CONDITIONS SURVEY

PORT HEIDEN SCHOOL (MESHIK)
LAKES AND PENINSULA SCHOOL DISTRICT
PORT HEIDEN, AK 99549

Category 0 Immediate
Category 0 1-5 years
Category 1 Poor 1-5 years

Category 1 Poor 10+ years
Category 2 Fair/Poor 1-5 years
Category 3 Fair 10+ years
No Category 2 Fair/Poor 5+ years

SITE ASSESSMENT DATE	5/22/2023	
REPORT DATE	7/14/2023	
	Orig	Add'n
CONSTRUCTION YEAR	1982	1996
CONSTRUCTION TYPE:	V-1 hour	(Wood)

CIVIL

Discipline	Item	Category	Condition	Timeline	Location	Observation/ Deficiency	Recommendation	Cost
M	2	C	0	0	Boiler/Generator building	Floor drains are not provided in the boiler/generator building	Provide floor drains and electric trap primers to serve boiler/generator building. Provide sewer service to building. Provide vent piping with vent through roof. Remove and patch concrete.	$ 10,469
M	16	MD	0	0	Boiler/Generator building	Well tanks (3) are not seismically restrained	Provide Seismic restraint	$ 2,800
M	17	RR	0	0	Boiler/Generator building	Pipe unions at well tanks and water filters are starting to develop surface rust.	replace piping unions	$ 1,248
M	19	MD	0	0	Boiler/Generator building	Expansion tank is not seismically restrained	Provide Seismic restraint	$ 352
M	20	MD	0	0	Boiler/Generator building	Boiler flue venting located at building exterior is not secured to the building	Provide support to serve boiler flue venting	$ 587
M	21	RR	0	0	Boiler/Generator building	Boiler #1 Temperature/Pressure Gauge does not appear to read system pressure	Replace Temperature/Pressure sensor with new	$ 350
M	22	C	0	0	Boiler/Generator building	Combustion air opening is undersized. Interior opening is obstructed.	Remove combustion air opening and associated hood, and provide new hood suitable for arctic environment.	$ 4,004
M	23	RR	0	0	Boiler/Generator building	Boilers are not provided with unions to facilitate separation from heating system piping.	Modify piping to provide unions at each boiler supply and return connection	$ 3,065
M	3	C	0	0	Boys 106	Floor drains not provided	Provide floor drain, trap primer, and associated piping. Connect and extend water piping to trap primer.	$ 2,048
M	26	C	0	0	Boys 106	Exhaust air is not provided to serve space	Provide exhuast grille, ductwork, and exhaust fan. Terminate exhaust at building exterior	$ 3,727
M	31	MD	0	0	Classroom 108	Ventilation to space consists of a single diffuser, and does not provide adequate mechanical ventilation to the space.	Replace AHU-4 and associated ductwork distribution system to provide additional ventilation to original building.	$ 11,881
M	32	MD	0	0	Classroom 109	Ventilation to space consists of a single diffuser, and does not provide adequate mechanical ventilation to the space.	Replace AHU-4 and associated ductwork distribution system to provide additional ventilation to original building.	$ 11,881
M	33	C	0	0	Corridor 101	Ventilation is not provided to serve this space.	Replace AHU-4 and associated ductwork distribution system to provide additional ventilation to original building.	$ 11,881
A	1	C	0	0	Exterior	Exterior landing and finish floor exceed 3/4" creating a potential trip hazard	Adjust landing upward to minimize the height differential to under 1/2"	**$ 13,291**
A	2	C	0	0	Exterior	Landings have not been provided at the bottom of stairs	Install new landings at bottom of stairs utilizing synthetic decking material	$ 9,324
A	3	C/AC	0	0	Exterior	Steel exterior stairs lack handrails	Install handrails on both sides of stairs	$ 38,458
A	4	C/AC	0	0	Exterior	Exterior Ramp lacks handrails	Install handrails on both sides of Ramp	$ 33,650
A	18	RR	0	0	Exterior	Exterior siding/flashing missing at portion of east and west gable ends	Replace with new flashing	$ 5,367
M	4	C	0	0	Girls 107	Floor drain not provided	Provide floor drain, trap primer, and associated piping. Connect and extend water piping to trap primer.	$ 2,048
M	27	C	0	0	Girls 107	Exhaust air is not provided to serve space	Provide exhuast grille, ductwork, and exhaust fan. Terminate exhaust at building exterior	$ 3,727
A	6	C	0	0	Interior	Handrails on stairs do not comply with current requirements for handrails-replace	Replace existing handrails with continuous tube steel handrails	$ 28,845
A	7	C	0	0	Interior	Interior relite from Classroom 110 to Vestibule 123 appears to be plate glass - the relite should be constructed of safety glazing.	Replace glazing with safety or wire glass	$ 2,512

A	**8**	**C**	**0**	**0**	Interior	2'6"x6'8" doors do not conform to egress or accessibility requirements and should be removed and replaced (Doors 112-1, 112-2)	Replace doors with 3' x 6'8" doors	$ 8,266
A	**12**	**C**	**0**	**0**	Interior	Double door 112-1 impedes egress route when fully open	Remove and replace door with single 3' x 6'8" door	$ 9,742
M	**1**	**C**	**0**	**0**	Interior	Fire Sprinkler System is not NFPA Compliant	Based on review from AHJ: Remove and replace existing system with new NFPA Compliant Sprinkler System to serve building. Provide new fire pump and water	$ 524,000
M	**11**	**MD**	**0**	**0**	Interior	Domestic cold water and hot water piping is not insulated.	Provide piping insulation	$ 325
M	**24**	**RR**	**0**	**0**	interior	Heating piping is not insulated.	Provide pipe insulation on heating system piping.	$ 35,503
M	**30**	**MD**	**0**	**0**	Interior	AHU-4 is from the original building construction, has been field modified to convert from an oil fired furnace to an indoor air handling unit. AHU is in poor condition	Provide new air handling unit and associated distribution ductwork to provide mechanical ventilation to applicable areas of the school.	$ 11,881
M	**35**	**MD**	**0**	**0**	Kitchen 114	Kitchen hood is provided with a sprinkler head from the main fire sprinkler system, in lieu of an ANSUL type system capable of extinguishing grease fires.	Replace kitchen hood with new hood that is provided with ANSUL type fire protection system and associated control panel. Replace grease exhaust ductwork and associated grease exhaust fan.	$ 32,075
M	**34**	**C**	**0**	**0**	Library 200	Ventilation is not provided to serve this space.	Replace AHU-4 and associated ductwork distribution system to provide additional ventilation to original building.	$ 11,881
M	**25**	**MD**	**0**	**0**	Mechanical 206	Circulation pump 2A is supported by the pump flange by a thin piece of sheet metal.	remove and replace pump/pipe support.	$ 306
M	**28**	**MD**	**0**	**0**	Mechanical 206	AHU-3 serving the kitchen is a 100% outside air type unit. Heating system is water based and could potentially freeze during winter months.	Provide brazed plate heat exchanger, circulation pump, piping, controls, and additional components to provide a 50/50 glycol/water system to serve the heating coil.	$ 4,790
M	**29**	**C**	**0**	**0**	Mechanical 206	Existing cord and plug type fan located in branch return air ductwork serving AHU-2.	Remove return fan. Provide new return fan with hardwired connection to serve entire return air system. Modify AHU-2 return air ductwork. Provide controls to serve return fan. Alternatively, replace AHU and modify associated ductwork distribution	$ 15,874
M	**5**	**C**	**0**	**0**	Stor 104	Floor drain not provided	Provide floor drain, trap primer, and associated piping. Connect and extend water piping to trap primer.	$ 2,048
M	**12**	**MD**	**0**	**0**	Stor 104	Water heater is not seismically restrained	Provide Seismic restraint	$ 261
M	**13**	**MD**	**0**	**0**	Stor 104	Water heater is not provided with tempering valve	Provide Tempering valve. Modify plumbing piping to install tempering valve	$ 699
M	**14**	**MD**	**0**	**0**	Stor 104	Domestic Hot water circulation is not provided.	Provide hot water circulation pump and hot water circulation piping. Coordinate with tempering valve installation.	$ 2,838
M	**15**	**RR**	**0**	**0**	Stor 104	Water heater is in fair condition	Provide new water heater	$ 9,829
A	**5**	**AC**	**0**	**0**		LPSD staff reported the crash bar latch mechanism at the doors located at the top of ramp has malfunctioned and requires repair. Due to the malfunction, these doors are rarely used for access. All other points of entry to the school building must be accessed by stairs.	Door crash bar latch mechanisms are recommended for repair as they serve as the only accessible route into the building.	$ 832
C	**4**	**C/RR**	**0**	**0**		Septic tank internal effluent pump is not operation, the electircal enclosure is severely corroded and no longer weather proof, and the septic tank is	Further investigation should be conducted to determine the cause of the effluent pump malfunction. At a minimum, a licensed electrical engineer should be	$ 12,771
C	**7**	**C**	**0**	**0**		Tank storage capactiy exceeds 1,320 gallons and requires EPA compliant SPCC Plan.	Verify if the LPSD has a current and maintained SPCC Plan. If not, take action immediately to create and implement plan for EPA compliance.	-
E	1	**C**	**0**	**0**		NEC required labeling and identification was missing from the service equipment in the generator building, including arc flash warnings, voltage, phase and rating of service, available fault current, etc. as required (NEC 110.16, 110.24(A)).	Provide code required labeling to the service disconnect and distribution equipment in the generator building to include arc-flash warnings and calculated available fault current, at each panelboard.	$ 3,645
E	2	**C**	**0**	**0**		The labeling at the distribution disconnects in the generator building is not permanent and does not clearly identify what it serves (NEC 110.22).	Provide engraved nameplates at each disconnect in the generator building, identifying the its purpose and the load it serves.	$ 1,600
E	3	**C**	**0**	**0**		The space directly in front of the distribution equipment in the generator building is being used for storage of items and materials in violation of NEC 110.26(B).	Remove all stored items from in front of the panels. Mark on the floor with paint, the outline of the NEC working clearance for each panel, indicating that it is to be kept clear.	$ 1,600
E	4	**C**	**0**	**0**		The tap feeders and transfer switches in the generator building are not adequately protected, as the tap conductors terminate at the transfer switches before terminating at the overcurrent protective devices (NEC 240.4 and 240.21)	Remove the multiple disconnects, transfer switches, and taps at the generator building that comprise the electrical distribution system and replace with a single transfer switch and circuit breaker distribution panel.	$ 12,766
E	5	**C**	**0**	**0**		The #1/0 feeder conductors in the generator building, for the "Shop" are rated for 150 amps and are not adequately protected by the 200 amp circuit breaker disconnect (NEC 240.4).	Remove and replace the 150 amp rated #1/0 conductors for the "Shop" and replace with 200 amp rated conductors.	$ 5,601
E	6	**C**	**0**	**0**		Aluminum conductors were tapped off of the main feeder (copper) in the generator building. It did not appear that anti-oxidant compound was used at the terminations as required for connection of dis-similar metals (NEC 110.14).	Disconnect the aluminum feeders from the lug connectors and provide an approved anti-oxidant compound and splice connectors identified for use with copper and aluminum connections.	$ 4,041

E	7	**C**	**0**	**0**		The feeder tap connections on the load side of the main circuit breaker disconnect in the generator room were not insulated but instead were attached to wooden 2x4's to isolate them from the metal gutter (NEC 376.56(B)(4) and 314.28(E)(4)).	Remove the 2x4's isolating the tap connections from the metal gutter and insulate the tap connections.	$ 1,622
E	8	**C**	**0**	**0**		Only a few of the feeder conductors in the distribution gutter in the generator building were taped to identify their phases (NEC 200.6).	Where the feeder phases are not identified in the generator building, properly identify the correct phases with colored tape.	$ 533
E	9	**C**	**0**	**0**		Conduit knockout seals are missing from multiple disconnects, meter cabinets, and at the distribution gutter. (NEC 110.12(A) and 312.5).	Provide approved conduit knockout seals at unused openings in disconnects, gutters, and boxes in the generator building.	$ 756
E	11	**C**	**0**	**0**		The main disconnects at the school building do not have any labeling to identify the loads they serve (NEC 110.22).	Provide engraved nameplates at each of the main disconnects at the school building, identifying the its purpose, the load it serves, and where it is supplied from.	$ 578
E	12	**C**	**0**	**0**		The grounding electrode system appears to consist of a single ground rod. The National Electrical Code requires all grounding electrodes present (metal underground water pipe, metal in-ground support structure, concrete	Provide a new grounding electrode system at the school with connections to all grounding electrodes present.	$ 4,356
E	13	**C**	**0**	**0**		The location of the generator and associated output circuit breaker only provides 32" of working space. The NEC requires 36" of working clearance (NEC 110.26(A)).	Remove and relocate the generator to allow for NEC required working clearances to be maintained in front of the output circuit breaker.	$ 3,556
E	14	**C**	**0**	**0**		The tap feeders and transfer switches in the generator building are not adequately protected, as the tap conductors terminate at the transfer switches before terminating at the overcurrent protective devices. (NEC 240.4	Remove the multiple disconnects, transfer switches, and taps at the generator building, that comprise the electrical back-up distribution system and replace with a single transfer switch and circuit breaker distribution panel.	$ 14,757
E	16	**C**	**0**	**0**		The direct burial well pump wiring at the exterior of the generator building does not have any conduit protection where emerging out of the ground (NEC	Provide new raceway for installation of the well pump conductors.	$ 1,579
E	17	**RR**	**0**	**0**		The handle of one of the circuit breakers in the generator room panelboard is broken off	Remove and replace the circuit breaker with the broken handle in the generator room panelboard.	$ 1,262
E	18	**C**	**0**	**0**		There are 3 conduits on the exterior of the generator building that not supported, as the conduit straps have rusted away (NEC 300).	Resecure the 3 conduits on the exterior of the generator building.	$ 734
E	20	**C**	**0**	**0**		Two of the three panels do not have panel identification and do not indicate where they are supplied from (NEC 408.4)	Provide nameplates at each panelboard identifying the panel and where it is supplied from.	$ 1,467
E	21	**C**	**0**	**0**		Code required labeling, such as arc-flash warnings, available fault current, etc. was missing from all of the panels (NEC 110.16 and 408.6).	Provide code required labeling, to include arc-flash warnings and calculated available fault current, at each panelboard.	$ 2,223
E	22	**C**	**0**	**0**		Circuit directories at the panels were handwritten, with corrections scribbled in, in many cases incomplete, and overall difficult to read. The directories did not provide clear identification the specific loads they control (NEC 408.4).	Trace existing circuits and provide typed and accurate circuit directory, with the clear, evident, and specific purpose identified for each circuit at each of the panels.	$ 1,600
E	23	**C**	**0**	**0**		The space directly in front each of the 3 panels is being used for storage of items and materials in violation of NEC 110.26(B).	Remove all stored items out from in front of the panels. Mark on the floor with paint, the outline of the NEC working clearance for each panel, indicating that it is to be kept clear.	$ 1,600
E	24	**C**	**0**	**0**		The dedicated equipment space directly above one of the panels in Storage 117 contains a water pipe in violation of NEC 110.26(E).	Remove and relocate the water pipe currently located above the panelboard in the Storage 117 to avoid the panel's dedicated equipment space.	$ 5,499
E	25	**C**	**0**	**0**		The dedicated equipment space directly below and the working clearance directly in front of Panel P, contains a mechanical drain cleanout, in violation of (NEC 110.26(A) & (E)).	Remove and replace Panel P, relocating it to avoid conflict with the mechanical drain pipe and cleanout that is located within the panel's dedicated equipment and working space. Extend the feeder and branch circuitry as required for new location of panel.	$ 5,512
E	26	**C**	**0**	**0**		The feeder for Panel P is not adequately protected, as it is rated for 130 amps and the overcurrent protective device is believed to be 200 amps (NEC 240.4).	Remove and replace the feeder for Panel P with a new feeder, rated for 200 amps.	$ 3,634
E	27	**C**	**0**	**0**		The feeder for the large panel in the Storage 117 is not adequately protected, as it is rated for 180 amps and the overcurrent protective device is believed to be 200 amps (NEC 240.4).	Remove and replace the feeder for the large panel in the Storage 117 with a new feeder, rated for 200 amps.	$ 3,524
E	28	**C**	**0**	**0**		The feeder for the small panel in the Storage 117 is not adequately protected, as it is rated for 40 amps and the overcurrent protective device is 50 amps (NEC 240.4).	Remove and replace the feeder for the small panel in the Storage 117 with a new feeder, rated for 50 amps.	$ 2,610
E	29	**C**	**0**	**0**		The branch circuit conductors for the kitchen range are not adequately protected, as they are rated for 90 amps and the overcurrent protective device is 100 amps (NEC 240.4).	Remove and replace the branch circuit conductors at the kitchen range with new branch circuit conductors, rated for 100 amps.	$ 2,925
E	30	**C**	**0**	**0**		The grounded and ungrounded branch circuit wiring in Panel P and the panel in the generator building is not grouped together as required (NEC 210.4(D)).	In Panel P and the panel in the generator building, group grounded conductors with the respective circuit's ungrounded branch circuit conductors.	$ 230
E	31	**C**	**0**	**0**		Panel P does not have a ground bar as required by NEC 408.40.	Provide a ground bar in Panel P.	$ 500
E	33	**C**	**0**	**0**		The feeder conduit at Panel P is bonded to the grounded (neutral) bar in violation of the National Electrical Code (NEC 250.32).	In Panel P, remove the bonding jumper between the conduits and grounded (neutral) bar. Provide new bonding jumper between the conduit and the grounding bar.	$ 325
E	34	**C**	**0**	**0**		There is a single branch circuit equipment grounding conductor at Panel P, however it is connected to the grounded (neutral) bar in violation of NEC 250.	In Panel P, remove the branch circuit equipment grounding conductor connected to the grounded (neutral) bar and reconnect it to the ground bar.	$ 500

E	36	**C**	**0**	**0**		None of the circuit breakers in any of the panels are an arc-fault type as is required for outlets supplying power to Office 201 (currently used as a	Remove and replace the circuit breakers supplying power to all outlets in Office 201 (currently used as a sleeping room) with new combination type arc-fault type	$ 2,650
E	37	**C**	**0**	**0**		The circuit breakers supplying the fire alarm and fire pump did not have a lock-on type device (NFPA 72 10.6.5.4).	Provide a lock-on type device at the circuit breakers supplying power to the fire alarm and fire pump.	$ 500
E	38	**C**	**0**	**0**		The circuit breakers supplying the fire alarm and fire pump did not have red identification (NEC 760.41).	Provide red identification marking at the circuit breaker supplying power to the fire alarm and fire pump.	$ 183
E	39	**C**	**0**	**0**		A piece of metal is screwed to the side of Panel P to cover a hole that was cut in the side of the enclosure. (NEC 110.12).	To correctly fix the hole that was cutout of the side of Panel P, remove and replace the panel enclosure with a new panel enclosure.	$ 1,334
E	40	**C**	**0**	**0**		Electrical circuits serving kitchen cooking equipment located under the Class 1 hoods did not appear to be controlled such that activation of the hood suppression system would de-energize the circuit as required by IBC 904.12.	Disconnect and reroute electrical circuits serving kitchen cooking equipment located under the Class 1 hood so that they will be controlled by and de-energized by activation of the hood suppression system.	$ 4,210
E	41	**C**	**0**	**0**		The kitchen range branch circuit is not ground fault protected (NEC 210.8(B)(2)).	Remove and replace the circuit breaker supplying power to the kitchen range with a new circuit breaker with ground fault protection.	$ 2,500
E	42	**C**	**0**	**0**		The kitchen range is hardwired and does not have a disconnecting means (locking or with sight) NEC 422.31)	Provide a disconnect at the kitchen range to disconnect it from power or provide a lock off device on the circuit breakre in the panel feeding the circuit.	$ 2,500
E	43	**C**	**0**	**0**		None of the receptacles in the school are a listed tamper-resistant type as required for education facilities (NEC 406.12).	Remove and replace all receptacles throughout the building with new listed tamper-resistant type 20 amp 120 volt receptacles.	$ 12,500
E	44	**C**	**0**	**0**		The receptacles located outdoors were not a listed weather-resistant type as required by NEC 406.9.	Remove and replace all receptacles located outdoors with new listed weather-resistant, ground fault type circuit interrupter type 20 amp 120 volt receptacles.	$ 1,444
E	45	**C**	**0**	**0**		Receptacles located outdoors did not have weatherproof while-in-use covers as required by NEC 406.9(B).	Remove and replace all device covers at the receptacles located outdoors with new metallic, extra duty rated, weatherproof while-in-use covers.	$ 985
E	46	**C**	**0**	**0**		Some receptacles in the kitchen are not ground fault (gfci) protected as required by NEC 210.8.	Remove and replace non-ground fault circuit interrupter (gfci) receptacles in the kitchen with new 20 amp 120 volt gfci type receptacles. Where receptacles are not located in readily accessible locations, remove and replace the circuit's supplying	$ 1,125
E	47	**C**	**0**	**0**		The receptacles in the mechanical and electrical rooms and spaces are not ground fault (gfci) protected (NEC 210.8(E)).	Remove and replace all receptacles in mechanical and electrical rooms and spaces with new 20 amp 120 volt GFCI type receptacles. Optional solution would be to change out existing breakers to GFCI.	$ 1,125
E	48	**C**	**0**	**0**		The receptacles in the laundry areas are not ground fault (gfci) protected (NEC 210.8(B)).	Remove and replace all 20 amp 120 volt receptacles in the laundry area with new 20 amp 120 volt gfci type receptacles. For the dryer, remove and replace the 30 amp 240 volt circuit breaker with a new 30 amp 240 volt gfci type circuit breaker.	$ 2,614
E	49	**C**	**0**	**0**		The receptacles adjacent to the sink in Classroom 108 are not ground fault (gfci) protected (NEC 210.8(B)).	Remove and replace the receptacles adjacent to the sink in Classroom 108 with new 20 amp 120 volt gfci type receptacles.	$ 510
E	52	**C**	**0**	**0**		The outlet box for the kitchen range is not large enough for the branch circuit conductors and terminations (NEC 314.16). The wiring and associated connections are laying on the floor exposed (NEC 314.25).	Remove and replace the kitchen range outlet box with a new larger box to contain the wiring connections.	$ 514
E	53	**C**	**0**	**0**		There is exposed wiring, in a junction box without a cover in Mechanical 204 (NEC 314.25).	Provide a new blank cover plate at the junction box missing its cover in Mechanical 204 on the 2nd floor.	$ 78
E	54	**C**	**0**	**0**		A large junction box serving the lift station, located on the exterior of the building has completely rusted through (NEC 314.19).	Remove and replace the rusted out junction box serving the lift station, at the exterior of the building.	$ 912
E	55	**C**	**0**	**0**		Branch circuit conduits supplying power to the lift station junction box on the exterior of building are unsupported (NEC 300).	Resupport the branch circuit conduits supplying power to the lift station junction box on the exterior of building.	$ 734
E	57	**C**	**0**	**0**		Branch circuit disconnects serving mechanical equipment are not properly identified with either the equipment that they serve or the branch circuits that serve them (NEC 110.22).	Provide nameplates at each equipment disconnect, identifying the load it controls and where it is supplied from.	$ 1,200
E	58	**C**	**0**	**0**		Extension (flexible) cords have been fastened to the ceiling and wall for powering the ceiling mounted projectors in the classrooms. Flexible cords are not permitted to be used as permanent wiring (NEC 400.12).	Remove the extension cords at the ceilings supplying power to the projectors and provide new receptacles with raceway and branch circuitry back to and connected to new circuit breaker in the panelboard.	$ 2,510
E	59	**C**	**0**	**0**		An extension (flexible) cord with a cord cover is located on the floor of Classroom 120. Flexible cords are not permitted to be used as permanent wiring (NEC 400.12).	Remove the extension cord and floor cord cover at Classroom 120 and provide a new receptacle with raceway and branch circuitry back to and connected to new circuit breaker in the panelboard.	$ 2,510
E	60	**C**	**0**	**0**		The "fire pump" is not installed or wired in compliance with governing codes (NEC 695).	If the existing fire pump will be removed and replaced with a new NFPA compliant electric fire pump, remove the existing fire pump associated wiring and remove and replace the existing electrical service and generator with new, configured as required for connection to new fire pump. Alternatively, if a diesel fired fire pump or mist fire protection system is provided instead of an electric fire pump, provide new electrical disconnect, panel, and feeder with branch circuits to new fire pump equipment, devices, and fixtures.	$ 24,804

E	68	**RR,C**	**0**	**0**		Many of the emergency lights are old and it is not likely that they will provide required emergency illumination level for 90 minutes (IBC 1008.3.4).	Remove and replace all emergency lights with new emergency lights.	$ 4,534
E	69	**RR,C**	**0**	**0**		Some emergency lights found throughout the facility did not function when tested (IBC 1008.3).	Test all existing emergency lights for proper operation and replace batteries and fixtures where needed.	$ 2,675
E	70	**C**	**0**	**0**		Emergency lighting was missing from Classroom 108, Classroom 109, Classroom 110, Restrooms (Boys 106 and Girls 107), mechanical and electrical rooms and spaces, and the exterior egress (IBC 1008.3).	Provide emergency lights in Classroom 108, Classroom 109, Classroom 110, Restrooms (Boys 106 and Girls 107), mechanical and electrical rooms and spaces, at the exterior egress and other rooms, areas, and halls where not currently installed, but required. Provide raceway and branch circuitry and connect to unswitched leg of area lighting circuitry.	$ 5,956
E	71	**C**	**0**	**0**		Emergency lighting quantity and placement is unlikely to provide the required illumination levels and uniformity ratio at the path of exit in the Gymnasium, Corridor 101, Vestibule 100, Passage 118, Library 200, Kitchen 114, and in Stairs 102 (IBC 1008.3.5).	Provide additional emergency lighting fixtures in the Gymnasium, Corridor 101, Vestibule 100, Passage 118, Library 200, Kitchen 114, and in Stairs 102, and other areas as needed to provide the required illumination levels and uniformity ratio at the path of egress.	$ 4,765
E	72	**C**	**0**	**0**		The emergency light in the generator building was not securely attached the wall (NEC 400.30).	Resecure the emergency light to the wall in the generator building.	$ 62
E	73	**C**	**0**	**0**		Self luminous exit signs (20 year life expectancy) throughout the building have expired and may no longer provide illumination levels at the face of the sign complying with the requirements of the International Building Code (IBC 1013).	Remove and replace all expired self-luminous exit signs with new UL listed self-luminous exit signs. Properly dispose of existing self-luminous exit signs.	$ 4,623
E	74	**C**	**0**	**0**		Exit signage in Classroom 110 is not code compliant as it is comprised of reflective plastic with no markings or listings and is not continuously illuminated from an external source (IBC 1013.6.2).	Remove and replace reflective plastic exit sign in Classroom 110 with a new UL listed self-luminous exit sign.	$ 578
E	75	**C**	**0**	**0**		Exit signs were missing from some halls (Corridor 101) and rooms with 2 exits (Classroom 108 and 110) (IBC 1013.1).	Provide additional UL listed self-luminous exit signs in Corridor 101 and Classrooms 108 and 110.	$ 1,156
E	76	**C**	**0**	**0**		An exit sign in Library 200 is single sided but should have been double sided to provide direction of egress from both sides (IBC 1013.1).	Remove and replace the single sided exit sign at Library 200 with a new double sided exit sign.	$ 1,022
E	77	**C**	**0**	**0**		An exit sign in Corridor 100 was located at a height that was not visible as there was an obstruction in front of it at the same elevation (IBC 1013.1).	Remove and replace the exit sign at in Corridor 100, locating where it will not be obstructed and will be visible.	$ 651
E	80	**C**	**0**	**0**		The fire alarm system is outdated and based on the age of the system it is most likely that the fire alarm horn/strobes do not comply with current ANSI and NFPA required signaling and sound levels in all areas (NFPA 72 18.4 and 18.5).	Remove and replace the fire alarm system including detection and notification devices with new to comply with current IFC, NFPA, and ADA requirements.	$ 27,115
E	81	**C**	**0**	**0**		The fire alarm system is not a voice evacuation type as is required for education facilities of this size (IBC 907.2.3)	**Requires AHJ review:** Remove and replace the fire alarm system with a new voice evacuation system.	$ 15,113
E	83	**C**	**0**	**0**		Horn/strobes in Library 200, Corridor 101, Passage 118, and Vestibule 100 were not located within 15' of each end of the hallway (NFPA 72 18.5.5.5).	**Requires AHJ review:** Add additional horn/strobes in the hallways of Library 200, Corridor 101, Passage 118, Vestibule 100.	$ 3,103
E	85	**C**	**0**	**0**		Carbon Monoxide detection does not appear to be present at the classrooms and (Office 201) sleeping room (IBC 915.1).	Install carbon monoxide detectors at classrooms and sleeping room (Office 201) as required by governing codes.	$ 290
E	86	**C**	**0**	**0**		Fire alarm detection and notification does not appear to be present in Mechanical 204.	Provide fire alarm detection and notification devices in Mechanical 204.	$ 2,631
E	87	**C**	**0**	**0**		Fire alarm notification devices (horn/strobes) are not located in Classrooms 108, 109, and 110 (NFPA 72 xxx).	**Requires AHJ review:** Provide fire alarm detection and notification devices in Classrooms 108, 109, and 110.	$ 6,312
E	88	**C**	**0**	**0**		Fire alarm notification devices (horn/strobes) are not located in Corridor 101 and Vestibule 100 (NFPA 72 xxx).	Provide fire alarm notification devices (horn/strobes) in Corridor 101 and Vestibule 100.	$ 3,823
E	89	**C**	**0**	**0**		Fire alarm detection devices (smoke and heat detectors) in the second floor spaces with sloped ceilings did not appear to be located as required by governing codes as the detectors were not within 36" of the peak of the ceiling (NFPA 72 17.6.3.4)	Remove and relocate or provide new fire alarm detection devices near the peak of the ceiling, in second floor spaces with sloped ceilings.	$ 1,552
E	92	**C**	**0**	**0**		Telecommunication cable is installed exposed and run unprotected through the exterior wall in mechanical 206 to outside (NEC 300.4).	Remove existing cable installed exposed through the exterior wall in Mechanical 206 and provide new cable installed in conduit.	$ 1,485
A	**9**	**C**	**0**	**1**	Interior	Suspended acoustical ceiling at Media Center 121 requires seismic upgrades	Upgrade siesmic connections and splay wiring at suspended acoustical ceiling at Media Center 121	$ 18,840
A	**10**	**AC**	**0**	**1**	Interior	The public bath/shower rooms do not comply with accessibility requirements	Reconfigure bathrooms to comply with accessibility standards	$ 5,900

Category 0
$ 1,131,459 Immediate

A	**11**	**AC**	**0**	**1**	Interior	Required accessibility clearances cannot be achieved within existing plan configuration. Areas include toilet rooms, side clearances for doors, heights of service counter.	Reconfigure plan to provide accessible route based upon Education Program assessement.	$ 58,408
E	91	**ED**	**1**	**0**		The device cover plate is missing from one of the telecommunication outlets in Classroom 110.	Provide a new cover plate where missing from the telecommunication outlet in Classroom 110.	$ 78
M	**6**	**RR**	**1**	**1**	Boys 106	Plumbing fixtures stained brown	Replace plumbing fixtures	$ 597
M	**8**	**RR**	**1**	**1**	Classroom 108	Faucet in classroom is not operable	Replace plumbing fixture	$ 597
M	**9**	**RR**	**1**	**1**	Classroom 109	Faucet in classroom is not operable	Replace plumbing fixture	$ 597
M	**10**	**RR**	**1**	**1**	Classroom 110	Faucet in classroom only had one operable faucet handle to dispense water	Replace plumbing fixture	$ 597
A	**13**	**RR**	**1**	**1**	Exterior	Soil is in direct contact with siding	Remove soils from siding - Install 8" deep x 12" wide gravel strip around building	$ 43,267
A	**16a**	**RR**	**1**	**1**	Exterior	The existing corrugated roof panels were installed in 1996 and are face fastened. Given the age of the panels-there is a high liklihood the panels are leaking and introducing moisture into the urethene insulation.	Replace existing fasteners with new gasketed fasteners	$ 8,997
A	**16b**	**RR**	**1**	**1**	Exterior	The existing corrugated roof panels were installed in 1996 and are face fastened. Given the age of the panels-there is a high liklihood the panels are leaking and introducing moisture into the urethene insulation.	Replace Existing Roof with Standing Seam, concealed fastener Roof. Replace damaged sheathing	$ 470,077
A	**17**	**RR**	**1**	**1**	Exterior	Exterior roof sheathing is subject to moisture damage due to use of Urethene Insulation	1) Verify condition of sheathing and replace damaged sheathing 2) Replace damaged roof sheathing (Estimate 20%)	$ 15,455
A	**19**	**RR**	**1**	**1**	Exterior	Exterior door hardware is in poor condition and does not allow doors to properly close and latch	Replace existing door hardware with new commercial grade hardware meeting accessibility standards	$ 15,854
A	**20**	**RR**	**1**	**1**	Exterior	Exterior doors and frames are extremely corroded	Replace exterior doors, frames, and hardware	$ 46,210
A	**21**	**RR**	**1**	**1**	Exterior	Several exterior windows panes have failed seals	Remove and replace glazing units with failed seals	$ 15,627
A	**22**	**RR**	**1**	**1**	Exterior	Gymnasium windows are 40 years old and need to be replaced with energy efficient windows.	Remove and replace high gymnasium windows	$ 8,325
A	**33**	**RR**	**1**	**1**	Exterior	The existing siding and roofing aged but in fair to poor condition in the event a full building renovation is approved it is recommended that the exterior siding and roofing be removed and replaced.	Remove and replace xx sf exterior roofing and siding	$ 967,152
M	**7**	**RR**	**1**	**1**	Girls 107	Plumbing fixtures stained brown	Replace plumbing fixtures	$ 597
A	**23**	**RR**	**1**	**1**	Interior	Door and frames and hardware are in need of replacement	Replace doors, frames, and hardware throughout	$ 174,208
A	**25**	**RR**	**1**	**1**	Interior	Surface applied acoustical ceiling tile is original and severly damaged in Gymnasium	Remove and replace existing surface applied ceiling tile in Gymnasium	$ 49,949
A	**26**	**RR**	**1**	**1**	Interior	Surface applied acoustical tile in office and educational areas throughout facility has been damaged and should be replaced as part of any renovation	Remove and replace existing surface applied acoustical ceiling tiles	$ 23,003
A	**27**	**RR**	**1**	**1**	Interior	Sheetrock surfaces throughout facility have been damaged and need to be patched and painted	Patch, prime, and paint existing gypsum board wall panels throughout facility	$ 88,214
A	**28**	**RR**	**1**	**1**	Interior	Carpet wainscotting throughout facility is delaminating and should be removed and replaced	Remove existing wainscotting and reapply rigid vinyl wainscotting throughout facility.	$ 25,559
A	**29**	**RR**	**1**	**1**	Interior	Wall mounted tackboards and white boards are in need of replacement	Provide new marker boards and tackable surface throughout school facility	$ 32,238
A	**31**	**RR**	**1**	**1**	Interior	Fixtures, Furnishings, and Equipment in the Port Heiden school are in poor condition with no uniformity. The books shelves, desks, tables, sports equipment and storage units should be replaced thoughout the entire facility	Provide new Fixtures, Furnishings, and Equipment throughout facility	$ 204,470
A	**32**	**RR**	**1**	**1**	Interior	The Kitchen cabinets are plastic laminate and have seams. Recommend seamless countertops for cleanability. NSF/ANSI Standard 2- food prep areas: 1. Food contact surfaces shall be easily cleanable, and free of breaks, open seams, cracks or similar defects 2. All joints and fittings shall be of sanitary design and construction	Replace casework and countertop with new counters with seamless joints.	$ 128,524
A	**34**	**AC**	**1**	**1**	Interior	Elevator is required per Chapter 4 ADAG	Install new Elevator	$ 215,000
M	**18**	**C**	**1**	**1**	Kitchen 114	Grease interceptor is not provided to serve 3-compartment sink	Provide grease interceptor, floor drain, and associated piping.	$ 3,656

Category 0 1-5
$ 83,148 years

C	**2**	**SC**	**1**	**1**		A 10-foot section of decking at the base of the multi-purpose room access stairs is damaged and decking materials are no longer present.	Removal and reconstruction of the at-grade timber decking between the teacher housing walkway and multi-purpose room stairs is recommended. Alternatively, this section of decking between the two buildings could be removed entirely and replaced with compacted gravel or paver block units. Total repair are is approximately 28' x 4'.	$ 8,408	
C	**5**	**FD**	**1**	**1**		School does not utilize groundwater well system for drinking water due to elevated arsenic levels.	Drinking water system improvements and equipment retrofits as detailed in the 2018 Port Heiden School Public Water System Request for Final Approval to Operate are recommended to improve drinking water quality, flow rate, and reduce contaminant levels below ADEC action levels. The State of Alaska is reviewing thier records on the matter. The assumption is that the State issued an interim approval to operate in 2018. It does not appear the proposed upgrades to the system have been completed.	-	
C	**8**		**1**	**1**		Childrens Play Area and structure are non compliant and beyond anticipated lifespan of structure.	Remove and Reconstruct new play area with new play structures.	$ 207,026	
E	15	**RR**	**1**	**1**		The generator radiator mounted on the exterior of the building has a considerable amount of rust	Remove and replace the exterior mounted generator radiator.	$ 11,201	
E	19	**RR**	**1**	**1**		The well pump disconnect located in the generator building has begun to rust. (NEC 230.62).	Remove and replace the rusty well pump disconnect with a new disconnect.	$ 1,502	
E	79	**ED**	**1**	**1**		The factory painted finish on one of the exterior lights at the generator building and two exterior lights at the school building is peeling off of the fixture housing.	Remove and replace the three weathered exterior lighting fixtures (one at the generator building and two at the school building) with new fixtures.	$ 34,670	
									Category 1
									$ 2,801,655 Poor 1-5 years
C	**3**	**AC**	**1**	**3**		The existing ramp longitudinal running slope is approximately 14.5%, well above maximum ADA accessible route slope requirements of 8.33% (1 to 12, vertical to horizontal profile). The ramp incorporates timber railings measuring approximately 42 inches from the top of timber decking.	Reconstruction of the timber decked ramp is recommended to provide a compliant accessible route for teacher housing. There appears to adequate space to reconstruct a longer ramp to achieve ADA compliant slopes. Approximate reconstructed ramp length is 28'-30'.	$ 28,353	
C	**6**	**SC**	**1**	**3**		Aboveground storage tank has settled, and intregrity of impermeable liner should be verified with leak test.	Recommend the tank be removed from containment, liner be tested and repaired/repaced if necessary, and 6" of compacted gravel be placed at base of containment. Tank to be reset in containment and leveled on dunnage.	$ 7,259	
									Category 1
									$ 35,612 Poor 10+ years
E	66	**RR**	**2**	**1**		The lens is loose from and not properly attached to one of the light fixtures in the Receiving 113.	Adjust and resecure the fixture lens where hanging from the light fixture in Receiving 113.	$ 73	
E	84	**ED**	**2**	**1**		The trim ring around one of the detectors in Office 201 has come loose and is hanging from the detector.	Reinstall the trim ring around the detector in Office 201.	$ 103	
E	90	**ED**	**2**	**1**		There is exposed telecommunication cable fastened to walls and ceilings in Media Center 121, Classroom 110, Gymnasium 111, and Vestibule 100, indicating that there are not enough telecommunication outlets in the building.	Remove existing exposed cabling and provide new telecommunication outlets at the Media Center 121, Classroom 110, Gymnasium 111, and Vestibule 100 with cabling concealed in conduit.	$ 12,428	
									Category 2
									Fair/Poor 1-5
									$ 12,604 years
A	**14**	**C**	**2**	**2**	Interior	Crawlspace ventilated appears inadequate	Approximately 5 sf of ventilation is provided to the crawlspace. Limited to the original foundation. The existing drawings indicate the crawlspace to be heated. Introduction of new mechanical or additional natural ventilation is required in crawlspace.	$ 21,674	
A	**24**	**RR**	**2**	**2**	Interior	Suspended acoustical ceiling tile is in fair to poor condition and should be replaced during any renovation	Remove and replace existing acoustical tile within suspended grid system .	$ 131,883	

A	**30**	**FD**	**2**	**2**	Interior	Layout of Pantry area is inefficient and functionally problematic	Removing or minimizing the wall between the pantry and kitchen would allow for greater funcationality within the kitchen and provide for adequate circulation area in front of coolers and freezers.	$ 2,118	
E	10	**ED**	**2**	**2**		The main disconnects at the school building are starting to show signs of corrosion. (NEC 230.62).	Remove and replace the school's rusty main disconnects with new disconnects.	$ 7,557	
E	32	**ED**	**2**	**2**		Equipment grounding conductors are not run with the feeder and branch circuit conductors at Panel P. Instead, the grounding of the electrical panels and branch circuits is utilized through the contact and bonding of the panel enclosure with the metallic conduit through which feeder and branch circuit conductors are run. Many local jurisdictions and private entities do not permit this method of grounding and bonding.	Remove and replace all branch circuitry (where not installed with an equipment grounding conductor) in Panel P with new conductors to include equipment grounding conductors. Connect the equipment grounding conductors to the grounding bar in the panel.	$ 5,690	
E	35	**ED**	**2**	**2**		Two of the panels do not have any physical spare capacity for additional loads.	If it is anticipated that new electrical loads will be added, in the future, or additional spare capacity is needed in electrical panels, remove and replace the two larger panelboards with new panelboards with 54 spaces each.	$ 5,500	
E	50	**ED**	**2**	**2**		The dryer receptacle is a 3 wire type as the branch circuit does not include an equipment grounding conductor. Under the current National Electrical Code, new construction and remodel work requires an equipment grounding conductor and 4-wire type receptacle (NEC 250.140, 250.142).	Remove and replace the 3-wire dryer receptacle with a new 4-wire (30 amp 120/240 volt) receptacle. Install new branch circuitry including an equipment grounding conductor. Remove and replace the dryer cord with new 4 wire dryer cord to match the receptacle configuration.	$ 2,610	
E	51	**ED**	**2**	**2**		The quantity and locations of receptacles in many locations was lacking as extension cords were used to power equipment and devices where receptacles were not located.	Remove extension cords and provide new receptacles with raceway and branch circuitry back to and connected to new circuit breakers in the panelboard.	$ 4,089	
E	61	**RR**	**2**	**2**		Some of the light fixtures appeared "well used" and have dirty and/or discolored lens.	Clean existing light fixtures and replace discolored lens.	$ 5,280	
E	62	**RR**	**2**	**2**		One of the light fixtures in Library 200 has had the ballast cover removed. Wiring is not separated from and protected from the lamps and could overheat as a result of close contact with the lamps.	Provide and install a new ballast cover where missing from the light fixture in Library 200.	$ 128	
E	63	**RR**	**2**	**2**		The light fixtures in Corridor 101 are mismatched, as some of the fixtures have been replaced in the past, but do not look the same as the existing remaining fixtures.	Remove and replace the mismatched light fixtures in Corridor 101 with new fixtures matching the remaining fixtures.	$ 1,262	
E	64	**RR**	**2**	**2**		Some of the light fixtures in the Storage 100, Gym Storage 115, and in Vestibule 100 were inoperable.	Remove and replace the existing light fixtures in Storage 100, Gym Storage 115, and in Vestibule 100 with new LED fixtures.	$ 1,894	
E	65	**ED**	**2**	**2**		There are no light fixtures in the crawlspace.	Provide new lights and associated branch circuitry for the crawlspace.	$ 6,010	
E	82	**ED**	**2**	**2**		The fire alarm panel is not located at or near the entrance of the building or in a continuously occupied location and there was no remote annunciator panel. NFPA 72 requires the panel to be located in a convenient location acceptable to the Authority Having Jurisdiction (AHJ).	**Requires AHJ review:** Annunciator Panel may be required to be re-located to an the front entry vestibule.	$ 1,636	
									Category 2 Fair/Poor 5+
									$ 197,331 years
A	**15**	**RR**	**3**	**3**	Exterior	The existing exterior siding is light gauge residential grade siding. It is in fair condition with some impact damage. The siding has areas of staining and discoloration due to mold growth.	Replacing ares of damaged siding and clean siding. If siding cannot be matched partial replacement should be considered . If siding is replaced remove and replace air infiltration barrier	$ 46,758	
E	56	**ED**	**3**	**3**		It was reported that there has been issues with the lift station wiring in the past. The exact issues and whether or not the problems have been remedied are unknown.	Remove and replace the branch circuit and control wiring at the lift station.	$ 3,396	
E	67	**ED**	**3**	**3**		There is an abandoned light fixture housing attached to the ceiling in Storage 104.	Remove the abandoned light fixture housing Storage 104.	$ 55	
E	78	**ED**	**3**	**3**		The exterior light fixtures on the building are minimal and do not provide enough illumination to provide a sense of security.	Provide additional LED light fixtures, in new locations on the exterior of the building to provide additional illumination to provide a sense of security.	$ 9,246	
									Category 3 Fair
									$ 59,455 10+ years
	C	**1**	**SC**	**1**	**2**		There are no delineated parking stalls for accessible parking at that school site or teacher housing.	$ 672	

S	**4**	**C**		**1**	Exterior	The Entrances to Vestibule #3 is not positively attached to the beams and posts supporting it.	Add properly sized light gauge clips to provide positive attachment.	$ 1,037
S	**5**	**C/AC**		**1**	Exterior	The saddles on the ramp to vestibule #1 show extensive signs of rust.	Replace saddles with galvanized steel.	$ 2,366
S	**1**	**ST**		**2**	Exterior	The foundation does not currently show signs of distress however the foundation under the original structure is approaching the end of the intended design life	Replace foundation or damaged portions of the foundation.	$ 507,903
S	**2**	**ST**		**2**	Int/Ext	The original portion of the school is nearing the end of its intended design life. The code required floor loading has increased over time therefore the existing framing may not be sufficient for current code required loading.	Joists should be analyzed for the current code required loads, and additional load from any new mechanical equipment if it is installed. Sister in additional joist where required.	$ 11,918
S	**3**	**ST**		**2**	Int/Ext	The age of original portion of the school puts the structure at the end of its intended design life.	This assessment is based on an assumed building life of fifty years. The school is approximately 41 years old is in good condition and is performing well. If the school continues to be well maintained it may continue to perform well past the intended design life. If roof maintenance is performed including the replacement of roofing and/or repairs to any environmental damage the life of the structure can be extended. The capacity of the building should be further explored as part of any renovation. As part of the analysis the engineer should check the current roof members for modern code required loads and if found deficient add additional strength by sistering in joists.	-
E	93					The building does not appear to be served by a security (intrusion detection) system.	If vandalism or burglary is a concern, install a building intrusion detection system, with door contacts, glass break sensors, motion sensors, sirens, and a dialer to monitor and alert of a break in.	$ 48,451
E	94					The building does not appear to be have a camera surveillance system.	If vandalism or burglary is a concern, install a networked camera surveillance system, with cameras at the exterior of the building and inside vestibules and common areas to capture and record surveillance.	$ 25,107
E	95					The building does not have a master clock or intercom system. The existing clocks located in classrooms were a standalone type with battery		$ 54,762

No Category 2 Fair/Poor 5+ years

$ 652,216

$ 4,973,480