Install medical simulation equipment (assume no compressed air provided)
- Additional simulation equipment not included (mannequins, call station, ECG, etc. and would be an additional cost).

Quantification: 3

Cost: Curtains 1800 ea
Head Unit 3500 ea

$15,900

Water Damage at Sills

Issue Description:

- There is water damage at a few of the wood window sills. Most can be attributed to plants and watering. Damaged sills due to window leaks are dealt with in other areas.

Issue Resolution

- Replace the sills with solid surface material if plants are to remain.

Quantification: 4 sills

Cost: 300/sf

$2000

Window leak at 113 Business Director

Issue Description:

- Window has leaked causing water intrusion at the sill and damage to the gypsum board material below the window. Per the construction photos windows throughout were not installed per the details, omitting the stainless steel fully welded sill pan with back and end dams which would have improved the performance. New materials and techniques have been developed since then and are described below.

Issue Resolution

- Remove window and siding system above and adjacent to the window. Install new peel and stick weather barrier, Install new back angle at the sill, install new liquid applied flashing all around window and lap onto weather barrier, lap existing weather barrier over new. Reinstall window. Reinstall exterior sealant at head and jambs. Install air barrier sealant at interior side of window at head, jambs and sill. Air barrier sealant must be compatible with and attach to the aluminum window and the liquid flash. Reinstall exterior siding and flashings. Install new gypsum board and refinish at interior. Test studs below window for moisture content and inspect for mold. Remediate if necessary.

Quantification: Recommend both the south and east facing windows.

Cost: $10,000 per window $20,000

Interior Sealant Joints have failed

Issue Description:

- Interior sealant joints between glue laminated beams at the high windows has failed. Failure is consistent with a joint that makes contact with 3 surfaces (top bottom and back) rather than two (top and bottom) and is usually caused by the absence of backer rod in the joint installation.

Issue Resolution

- Remove all sealant to the bare wood
- Install backer rod sized for the joint and install new sealant

Quantification: 58’

Cost:$20/ LF

$1,140

Exterior Flashing at Room 206

Issue Description:

- Exterior flashing has been bent up outside of room 206 and has been nailed through at the leading edge (leading edge of flashing systems should not be nailed through causing potential leaks in the system).

Issue Resolution

- Remove the flashing, the top row of shingles and install new self adhered flexible flashing. Install new row of shingles to match. Install new angled coated aluminum flashing. Thickness: 040 minimum. Reference detail A/706 from the volume 3 of the project manual.

Quantification: 35’

Cost: $150/LF

$5,250

Second Floor Landing - North

Issue Description:

- The landing at Stair S-02 is lower than the adjacent floor especially at the SE corner. The offset ranges from 1/8” at the SW corner to 3/8” at the SE corner

Issue Resolution

- Structural drawings (detail R1/A641) call for 6” x ¼” SDS screws at 16” on center staggered through the face of the beam into blocking attached to the wide flange beam beyond, however only 3 plugs are visible in the face of the GLB.
- Destructive investigation is necessary to determine how the GLB is attached to the steel wide flanged beam since the installation does not appear to match the installation.
- Recommendation option 1: provide temporary shoring at beam. Remove plugs and installed fasteners into face of beam. Shim up beam using the temporary shoring to bring the landing level with the second floor. Verify blocking does not lift when the beam is shimmed into place. Verify blocking bolts are installed per R1/641 by removing the first floor hallway ceiling tiles. Tighten those bolts if possible. Install SDS ¼ x 6 at 16” o/c staggered per detail R1/641. Countersink screws and plug to match GLB. Install new sealant joint below beam. The detail is attached at the back of this report.
- Recommendation option 2: Shore and shim beam to level the landing with the second floor. Remove gypsum board finish below beam. Weld new L 4x8x ¼ x 6” support angles to wide flanged beam at east, center and west ends. Secure to beam with SDS ¼” x 6” into bottom of beam. Refinish gypsum board and paint.

Quantification: As indicated above.

Cost: $12,000

Exterior exposed wood

Issue Description:

- Finish has aged, cracked and peeled. Wood is stained and has grayed.
- Wood with clear finish should be recoated every three years and sanded and refinished every 12 years as needed

Issue Resolution

- Sand down wood to remove finish and as much of the staining as possible.
- Apply a wood stain remover product
- Apply three coats of clear spar urethane varnish – satin finish

Quantification: All

Cost: $8500

Exterior seals at windows

Issue Description:

- Exterior sealant installation is getting brittle and will need to be replaced every 15 to 20 years

Issue Resolution

- None at this time except for at windows that are leaking (see above).

Quantification:

Cost: None at this time

Exterior Paint at Steel Substrates

Issue Description:

- Exterior steel needs to be repainted every 8 years

Issue Resolution

- Remove flaking paint and abrade surfaces of intact paint
- Apply a DTR paint system intended for galvanized metal surfaces. Color to match existing.

Quantification: All

Cost: $8,000

Exterior Brick Systems

Issue Description:

- Brick needs to be resealed every 8 years going forward
- Brick control joints need to be replaced every 12 years

Issue Resolution

- Power wash brick and reseal.
- Remove silicone control joints and replace

Quantification: All

Cost: $9,000

Repaint Exterior Painted Soffits

Issue Description:

- All cement fiber siding and soffits need to be repainted.
- Repainting needs to occur every 8 years going forward.

Issue Resolution

- Remove all flaking paint
- Remove and reinstall all sealant associated with the siding system
- Prime entire surface with an elastomeric paint system intended for cement fiber siding and cedar trim.

Quantification: All

Cost: $12,000

Metal Siding Systems

Issue Description:

- Clean metal siding systems every other year.

Issue Resolution

- Remove all spider webs and debris. Scrub surfaces with a brush and detergent to remove algae, dirt and debris. Power washing is not recommended.

Quantification: All

Cost: $3,000

Repaint Downspouts

Issue Description:

- Downspouts should be repainted every 8 years moving forward.

Issue Resolution

- Remove flaking paint, prime and repaint with appropriate paint system

Quantification: All

Cost: $3500

Concrete Staining

Issue Description:

- Concrete has developed moss and stains. Clean every other year.

Issue Resolution

- Power wash with an anti moss / mildew additive to be determined

Quantification: All

Cost: $3000

Exterior Door Hardware

Issue Description:

- Some Door Hardware is damaged or corroded.

Issue Resolution

- Replace as necessary and clean / lubricate the rest on a yearly basis.

Quantification: 4 locations

Cost: $4200

HVAC - Controls

Issue Description:

- Current control system (Sunbelt Reliable) stopped receiving updates in 2014.
- Current control sequences lead to undesirable or incorrect equipment operation (redundant/backup boiler does not fire if primary has error, Mach units need hard restart every quarter, boiler circulation pumps do not operate in lead/lag resulting in excessive wear on primary pump, CP-1)

Issue Resolution

- Update controls to Sunbelt's latest (cloud based).
- In update, scrub all sequences of operation (or develop from scratch) to ensure appropriate operation.
- Replace boiler circulation pump (CP-1).

Quantification: Controls update should include all of OCCC's buildings, including Central County Campus, Aquarium Science, Lincoln City, and Waldport.
Replacement of one pump.

Cost: $80,000

HVAC – AC-1.1 Startup

Issue Description:

- Unit outside air intake located on side of building. Wind causes fan to turn when unpowered, which then prevents unit from starting up when needed.

Issue Resolution

- Install motorized shutoff damper that shuts outside air duct when unit is powered off. Damper to power open on unit startup.

Quantification: Unit AC-1.1 only.

Cost: $5000

HVAC – CU-2.1 Replacement

Issue Description:

- Outdoor unit wearing/rusting out.

Issue Resolution

- Replace with new outdoor unit. Recommend provide with marine coating to help prevent corrosion.

Quantification: Unit CU-2.1 only.

Cost: $10,000

HVAC – Outside Air Intake Hoods

Issue Description:

- Outside air intake hoods and screens have rusted out and have created issues with wildlife.

Issue Resolution

- Replace three outside air intake hoods and associated screens.
- Recommend incorporating mist elimination screen to protect downstream HRUs from corrosion.

Quantification: Three rooftop intake hoods.

Cost: $24,000

HVAC – Elevator Machine Room HVAC Replacement

Issue Description:

- Exhaust fan EF-3, wall heater WH-B1, and outside air louver in door showing severe corrosion.

Issue Resolution

- Replace exhaust fan and wall heater with new units. Recommend stainless steel or protective marine coating to reduce corrosion.
- Replace door louver with new. Recommend stainless steel or protective marine coating to reduce corrosion.

Quantification: Exhaust fan, wall heater, and door louver.

Cost: $17,000

Lighting Systems – Luminaire Upgrade

Issue Description:

- Interior lighting is fluorescent.
- Building mounted exterior lighting is Metal Halide
- Exterior signage lighting is fluorescent.
- Pole lights have been converted to LED.
- Older lighting technologies are costly to maintain, requiring regular lamp and/or ballast replacement.
- Controllability for these fixtures is also limited, minimizing energy savings potential through lighting controls.

Issue Resolution:

- Replace and/or retrofit interior lighting with dimmable LED fixtures/lamps.
- Replace and/or retrofit exterior lighting with LED fixtures/lamps.
- Consider luminaires with Luminaire Level Lighting Controls (LLLC). See Lighting Controls section for more information.

Quantification: Full interior and exterior replacement. Include exterior pole lights to align with replacements at the other campuses and simplify maintenance.

Cost: $264,800

Lighting Systems – Lighting Controls

Issue Description:

- In enclosed spaces such as offices, classrooms, conference rooms, etc., controls primarily consist of standalone on/off controlled rooms with automatic override by motion

sensors and photocells. Dimming control is not provided in most spaces.
- A Powerline Communications Inc. lighting control panel serves circulation spaces and common areas. This manufacturer is no longer in operation and the product is no longer directly supported.
- Limited staff is available to monitor, adjust, and service equipment. Having remote access to network settings through a networked system can help to streamline this effort.
- Consider replacing with a networked lighting controls solution that can be monitored and adjusted remotely.

Issue Resolution:
- Upgrade the lighting controls system to a currently supported system by a reputable and locally represented manufacturer.
- Provide dimming control of luminaires in enclosed spaces.
- Consider Luminaire Level Lighting Controls (LLLC) as a solution for greatest rebates, flexibility, and remote accessibility for maintenance personnel.

Quantification: Full interior and exterior replacement. Replace central lighting control panel with networked solution by a reputable, locally supported manufacturer. Under the Luminaire Upgrade, elect to provide fixtures with Luminaire Level Lighting Controls (LLLC). The 5-8% cost premium for these luminaires can be offset with utility rebates. Controls components required will also be minimized as they will primarily be integrated withing replacement luminaires. Include cost of the manufacturer to generate a system map to easily navigate device settings in each space from a helpful graphical user interface.

Cost: (included in lighting)

Reliable Standby Power

Issue Description:
- The North County Campus is backed up via a 235kW natural gas fueled generator. Natural gas is not considered to be a reliable source. Upon a seismic event, the utility will likely stop the supply of fuel to mitigate hazards.
- The Community College has expressed concerns regarding the reliability of the standby power source as the facility is a check point for Red Cross and is used as an emergency shelter to support community members during upset conditions. The local Fire Department and Police Department have also expressed interest in using the facility as an Emergency Operations Center (EOC).

- While it may be possible to configure the existing genset to accept propane, there are concerns about the vulnerable nature of a remote tank and fuel piping.

Issue Resolution:

- Replace the existing generator with a diesel generator.

Quantification: Disconnect and remove the existing generator and natural gas service to the equipment. Provide 235kW diesel generator with subbase fuel tank. Commission the complete system, including existing transfer switch and emergency lighting inverter.

Consider replacing the lighting inverter with a separate 100A emergency system transfer switch to simplify maintenance. Provide new 100A, 120/208V panel and connect emergency lighting circuits.

Cost: $170,000

Emergency Power Systems – Emergency Lighting Inverter

Issue Description:

- Existing egress lighting is provided with emergency backup power via a 6kVA lighting inverter.
- Inverter batteries are nearing end of life and are due for replacement.

Issue Resolution

- If diesel generator and emergency system ATS/branch panel are not provided, replace existing batteries in lighting inverter.

Quantification: Full replacement of 120kVA battery UPS with maintenance bypass.

Cost: $50,000

Arc Flash Hazard Analysis

Issue Description:

- Electrical equipment is not provided with arc flash hazard labels. This poses life safety risks for personnel performing maintenance on the electrical system.

Issue Resolution:

- Perform an arc flash hazard analysis and label equipment.

Quantification: Whole building study, report, and equipment labels.

Cost: $25,000

Power Distribution System Maintenance and Testing

Issue Description

- Periodic testing of electrical system components is recommended to monitor regular deterioration of equipment, devices, connections, and conductors over the system's useful life. Monitoring the electrical system helps to predict and determine scheduled replacements of system components, minimizing operational downtime and improving worker safety.

Issue Resolution:

- Develop preventative maintenance schedule per ANSI/NETA recommendations.
- Visually inspect equipment condition, connections, anchorage, and alignment.
- Perform electrical and mechanical test and inspect operation, connections, conductor insulation, and tap settings.
- Clean and lubricate equipment.

Quantification: Whole building assessment and reporting. Include professional services for developing routing maintenance and reporting process.

Cost to be determined TBD

Access Control System Replacement

Issue Description:

- The existing Millennium Expert access control system is past the end of its useful life and is no longer supported by the manufacturer.

Issue Resolution (paragraph and / or bullet points)

- Replace existing access control system and provide new, compatible field devices.

Quantification: Whole building system replacement. Currently controls (4) sets of exterior doors. Include (5) additional electrified doors.

Cost (9 doors) $18,000

Telecommunications System Improvements

Issue Description:

- Cabling is Category 5E which is still loosely supported but is becoming obsolete.

Issue Resolution:

- Further evaluate infrastructure upgrades necessary to support upgrade of network cabling from CAT5E to CAT6 as the outside diameter of these cables will increase.

Quantification: Include professional services to develop implementation plan for conversion to CAT6A cabling.

Cost: Dependent on further evaluation

Allowance: $120,000

Building Telephony Replacement

Issue Description:

- Existing Panasonic phone system is antiquated and unsupported. The current license capacity has been exceeded which has presented challenges for onboarding new staff.

Issue Resolution:

- Replace existing phones with new, system agnostic, VOIP based phone system.

Quantification: Full replacement of existing phone system.

OCCC to provide cost

Classroom and Conference Audio-Visual (AV) Improvements

Issue Description:

- As remote learning becomes more prevalent, audio-visual systems within these spaces will need to be updated to support the application.

Issue Resolution:

- Develop updated AV standards for classrooms and conference spaces.
- Provide new projectors and supplemental video displays in classrooms and conference rooms to

provide adequate visual coverage of the space.
- Provide integrated video and microphone systems to allow for improved remote and hybrid learning environments.

Quantification: Full AV upgrades for all classroom and conference room spaces. Include additional monitor displays for large rooms.

Cost dependent on further evaluation

Fire Alarm System Reprogramming

Issue Description:
- It has been noted that some alarm sequences are not programmed correctly in the current fire alarm system.
- An example of this is that the sump pump alarm is an indication of low pressure in the dry portions of the fire protection system.

Issue Resolution:
- Audit the fire protection system connections and programming and revise system as required for correct sequence of operations.

Quantification: Include professional services for auditing existing system and time to reconfigure up to (5) system connections.

Cost: $8000

Intrusion Detection System Nuisance Alarms

Issue Description:
- The Honeywell intrusion detection/burglar alarm system has provided nuisance alarms. Currently, signal from any individual sensing device (door contacts, motion sensors, etc.) triggers the alarm.
-

Issue Resolution:
- Add a motion sensor at each door and configure the system to go into alarm when both a door contact and motion sensor are triggered.
-

Quantification: Security system motion sensor at each exterior door, programming support to revise operating sequence of alarm system.
Cost: 28,000

Cost Summary

Item	Cost
Gypsum Board Cracking	$15,000
Nursing Completion	$15,900
Water Damage at Sills	$2,000
Window Leak at 113 Business Director	$20,000
Interior Sealant Joints	$1,140
Exterior Flashing at Room 206	$5,250
Second Floor Landing - North	$12,000
Exterior Wood Refinish	$8,500
Exterior Window Seals	$0
Exterior Paint at Steel Substrates	$8,000
Exterior Brick Systems	$9,000
Paint Soffits	$12,000
Clean Metal Siding Systems	$3,000
Repaint Downspouts	$3,500
Concrete Staining	$3,000
Exterior Door Hardware	$4,200
HVAC Controls	$80,000
HVAC AC 1.1	$5,000
HVAC CU-2.1 Replacement	$10,000
HVAC Outside Air Intake Hoods	$24,000
HVAC Elevator Machine Room HVAC Replacement	$17,000
Lighting Systems – Luminaire Upgrade	$264,800
Lighting Systems – Lighting Controls (see lighting systems)	$0
Reliable Standby Power	$170,000
Emergency Power Systems - Emergency Lighting Inverter	$50,000
Arc Flash Hazard Analysis	$25,000
Power Distribution System Maintenance and Testing (TBD)	$0
Access Control Systems	$18,000
Telecommunications System Improvements (allowance)	$120,000
Building Telephony Replacement (TBD)	$0
Classroom and Conference AV Improvements (TBD)	$0
Fire Alarm Reprogramming	$8,000
Intrusion Detection System Nuisance Alarms	$28,000

Subtotal	**$942,290**
Soft Costs 27%	$254,418
Contingency 10%	$94,229
Inflation to Spring 2025 8%	$75,383
Total Cost	**$1,366,321**

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Gypsum Board Cracking	$15,000
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Total Cost	**$1,366,321**

OCCC – Waldport

Building Description The South Campus, adjacent to Waldport High School in the city of Waldport is a 4250 square foot facility with office space, two classrooms and restrooms. It was designed to be expanded to the north with extra classroom space and extra parking.

Exterior Cement Fiber / Cedar Siding Systems

Issue Description:

- All cement fiber siding and soffits need to be repainted.
- Repainting needs to occur every 8 years going forward.

Issue Resolution

- Remove all flaking paint
- Remove and reinstall all sealant associated with the siding system
- Prime / Paint entire surface with an elastomeric paint system intended for cement fiber siding and cedar trim.

Quantification: All

Cost: $9500

Exterior Brick

Issue Description:

- Brick needs to be resealed every 8 years going forward
- Brick control joints need to be replaced every 12 years

Issue Resolution

- Power wash brick and reseal.
- Remove silicone control joints and replace

Quantification:

Cost: All $2500

Exterior Wood with Clear Finish

Issue Description:

- Finish has aged, cracked and peeled. Wood is stained and has grayed.
- Wood with clear finish should be recoated every three years and sanded and refinished every 12 years as needed

Issue Resolution

- Sand down wood to remove finish and as much of the staining as possible.
- Apply a wood stain remover product
- Apply three coats of clear spar urethane varnish – satin finish

Quantification: All

Cost: $5000

Repaint Exterior Steel

Issue Description:

- Exterior steel needs to be repainted every 8 years

Issue Resolution

- Remove flaking paint and abrade surfaces of intact paint
- Apply a DTR paint system intended for galvanized metal surfaces. Color to match existing.

Quantification: All

Cost: $2000

Perimeter Soil Buildup

Issue Description:

- Soil has built up over time at the perimeter of the building, blocking brick weeps and causing potential rot / decay at siding systems.
-

Issue Resolution

- Remove excess soil to expose weeps at brick and provide 2” minimum clear at cement fiber siding and cedar trim.
-

Quantification: All around perimeter of building

Cost: $500

Corner Guards

Issue Description:

- Interior outside corners at numerous locations are damaged.

Issue Resolution

- Repair corners and paint if exposed
- Provide 2”x2” x4’-0” Stainless Steel adhered corner guards
-

Quantification: Provide where needed – approximately 10 locations

Cost: $1000

Ceiling Tiles

Issue Description:

- Ceiling tiles have come loose and are sagging in several locations.

Issue Resolution

- Ceiling tiles likely become dislodged during wind events that cause a low pressure in the vented attic space. The attic is supposed to be sealed at the bottom chord of the trusses with a plastic scrim material – seal all holes with tape that is rated for exposure in a plenum (Flame spread of 25 or lower and smoke development of 450 max). Additionally, ceiling tile hold down clips can be installed to hold the tiles in place. In some locations a new tile will need to be installed that is sized properly for the opening

Quantification: Check all spaces

Cost: $2000

Monument Sign

Issue Description:

- Monument Sign is discolored and lights are broken.

Issue Resolution

- Power wash concrete using a low pressure water / bleach / TSP solution to remove any algae growth. Repair any spalling concrete with a concrete patch compound. Remove raised lettering and artwork. Prime concrete and paint with an elastomeric paint system intended for concrete substrates. Reinstall lettering. Replace lighting (included in site lighting package below).

Quantification: One Sign

Cost: $4000

Plumbing – Hot Water Plumbed to Cold Water Fixtures

Issue Description:

- Hot water was mistakenly plumbed to cold-water only fixtures, such as drinking fountain

Issue Resolution

- Replumb fixtures to be served by cold water as required.

Quantification: To be determined, drinking fountain is known.

Cost: $2000 Allowance

HVAC - Controls

Issue Description:

- Current control system (Sunbelt Reliable) stopped receiving updates in 2014.
- Current control sequences lead to undesirable or incorrect equipment operation (lead lag issues, backup systems do not come online when primary equipment fails, etc.).

Issue Resolution

- Update controls to Sunbelt's latest (cloud based).
- In update, scrub all sequences of operation (or develop from scratch) to ensure appropriate operation.

Quantification: Controls update should include all of OCCC's buildings, including Central County Campus, Aquarium Science, Lincoln City, and Waldport

Cost – can vary widely – Allowance: $30,000

HVAC – Air Handling Unit Component Replacement

Issue Description:

- AHU-1 has severely rusted filter section.
- Actuators rusted.

Issue Resolution

- Replace filter section of AHU and associated control components.
- Recommend installing mist elimination screen into outside air intake to help prevent corrosion.

Quantification: AHU-1 filter section and added screen to outside air intake duct.

Cost: $35,000

Makers Lab HVAC and Plumbing Provisions

Issue Description:

- The South County Campus seeks to add maker spaces for career technical education. Additional HVAC provisions may be required to maintain operating temperatures and ventilated air with the addition of specialized equipment.
- Some specialized equipment may have water connection requirements.

Issue Resolution:

- Provide additional outside air and ventilation to Makers Lab spaces as required.
- Provide domestic cold-water connections to specialty equipment, where applicable.
- Provisions for specialized water treatment systems are not known are this time and have not been included.

Quantification: Assume programming to adjust control setpoints and include provisions for additional dedicated ventilation. Assume domestic cold-water connections to (2) pieces of equipment. Final requirements will be coordinated with programmed space use, occupancy, and operating needs of equipment to be installed.

Cost: TBD

Lighting Systems – Luminaire Upgrade

Issue Description:

- Interior lighting is fluorescent.
- Building mounted exterior lighting is Metal Halide.
- Parking area lighting is High Pressure Sodium.
- Parking area lighting provides insufficient coverage.
- These older technologies are costly to maintain, requiring regular lamp and/or ballast replacement.
- Controllability for these fixtures is also limited, minimizing energy savings potential through lighting controls.

Issue Resolution:

- Replace and/or retrofit interior lighting with dimmable LED fixtures/lamps.
- Replace and/or retrofit exterior lighting with LED fixtures/lamps.
- Increase number of parking area pole lights to provide full coverage illumination.
- Consider luminaires with Luminaire Level Lighting Controls (LLLC). See Lighting Controls section for more information.

Quantification: Full interior and exterior replacement of existing lighting. Add approximately (3) pole lights with

Cost: Includes new control system $52,000
Site Lighting – Add $900 per pole light Assume 7 $6300

Lighting Systems – Lighting Controls

Issue Description:

- In enclosed spaces such as offices, classrooms, conference rooms, etc., controls primarily consist of standalone on/off controlled rooms with automatic override by motion sensors and photocells. Dimming control is not provided in most spaces.
- Consider replacing with a networked lighting controls solution that can be monitored and adjusted remotely.

Issue Resolution:

- Replace controls in enclosed spaces to facilitate dimming control of new luminaires.
- Provide new networked lighting controls system that can be monitored and adjusted remotely.

Quantification: Replace standalone lighting controls in enclosed spaces to provide all code required controls, including dimming.

Cost: See lighting upgrade

Lighting Systems – Networked Lighting Controls

Issue Description:

- Automatic control of common areas, circulation spaces, and exterior lighting is currently provided via a legacy Wattstopper LP8 relay-based control panel.
- Limited staff is available to monitor, adjust, and service equipment. Having remote access to network settings through a networked system can help to streamline this effort.
- Consider replacing with a networked lighting controls solution that can be monitored and adjusted remotely.

Issue Resolution:

- Provide new networked lighting controls system that can be monitored and adjusted remotely.

Quantification: Replace central lighting control panel with networked solution by a reputable, locally supported manufacturer. Under the Luminaire Upgrade, elect to provide fixtures with Luminaire Level Lighting Controls (LLLC). The 5-8% cost premium for these luminaires can be offset with utility rebates. Controls components required under the Lighting Controls section, above, will also be minimized as they will primarily be integrated withing replacement luminaires. Include cost of the manufacturer to generate a system map to easily navigate device settings in each space from a helpful graphical user interface.

Cost: See Lighting Upgrade

Makers Lab Power Provisions

Issue Description:

- The South County Campus seeks to add maker spaces for career technical education. Additional power provisions will need to be made to support new equipment.

Issue Resolution:

- Provide additional general power provisions and special equipment connections to support

Quantification: Assume (10) additional receptacles on dedicated 20A/1P circuits and (5) new 30A/2P hard-wired equipment connections with heavy-duty switched disconnects. Final provisions to be coordinated with programmed space use and equipment connection requirements.

Cost: TBD

Service Entrance Equipment

Issue Description:

- Meter base and CT enclosures mounted on the building exterior are not marine grade and are showing signs of deterioration.

Issue Resolution:

- Replace exterior equipment enclosures with marine grade stainless steel NEMA 3R enclosures.

Quantification: Utility coordination, temporary disconnection and reconnection of electrical service, new marine grade stainless steel meter base and CT can.

Cost: $8,000

Emergency Power Systems – Diesel Generator

Issue Description:

- The facility is currently provided with an automatic transfer switch but no source of standby power.

Issue Resolution

- Provide a 100kW diesel generator to serve the existing building loads.

Quantification: Provide generator, feeders, remote annunciator, remote shutdown pushbutton, feeders, auxiliary load branch circuiting, and commissioning as required for a complete and operable system.

Cost: $70,000

Arc Flash Hazard Analysis

Issue Description:

- Electrical equipment is not provided with arc flash hazard labels. This poses life safety risks for personnel performing maintenance on the electrical system.

Issue Resolution:

- Perform an arc flash hazard analysis and label equipment.

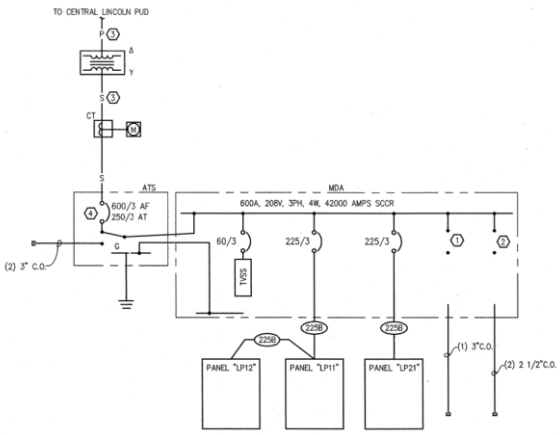
Quantification: Whole building study, report, and equipment labels.

Cost: $15,000

Power Distribution System Maintenance and Testing

Issue Description

- Periodic testing of electrical system components is recommended to monitor regular deterioration of equipment, devices, connections, and conductors over the system's useful life. Monitoring the electrical system helps to predict and determine scheduled replacements of system components, minimizing operational downtime and improving worker safety.



Issue Resolution:

- Develop preventative maintenance schedule per ANSI/NETA recommendations.
- Visually inspect equipment condition, connections, anchorage, and alignment.
- Perform electrical and mechanical test and inspect operation, connections, conductor insulation, and tap settings.
- Clean and lubricate equipment.
- Include inspections, testing, and servicing of rooftop solar photovoltaic array and associated components.

Quantification: Whole building assessment and reporting. Include professional services for developing routing maintenance and reporting process.

Cost to be determined TBD

Access Control System Replacement

Issue Description:

- The existing Millennium Expert access control system is past the end of its useful life and is no longer supported by the manufacturer.

Issue Resolution:

- Replace existing access control system and provide new, compatible field devices.

Quantification: Whole building system replacement. Currently controls (1) set of exterior doors. Include (3) additional electrified doors.

Cost: $7,500

Telecommunications System Improvements

Issue Description:

- Cabling is Category 5E which is still loosely supported but is becoming obsolete.

Issue Resolution:

- Further evaluate infrastructure upgrades necessary to support upgrade of network cabling from CAT5E to CAT6 as the outside diameter of these cables will increase.

Quantification: Include professional services to develop implementation plan for conversion to CAT6A cabling.

Cost: Dependent on further evaluation $30,000 (Allowance)

Building Telephony Replacement

Issue Description:

- Existing Panasonic phone system is antiquated and unsupported. The current license capacity has been exceeded which has presented challenges for onboarding new staff.

Issue Resolution:

- Replace existing phones with new, system agnostic, VOIP based phone system.

Quantification: Full replacement of existing phone system.

Cost: OCCC To provide cost

Intrusion Detection System Nuisance Alarms

Issue Description:

- The Honeywell intrusion detection/burglar alarm system has provided nuisance alarms. Currently, signal from any individual sensing device (door contacts, motion sensors, etc.) triggers the alarm.

Issue Resolution:

- Add a motion sensor at each door and configure the system to go into alarm when both a door contact and motion sensor are triggered.

Quantification: Security system motion sensor at each exterior door, programming support to revise operating sequence of alarm system.

Cost: $9,000

Classroom Audio-Visual (AV) Improvements

Issue Description:

- As remote learning becomes more prevalent, audio-visual systems within these spaces will need to be updated to support the application.

Issue Resolution:

- Develop updated AV standards for classrooms and conference spaces.
- Provide new projectors and supplemental video displays in classrooms to provide adequate visual coverage of the space.
- Provide integrated video and microphone systems to allow for improved remote and hybrid learning environments.

Quantification: Full AV upgrades for all classroom spaces. Include additional monitor displays for large rooms.

Cost dependent on further evaluation	TBD

Cost Summary

Item	Cost
Repaint Exterior	$9,500
Reseal Exterior Brick	$2,500
Exterior Wood with Clear Finish	$5,000
Repaint Exterior Steel	$2,000
Perimeter Soil Buildup	$500
Corner Guards	$1,000
Ceiling Tiles	$2,000
Monument Sign	$4,000
Hot Water Plumbing (Allowance)	$2,000
HVAC Controls	$30,000
HVAC Air Handling Unit Component Replaceennt	$35,000
Makers Lab HVAC and Plumbing Provisions	TBD
Lighting Systems	$52,000
Lighting Systems Exterior	$6,300
Lighting Controls (see Lighting Systems)	
Networked Lighting Controls (see Lighting Systems	
Makers Lab Power Provisions	TBD
Service Entrance Equipment	$8,000
Emergency Power Generator	$70,000
Arc Flash Hazard Analysis	$15,000
Power Distribution System Maintenance and Testing	TBD
Access Control	$7,500
Telecommunications System Improvements (allowance)	$30,000
Building Telephony Replacement	TBD
Intrusion Detection System Nuisance Alarms	$9,000
Classroom Audio-Visual (AV) Improvements	TBD
Subtotal	**$291,300**
Soft Costs 27%	$78,651
Contingency 10%	$29,130
Inflation to Spring 2025 8%	$23,304
Total Cost	**$422,385**

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