

Facility Assessment Update of Park Elementary School

Located at: 111 Goodrich Court, Chardon, Ohio 44024

May 2024





Preface:

ThenDesign Architecture (TDA) conducted a field investigation of conditions at Chardon Local School District's Park Elementary School in May of 2024. The goal of the assessment was to identify the facility condition and renovation/improvement needs of the building and to understand the immediate, short-term, and long-term needs of the facility. The benchmark standard for the evaluation is based on current codes (including ADA), general conditions, and anticipated life expectancies of building materials, components, and systems. Costs are based on a variety of resources, regional cost data sources, current market conditions, and recent project bid experiences. The structure of the report is outlined in a twenty-three-point checklist which includes:

- A) Heating
- B) Roofing
- C) Ventilation/Air Conditioning
- D) Electrical Systems
- E) Plumbing & Fixtures
- F) Windows
- G) Foundations
- H) Walls & Chimneys
- I) Floors & Roofs
- J) General Finishes
- K) Interior Lighting
- L) Security System
- M) Emergency/Egress Lighting
- N) Fire Alarm System
- O) Handicapped Access
- P) Site Condition
- Q) Sewage System
- R) Water Supply
- S) Exterior Doors
- T) Asbestos
- U) Life Safety Code
- V) Loose Equipment
- W) Technology

Each of the above categories includes a description, recommendation, and cost associated with the identified improvement. Upon subtotal of the cost of work, soft costs including contingencies, A/E Fees, CMR Fees, etc. have been included and tabulated. Additionally, the scope of required work has been broken down in the following manner:

Priority 1 – Needs that should occur as soon as possible – within 1-2 year timeframe Priority 2 – Items that are approaching the end of useful life – within 3-5 year timeframe



Priority 3 – Replacement of components that are recommended to enhance performance and functionality, but is not necessarily urgent – 6+ year timeframe



General Description:

Park Elementary School is a three-story, brick school building originally constructed in 1938. The school is comprised of 2 separate buildings; the main academic buildings located on the east side of the site, and a gymnasium/auditorium building located on the west side of the site. Overall, the buildings provide 44,733 SF of space. The site is very small with only 1.49 acres being provided for the parcels on which the school resides. The school district owns an additional .5 acre across Park St. which is utilized for additional parking. The site is located near the heart of



downtown Chardon adjacent to both residential and commercial properties. An asphalt parking lot is provided on the east side of the site with very limited parking spaces available. The additional parking lot across Goodrich Ct. is a gravel lot that is utilized by visitors and staff.

Park Elementary School serves grades 1-3 and has a reported enrollment in early 2024 of 505 students. The building features a conventionally partitioned design concept and does not utilize modular buildings. The structure of the buildings is loading-bearing masonry units with brick-faced exterior walls. The floor system consists of concrete slabs on the lower levels with structural concrete intermediate floor structures and steel and wood truss roof framing structures. The West building roof is comprised of built-up tar and gravel systems with fluid-applied silver coating. Previous assessment reports this roof to have been installed in 1990. The East Building features a modified bitumen roof system. Both roofs are in poor condition and one active leak was reported during the physical assessment. It is assumed that there are multiple layers of roof systems on the buildings.

The building's major systems are in poor condition. The ventilation system of the building is inadequate to meet the needs of the users. The heating and ventilating system is in the West Building and serves that building and the East academic building. An underground pipe tunnel connects the two buildings. There is no central air conditioning system, though a few select spaces such as the office areas and teacher's lounge have window air conditioning units. The fire alarm system does not meet the NFPA or OFCC standards and some systems are non-existent, such as a fire suppression system. The building does contain asbestos. The overall building is not compliant with ADA accessibility requirements. Additionally, students must travel outdoors between buildings for gym which is not ideal in inclement weather and is also a safety concern.

Recent improvements in the school include but are not limited to replacing the underground pipe tunnel, replacement of all interior lighting with LED lighting, a few exterior light fixtures being replaced, various new kitchen equipment pieces, and new auto flush handles on toilets and touchless faucets on sinks.

The classrooms are undersized in terms of the current standards established by the State of Ohio. The average typical classroom is approximately 700 square feet, compared to the Ohio School Design Manual (OSDM) recommendation of 900 SF. Student dining is also undersized at 1,086 SF compared to the OSDM recommendation of 3,000 SF. The 4,684 SF gymnasium, however, is larger than the OSDM recommendation of 4,000 for the current enrollment.



Item A: Heating and Ventilation

Description:

The existing system for the overall facility consists of a 1938 Kewanee steam boiler in fair condition and two 2013 Burnham boilers located in the gymnasium/auditorium building. The steam boiler is now offline. A newly replaced mechanical tunnel connects the HVAC piping from the gymnasium/auditorium West building to the East classroom building. All utility piping in the tunnel was also replaced at the time of tunnel replacement.

Unit ventilators are used to provide heat and ventilation in most of the classrooms with radiators in corridors. The equipment in the building does not provide the required outside air delivery to meet the OBC mechanical code. The system temperature controls pneumatic-type thermostats with DDC controls in fair condition. The structure is not equipped with air conditioning for the overall facility and the ductwork and air handlers cannot supply air conditioning to the classrooms. The two-pipe system does not provide a capacity for simultaneous heating and cooling operation which is not compliant with the OSDM requirements. According to school officials, the site does not contain underground fuel tanks.



Steam boiler (offline)



Newly installed pipe tunnel & piping







2013 Burnham Boiler

Provide a new overall heating ventilating and air conditioning system to achieve compliance with OBC and OSDM standards. The two Burnham boilers can remain and be incorporated into the new system. The new ducted system will likely require architectural soffits to accommodate the installation of the ductwork. This work is outlined as Priority 3.

Priority 1 Recommendation: None at this time.

Priority 2 Recommendation: None at this time.

Priority 3 Recommendation:

Provide a new OSDM compliant HVAC system including new ductwork.

Priority 3 Costs:

HVAC System Replacement: 44,733 SF x \$54.42/SF = Convert to ducted system: 44,733 SF x \$10.37/SF = Subtotal = \$2,434,369.86 <u>\$463,881.21</u> \$2,898,251.07

Total Item A:



\$2,898,251.07

Item B: Roofing

Description:

There are two roof systems in the overall facility. The West gymnasium/auditorium building features a built-up roof system reported to have been installed in 1990. This roof has had a fluid-applied silver coating at an unknown date. There are signs of past leaking in the building. The East academic building features a modified bitumen roof system which is reported to have been installed over a previous roof system (suspected built-up roof system) with an unknown installation date. It too has a silver coating applied. This roof was reported to have one active leak.

Access to the main academic building roof was gained by a wall-mounted ship ladder at the stair landing which leads to an access roof hatch. Because of its location off the corridor, a



Main academic (East) building roof

portable ladder must be used to gain access to the bottom rungs of the ship ladder. The ladder and access hatch are dated but in functional condition. A fall safety protection cage is not provided.

There were no observations of standing water on the roof. Stone copings are in fair condition, having appeared to have been recently patched. Roof storm drainage is addressed through a system of internal roof drains. The roofs are not equipped with overflow roof drains though they are needed on these buildings. No problems requiring attention were encountered with any roof penetrations. There are not any covered walkways attached to this structure.





As a Priority 1, provide for replacement of both roofs due to age and condition. Additional cost is provided for multiple roof layers requiring tear-off. Provide for repairs to cap flashings and copings, new roof drains, and overflow drainage, as well as roof insulation. It is uncertain at this time if roof deck replacement will be required, as it could not be observed.

Priority 1 Recommendation:

Provide for roof replacement.

Priority 1 Costs:

New Built-up asphalt roofs: 19,496 SF x \$7.10/SF =	\$138,421.60
Tear off premium of multiple layers: 19,496 SF x \$3.00/SF =	\$58,488.00
Roof insulation (tapered): 19,496 SF x \$6.08/SF =	\$118,535.68
Repair/Replace cap flashings/copings: 838 LF x \$23.84/LF =	\$19,977.92
Remove/Replace existing roof drains: 16 units x \$1,554.78 / unit =	\$24,876.48
Overflow roof drains/piping: 16 units x \$3,886.95 =	<u>\$62,191.20</u>
Subtotal =	\$422,490.88



Priority 2 Recommendation: None at this time.

<u>Priority 3 Recommendation:</u> None at this time.

Total Item B:

\$ 422,490.88

Item C: Air Conditioning

Description:

There is no central ducted air conditioning system for this building. Window units are the majority of air conditioning, the clinic has a steam and cooling unit in fair condition. The overall system is not compliant with OSDM requirements. The general building exhaust systems located in the restrooms are functional and in satisfactory condition. There is a separate ventilated exhaust for the kiln in this facility. There is no art program paint hood or science room chemical hood in the elementary school building.

Recommendations:

Provide for complete replacement of HVAC system. See Item A for recommendations and pricing.

Total Item C:

Item D: Electrical

Description:

The electrical system in the overall facility is a 240/120 volt, 1 phase, 3 wire, 800-amp electric service with a 240 volt, 3 phase, 3 wire, 100-amp additional service. An upgrade occurred in 1999 to support the new computers at the school with no increase in the electric service. The service originates in the auditorium building and connects to the classroom building through the mechanical tunnel. The electrical conduits going through the mechanical tunnel were installed during the tunnel replacement last year. The existing system is not capable of supporting the new HVAC system. There is no lightning protection. The overall electrical system does not meet OSDM requirements in supporting the needs of the school.





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\$0.00



Antiquated electric equipment



Electrical room

The entire electrical system requires replacement to meet OSDM guidelines for overall capacity due to age. Upgrade service to a 208/120 volt, 3 phase, 2000 amps minimum service per OSDM guidelines. Work outlined as a Priority 3.

<u>Priority 1 Recommendation</u>: None at this time.

Priority 2 Recommendation: None at this time.

Priority 3 Recommendation: Provide complete electrical system replacement.

Priority 3 Costs:

Electrical System: 44,733 SF x \$37.26/SF =

\$ 1,666,751.58

Total Item D:



\$ 1,666,751.58

Item E: Plumbing & Fixtures

Description:

The school meets the OBC requirements for fixtures and drinking fountains. The school contains 3 restrooms for girls, 3 restrooms for boys, and 2 restrooms for staff. The facility contains 9 toilets, 2 ADA toilets, 12 urinals, and 8 lavs for boys and they are in good condition. The school contains 10 toilets and 8 lavs for girls and they are in good condition. The school contains 2 toilets and 3 lavs for staff and they are in good condition. The school maintenance staff is in the process of renovating the women's restroom off the lobby of the West gymnasium/auditorium building with ADA-compliant fixtures and toilet partition for public use during events. The restrooms meet the requirements for the total number of fixtures. The majority of the water closets are wall-mounted. Most of the flush handles have been replaced with automatic flush devices and the majority of faucets have been replaced with sensor touchless faucets. The plumbing fixtures are generally in fair to good condition. The district has also replaced 3 of the 5 electric water coolers in recent years with fixtures that feature water bottle fillers, and they are ADA-compliant. A fourth fixture is currently scheduled for replacement. There are an adequate number of hose bibbs on the perimeter of the building in good condition. The hot water is heated by a 65-gallon natural gas hot water tank installed in 2005. The staff indicated the capacity was adequate. There is a grease interceptor for the kitchen in this school. A majority of the domestic water piping is still galvanized. There is no backflow preventer provided at the water service entrance. No considerations are needed for science room emergency eyewash/shower in this elementary school. The kitchen is a warming kitchen and has all the required fixtures.



<complex-block>





New touchless sink faucets



New auto flush devices on urinals



Due to age, provide for replacement of the hot water heater as a Priority 1. As a Priority 3, replace the balance of manual flush handles with electronic flush valves and sensor faucets for sinks to meet OFCC requirements. Replace the last electric water cooler with a unit equipped with a bottle filler per OFCC guidelines. Install a new backflow preventer. Replace domestic water galvanized piping throughout the building.



Priority 1 Recommendation: Replace hot water heater.	
Priority 1 Costs: Domestic hot water heater: 1 unit x \$12,852.00/unit=	\$ 12,852.00
Priority 2 Recommendation: None at this time.	
Priority 3 Recommendation: Provide an allowance to replace the balance of flush valves a devices. Replace the last electric water cooler with a unit equ Install a backflow preventer.	Ind faucets with touchless Ipped with a bottle filler.
Priority 3 Costs: Flush valves and faucets: Lump Sum = Electric water cooler: 1 unit x \$3,886.95/unit = Backflow preventer: 2 units x \$6,478.25/unit = Domestic water piping: 44,733 SF x \$4.53/SF = Subtotal =	\$5,000.00 \$3,886.95 \$12,956.50 <u>\$202,640.49</u> \$224,483.94

Total Item E:

\$ 237,335.94

Item F: Windows

Description:

In 1985, the district replaced the lower portions of the window openings with double insulated pane, aluminum frame windows. Most of the openings were filled in with panels, many of which are rusting. The windows are reported to be in poor condition and some units were observed with condensation in between the panes. The seals have failed in these units, and they are a source of water and air infiltration. The windows are a source of energy loss to the building. The window system is an operable, awning-type window system and is equipped with insect screens.

The windows do not feature integral blinds but are equipped with surface-mounted blinds and/or curtains. The facility does not contain storefront windows. There are no skylights in either building. There is not a greenhouse associated with this school.





West gymnasium/auditorium bldg. windows



East academic building windows



Provide for replacement of all window systems throughout the facility due to age and failing condition. All work is recommended as a Priority 1 to ensure the building being warm, safe, and dry as a priority.



Priority 2 Recommendation: None at this time.

Priority 1 Recommendation:

Provide for replacement of window system.

Priority 3 Recommendation: None at this time.

Total Item F:

\$685,742.84

\$685,742.84

<u>Item G: Structure – Foundation</u>

Description:

Before the tunnel replacement, it was observed to have significant water infiltration. Students and staff used this tunnel regularly as a connector between the two buildings. Efflorescence was observed throughout the tunnel walls. This issue has been resolved with the existing tunnel being demolished and the construction of the new tunnel. No significant site drainage issues were visible that could contribute to foundation wall deterioration. Please see Item H & I for issues related to spalling/deteriorating concrete structure in the West gymnasium/auditorium building.



Old tunnel – water infiltration





No work is required at this time.

Total Item G:

Item H: Structure (Walls & Chimneys)

Description:

The building is framed with load-bearing unit masonry walls with face brick exteriors. No expansion joints were observed in the wall. There are areas where caulk has been applied over mortar as well as areas of missing mortar. Previous repairs in an area where the wall had separated from the roof is thought to be due to the 1986 seismic activity in the area.

In the basement area of the West gymnasium/auditorium building, many locations of spalling and deteriorated concrete columns and intermediate concrete floor structures was observed. The deterioration was significant enough in some locations to expose the rebar/steel within, and it is beginning to rust. It is recommended that the district retain the services of a structural engineer to investigate the deterioration and provide a solution for repairs and restoration.



Spalling & cracking in concrete structure – exposed steel



Spalling & cracking in concrete column – exposed steel



Lintels are rusted and delaminating in many window and door locations and require replacement. Stone sills throughout are in a variety of conditions; some locations are in disrepair and require replacement, and some locations require minor repairs and/or tuckpointing at sill joints. Unit ventilators on exterior walls will be removed due to HVAC replacement outlined in Item A, thus leaving wall voids that will require infill. The overhangs above the gym building's front entrance doors are in poor condition and require replacement.



Tuckpointing needed (see lower brick courses)



Wall voids will be present when unit vents removed at time of new HVAC installation

Recommendations:

As a Priority I, the district should retain the services of a professional structural engineer to provide analysis of the existing concrete condition and deterioration. Recommendations and anticipated costs can be amended in this report upon completion of that analysis. Additionally, provide for lintel replacement as a Priority 1 – lintel replacement should ideally happen when window replacement occurs (which is also a Priority 1 item). As a Priority 2, provide for masonry cleaning and sealing of the entire masonry façade. Provide tuckpointing as needed. Both of these items will protect the integrity of the exterior façade. As a Priority 3, provide expansion joints around the building's envelope, install control joints as needed, infill brick at unit vent openings, provide for window sill repairs, and replace overhangs.

Priority 1 Recommendation:

Retain the services of a professional structure engineer to evaluate current existing conditions and renovation/restoration solution. This cost will be amended in the report once obtained. Provide for lintel replacement.

<u>Priority 1 Costs</u>:

Lintel replacement: 1,182 LF x \$323.91/LF =

\$382,861.62



Priority 2 Recommendation: Provide for masonry cleaning and sealing of the entire masonry façade tuckpointing as needed.	e. Provide for
Priority 2 Costs:	¢5710250
Masonry sealing: 29,330 SF x \$1.30/SF =	\$37,193.50 \$38,129.00
Masonrytuckpointing: approx.7,500SF x \$9.72/SF = Subtotal =	<u>\$72,900.00</u> \$168,222.50
Priority 3 Recommendation: Provide infill of brick @ unit vent voids when HVAC system is replaced. Replace	
Priority 3 Costs:	
Control joints: 978 LF x \$77.73/LF = Infill brick @ unit vent voids: 100 SF x \$73.90/SF =	\$76,019.94 \$7.390.00
Replace overhang: lump sum = Subtotal =	<u>\$14,500.00</u> \$97,909.94

Total Item H:

\$648,994.06

Item I: Structure (Floors & Roofs)

Description:

The floor construction of the base floor is concrete slab construction and is generally in fair condition with some areas of crumbling noted. According to maintenance staff, there are no issues with water infiltration.

The floor construction of the intermediate floors is cast-in-place concrete type construction. Several locations of deterioration and spalling were observed in the West gymnasium/auditorium building. Steel is exposed in several locations and beginning to rust. As recommended in Item H, it is our recommendation for the district to retain the services of a professional structural engineer to investigate the deterioration and propose a course of action.

The roof construction of the East academic building is reported to be structural concrete, though some district personnel suspect it may be wood. Visually observation could not be done to confirm. The roof of the West gymnasium/auditorium building is steel trusses.







Intermediate concrete floor structure

As a Priority 1, retain the services of a professional structure engineer to evaluate current existing conditions and renovation/restoration solutions. This cost will be amended in the report once obtained.

Total Item I:

<u> Item J: General Finishes</u>

Description:

The school features conventionally partitioned classrooms with glazed blocks, plaster, and brick walls. The walls range in condition from poor to good condition. Some areas of plaster damage were observed. The floor finishes vary in the classrooms as well, but primarily feature wood flooring on the 2nd and 3rd floors and VCT being the primary finish on the first floor. The majority of the classrooms are equipped with 2' x 4' acoustical lay-in tile ceilings in fair condition. Many ceiling tiles were observed to be bowing at the corners most likely due to humidity levels during warmer months. The classrooms feature the original built-in wood storage cabinets as well as the original built-in chalkboards, many of which have had a markerboard surface applied onto their surface area.



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\$0.00

The corridors feature VCT flooring, glazed block walls with plaster wainscot above, and gluedon 1' x 1' ceiling tiles. Coat hooks with a shelf above are provided in the corridors for storage of students' outdoor clothing materials and bookbags/lunchboxes. The classroom doors are the original wood doors, some semi-recessed and most not, feature glass light panels and have recently been retrofitted with ADA-compliant door hardware.



Typical classroom finishes



Built in classroom storage



Old wood classroom doors w/new ADA handles



Typical restroom finishes



The large group restrooms are equipped with concrete flooring, glazed block walls with plaster wainscot, and 2' x 4' lay-in acoustical ceiling tiles in fair but dated condition. The toilet partitions are primarily metal and in dated and worn condition. The district is in the process of installing a renovated restroom in the West gymnasium/auditorium buildings which will be equipped with new partitions, finishes, and fixtures.

The gymnasium/auditorium is equipped with wood flooring on the gymnasium court, brick walls with plaster wainscot walls, and plaster ceilings in dated condition. The gymnasium doubles as an auditorium and fixed concrete riser seating with what appears to be the original wood seats that are in poor condition. The seating quantity provided is slightly over 300 seats. No ADA-compliant seating is provided. The space has some acoustical treatment provided on the walls as well as hanging from the ceilings. Four fixed basketball backboards/hoops are provided that are also in dated condition. There is no wall padding provided. There is a wood stage provided and the district reports that they have 2 new backstage curtains being ordered.



Kitchen finishes



New dishwasher



Gym finishes





The cafeteria has VCT flooring, painted block walls, and 2' x 4' lay-in acoustical ceiling tiles. The finishes are in fair condition, but the ceiling tiles are bowing from humidity. Student dining is undersized at 1,086 SF compared to the OSDM recommendation of 3,000 SF. The adjacent kitchen is a warming kitchen, and the district reports several new pieces of equipment having been replaced in the past few years. This includes the dishwasher, 2 reach-in coolers (replaced 2 years ago), as well as a new warming table replaced last year. Older equipment remaining includes a serving line, cabinetry, ovens, and sinks.







Provide for complete replacement of finishes throughout due to age, condition, lack of compliance with OSDM requirements, and in conjunction with mechanical, electrical, plumbing, and life safety upgrades. Provide for select plaster repairs. Provide new toilet partitions and accessories due to age and condition (sans the one restroom in the West gymnasium/auditorium that is being provided with new partitions). Provide for replacement of wood flooring throughout; Note: classroom recommendation below is to provide for wood floor sleeper system infill with lightweight concrete in prep for new VET or LVT flooring. Provide new gym seating, basketball backboard replacement & provide wall padding in the gym. Provide for warming kitchen equipment replacement as needed. New interior door replacement is outlined in Item O. The work is prioritized below as Priority 3. Note I: Due to the replacement of the HVAC system in Item A, and the recommendation for sprinkler system installation in Item U, complete replacement of ceiling tiles and interior lighting will be required. Note 2: The building is not provided with wall insulation necessary to meet the LEED requirements by OFCC. Additional wall insulation is required to meet this requirement.

Priority 1 Recommendation:

None at this time.

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

Provide complete replacement of finishes, new toilet partitions and accessories, select plaster repairs, wood flooring replacement, new gym seating, basketball backboard replacement, add wall padding, and replacement of select kitchen equipment. See Item O for ADA requirements of ADA toilet partitions and interior door replacement.

Priority 3 Costs:

Complete replacement of finishes: 44,733 SF x \$35.95/SF =	\$ 1,608,151.35
Toilet partitions: 13 units x \$ 1,606.50/SF =	\$ 20,884.50
Toilet partition accessories: 44,733 SF x \$.26/SF =	\$ 11,630.58
Plaster Repairs: Lump Sum =	\$10,000.00
Resilient wood flooring (gym & stage): 5,538 SF x \$18.21/SF =	\$100,846.98
Basketball backboards: 4 units x \$4,146.08/unit =	\$16,584.32
Additional wall insulation: 29,330 SF x \$7.78/SF =	\$228,187.40
Gym seating: 308 seats x \$400/seat =	\$123,200.00
Wood floor sleeper infill: 15,570 SF x \$10.37/SF =	\$ 161,460.90
Add wall padding: 480 SF x \$16.07/SF =	\$ 7,713.60
Kitchen – New combi oven: 1 unit x \$40,165.16/unit =	\$40,165.16
Kitchen – Serving line hot: 1 unit x \$10,556.95/unit =	\$10,556.95
Kitchen – Serving line cold: 1 unit x \$8,594.05/unit =	\$8,594.05
Kitchen – Shelving/tables: 1 unit x \$4,308.04/unit =	<u>\$4,308.04</u>
Subtotal =	\$2,352,283.83



Item K: Interior Lighting

Description:

When the facility was assessed in 2016, it contained primarily recessed, fluorescent-type lighting. The lighting in classrooms was T-12 and T-8 fluorescent 1x4 and 2x4 fixtures with electronic ballast. The lighting levels were as follows: classrooms 65 FC, cafeteria/kitchen 80 FC, gym 30 FC, offices 65 FC, restrooms 40 FC, band/art 40 FC, and corridors 30 FC. The corridors and gym lighting levels were slightly below OSFC standards. In 2017 – 2018, the district cut out all the ballasts and put in LED lamps. The lighting levels are much improved in all the spaces.





48 inch, T8 LED Lamp

Recommendations:

Although all new LED lighting is provided, complete replacement of lighting system in areas with dropped ceilings will be required due to the installation of mechanical systems and fire suppression systems outlined in Items A & U.



Priority 1 Recommendation: None

<u>Priority 2 Recommendation:</u> None at this time.

Priority 3 Recommendation:

Replace lighting system in all areas which have lights in the lay in ceilings and are recommended for HVAC system and sprinkler system installation.

Priority 3 Costs:

Interior lighting replacement: 83,611 SF x \$8.42/SF =

\$ 704,004.62 \$704,004.62

Total Item K:

Item L: Security System

Description:

The security system is a 1992 Fire Burglary system maintained by Vector Security. It includes cameras located inside (30) and outside of buildings (19). All school district cameras are connected to the high school recording equipment with 2 weeks of storage. There is one card reader located at the main entrance of the classroom building with 2-way communication and a door release for visitors. There is a card reader at the auditorium building. The district recently installed a district-wide keying system. There is no secure vestibule in this facility, however there is a buzzer entrance into the building.

The exterior site lighting system is equipped with buildingmounted wall packs in fair condition. Since the 2016 Buzzer device at entry point

OFCC facilities assessment, the district has replaced the exterior building cameras. However, the overall exterior lighting including parking and site lighting is inadequate compared to OFCC standards.

Recommendations:

Provide a new security system to meet OFCC design manual standards as a Priority 1 which is focused on warm, safe, and dry. Add a secure vestibule entrance which may require an addition due to half-level changes in the building.





Priority 1 Recommendation: Provide a new security system to meet OFCC guidelines, including a new secure vestibule. Priority 1 Costs:

Security system replacement: 44,733 SF x \$3.69/SF =

Exterior Lighting: 44,733 SF x \$1.30/SF = Secure Vestibule addition: Lump Sum = Subtotal: \$ 165,064.77 \$58,152.90 <u>\$500,000.00</u> \$723,217.67

Priority 2 Recommendation:

None at this time.

Priority 3 Recommendation:

None at this time.

Total Item L:

\$723,217.67

Item M: Emergency / Egress Lighting

Description:

The overall facility is equipped with an emergency egress lighting system consisting of compact fluorescent and LED exit signs, and emergency lighting with battery packs. The system is not adequately provided throughout and is not compliant with OFCC design manual guidelines. Since the 2016 assessment, there have been some LED exit signs replaced. There is no emergency generator.





Provide a complete replacement of emergency egress lighting due to the installation of systems outlined in A, K, and U. A new generator is included as part of Item D.

Priority 1 Recommendation: None	
Priority 2 Recommendation: None at this time.	
Priority 3 Recommendation: Provide a new egress lighting system.	
Priority 3 Costs: Emergency/Egress Lighting: 44,733 SF x \$1.30/SF =	\$ 58,152.90
Total Item M:	\$58,152.90

Item N: Fire Alarm

Description:

The fire alarm system is a 1992 Silent Night zoned type system and is annually tested and remotely monitored by Vector Security. There is not an adequate number of horn/strobe units. The existing system does not have enough capacity to add additional horn strobes or duct fire suppression system detectors for the shutdown of air handling equipment to meet NFPA and OFCC standards. It is not likely that the current system would accommodate the addition of a fire suppression system.

Recommendations:

Replacement of the system will be required when the work in A and C- upgrading the ventilation and air conditioning is completed. At that time, the devices would be replaced and added to with addressable devices.



Original alarm device



Priority 1 Recommendation: None at this time.

Priority 2 Recommendation: None at this time.

<u>Priority 3 Recommendation:</u> Provide for replacement of fire alarm system.

Priority 2 Costs:

Fire alarm system replacement: 44,733 SF x \$3.89/SF =

\$ 174,011.37

Total Item N:

\$174,011.37

Item O: Handicap Access

Description:

At the site, there is an accessible route provided from the public right-of-way, accessible parking areas, and from the passenger unloading zone to the main entrance of the school. There is an accessible route connecting most areas of the site via sidewalks and asphalt parking areas. Adequate handicapped parking is not provided; there are approximately 27 regular striped parking spaces located on the west and north sides of the main school and 1 ADA parking space. Per ADA requirements, 2 ADA spaces are required when 26-50 parking spaces are provided. The majority of the main entrance points of the east academic building are not ADA accessible due to steps. Doors labeled "3" on the west side of the academic building are, however, on grade but enter at a half level in between floors. There is not an ADA power door assist provided.

On the interior of the building, space allowances and reach ranges are not fully compliant. There is a wheelchair lift on the main school building that provides access to all three floors, however, no elevator is provided. Additionally, the East auditorium/gym building has no ADA access between the floors. The stage located in the building is not ADA accessible and requires an ADA lift for ADA access. Interior doors are generally the original door leafs and most have been retrofitted with ADA hardware in recent years. Interior doors are a mix of semi-recessed and non-recessed doors.

In the main East academic building, there are a total of 5 ADA-compliant electric water coolers provided in the hallways. Three of them have been replaced with units that feature water bottle fillers and a fourth one is scheduled for replacement, thus leaving one unit requiring replacement (See Item E – Plumbing for details and replacement cost). ADA-compliant signage is not provided in either of the buildings.



The large group restrooms are generally not compliant with ADA requirements for fixtures. However, an ADA restroom was being installed in the West auditorium/gym building during the physical assessment and ADA urinals were observed in several restrooms in the main East academic building.







Non-recessed doors retrofitted with ADA hardware



Non-ADA signage above classroom doors







1 ADA parking space provided on the east side of the academic bldg.

Provide ADA-compliant large group restrooms on each floor of the two buildings. Provide a 3stop elevator in each building for ADA accessibility, as well as a power door assist at each main entrance point. Although the academic building has doors that are retrofitted with ADA hardware, the doors themselves are very dated and should be replaced. Provide ADA signage in the buildings. Provide a lift for the stage.

<u>Priority 1 Recommendation</u>: None at this time.

Priority 2 Recommendation: None at this time.

Priority 3 Recommendation:

Provide for ADA compliant large group restrooms on each floor of the two buildings. Provide a 3 stop elevator in each building for ADA accessibility, as well as a power door assist on each main entrance point. Although the academic building has doors that are retrofitted with ADA hardware, the doors themselves are very dated and should be replaced. Provide ADA signage in the buildings. Provide a lift for the stage.



<u>Priority 3 Costs:</u>	
ADA signage: 44,733 SF x \$0.26/SF =	\$11,630.58
Replace doors: 68 leafs x \$1,684.34/leaf =	\$ 114,535.12
Elevators (3 stops x 2 buildings): 6 stops x \$66,078.15=	\$ 396,468.90
ADA power door assist: 2 entrances x \$9,717.38/unit =	\$ 19,434.76
ADA Toilets/sinks/urinals: 12 fixtures x \$4,923.47/fixture =	\$ 59,081.64
ADA toilet partitions: 6 units x \$1,750/unit =	\$10,500.00
Toilet Accessories: 6 restrooms x \$1,295.65/restroom =	<u>\$7,773.90</u>
Subtotal:	\$619,424.90

Total Item O:

Item P: Site Condition

Description:

According to the Geauga County Auditori's website, the school sits on two, district-owned parcels. The main parcel houses both the academic building and the auditorium/gym building and is comprised of 1.49 acres. The school district owns an additional .5 acre parcel across Goodrich Ct. which is utilized for additional parking. The site is in the heart of downtown Chardon adjacent to both residential and commercial properties. The site is attractive but very small. There are limitations to parking and site access, and Goodrich Court has to be closed off during school hours. There is no bus loop or designated parent drop-off/pick-up drives. There were no significant locations with erosion observed during the physical assessment.

The school has one paved parking lot that provides 27 striped parking for staff, one of which is an ADA parking space. The school does not have ample parking for visitors and the disabled on the main parcel, however, an additional gravel lot is provided across the street. The asphalt is in fair condition, though patching of cracks was apparent in the parking lot portion and this parking lot should be provided with resurfacing. The asphalt in between the academic and gym buildings is in good condition around the new tunnel area, but the

nificant locations with erosion vsical assessment. d parking lot that provides 27 one of which is an ADA parking not have ample parking for





other half is experiencing cracking throughout and should be resurfaced. Parking lot stormwater drainage is facilitated via storm drains. No issues with parking lot ponding were observed nor reported.



\$619,424.90

The school has a new concrete sidewalk over the tunnel that was installed in between the two buildings last year. This sidewalk is in good condition. The remaining sidewalks around the West auditorium/gymnasium building are cracked and uneven and should be replaced. The trash dumpster is not provided with concrete pads or enclosures.

Two playgrounds are provided, one on-site on the north side of the building and another across Goodrich Ct. adjacent to the gravel parking lot. Both playgrounds are fenced for security. Both are provided with wood chip soft surfaces, but they are not of sufficient depth in many locations. The playground equipment is a mix of older and newer metal and high-density plastic pieces. The chain link fence along the east and north sides of the property is in poor condition and should be replaced. The dumpster is not provided with a concrete pad. Two sets of exterior stairs have recently been rebuilt and are in good condition.



Recommendations:

As a Priority 1, add additional mulch to sufficient depth for compliance with fall safety regulations. As a Priority 2, resurface the parking lot and the remaining half of asphalt in between the two buildings. Provide asphalt parking in the gravel parking lot. Provide sidewalk replacement around the West auditorium/gymnasium building. Replace rusted fencing. As a Priority 3, provide a concrete pad & enclosure for the dumpster, and replace older pieces of playground equipment. Note: OFCC automatically puts in a lump sum for unforeseen circumstances. This allowance remains in this assessment report and is under Priority 3.



rnonty i kecommendations.	Priority 1 Recommendations:	
Provide adequate depth of wood mulch in the north playground.		
Priority 1 Costs:		
Soft Playaround Surface: 758 SY x \$3787/SY =	\$2870546	
	\$20,700.10	
Priority 2 Recommendations:		
Provide asphalt resurfacing as needed. Provide new asphalt in gravel	lot. Provide for	
sidewalk replacement. Replace rusted fencing.		
Priority 2 Costs:	¢ 40 0 40 10	
Asphalt Resurracing: $1,879$ SY x \$24.67 SY =	\$40,242.19	
New Asphalt in gravenol. 1,05 St x $$33.44/St =$	\$30,004.32 \$23,088,06	
Fencing replacement: $5591 \text{ Fx} \$65.00/1 \text{ F} =$	\$36,335.00	
Subtotal =	\$143,450.47	
Priority 3 Recommendations:		
Provide dumpster pad and enclosure. Remove old pieces of playground equipment		
and replace with new. OFCC allowances for unforeseen site circums	tances.	
Priority 3 Costs:		
Dumpster pad and enclosure: Lump Sum =	\$10,000.00	
Remove old playground equipment: Lump Sum =	\$2,591.30	
New playground equipment: 22,000 SF x \$1.95/SF =	\$42,900.00	
Base Sitework allowance: Lump Sum =	\$50,000.00	
Additional sitework allowance: 44,733 SF x \$1.50/SF =	<u>\$67,099.50</u>	
, , ,		

Total Item P:

\$344,746.73

<u>Item Q: Sewer System</u>

Description:

The existing system is tied to the municipal system. A 4" city sewer pipe serves the building. The original assessment reported that there are twin sewage ejector pumps located in the mechanical room – however, this is not the case and was an apparent error in the original report. There are no current problems reported with the city sewer system.



Existing conditions require no renovations or replacement at this time.

Total Item Q:

Item R: Water Supply

Description:

The existing system is tied to the municipal system. There is a 3" city water supply line which is then reduced to 2" serving the school. The water service is adequate for the present use but is not adequate for a future fire protection system.

Recommendations:

Provide a new fire line from the main at the street that will accommodate the future system – cost in Item U.

Total Item R:

Item S: Exterior Doors

Description:

The school district recently replaced exterior doors at Entrance 1, entrance 3, and Entrance 4 in the academic building, and Entrance door 4 in the auditorium/gym building. These are double FRP doors and are in good condition. All other doors around the building are older. They were observed to be nonthermal, misaligned, and making poor closures against the frame.

Recommendations:

Provide for exterior door replacement as a Priority 2 due to the limited useful life expected. 9 doors in the West

auditorium/gymnasium building and 1 exterior door in the East academic building.

<u>Priority 1 Recommendations:</u> None at this time.



thendesign architecture



New FRP doors

\$0.00

\$0.00

Priority 2 Recommendations:

Replace dated and worn exterior doors.

<u>Priority 2 Costs:</u>

Exterior Door Replacement: 10 leafs x \$3,239.12/leaf =

\$32,391.20

Priority 3 Recommendations:

None at this time.

Total Item S:

\$32,391.20

Item T: Hazardous Materials

Description:

In 2019, the OFCC sent an environmental engineer to confirm the presence of hazardous materials (including asbestos) in the facility. They conducted testing as part of this assessment. They listed boiler insulation, pipe insulation, cement board, fire door, ceiling/wall, resilient flooring, mastic, carpet over RFC, and sink undercoatings as confirmed asbestos-containing materials. Note: Since 2019, the district has replaced all the fluorescent lighting in the building district-wide, thus the recommendation for incineration of fluorescent lamps is removed from this recommendation.

Recommendations:

Remove asbestos and hazardous material-containing materials.

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

None at this time.

Priority 3 Recommendations:

Remove hazardous material identified in the Enhanced Environmental Assessment prepared by OFCC in 2019.

Priority 3 Costs:

Boiler/Furnace Insulation Removal: 450 SF x \$16.07/SF =	\$7,231.50
Est. Cost for Lead Mock-ups: 5,000 units x \$1.30/unit=	\$6,500.00
Special Engineering for LBP Mock-ups: 5,000 units x \$1.30/unit=	\$6,500.00
Pipe insulation Removal: 880 LF x \$32.13/LF =	\$28,274.40



Dismantling of Boiler/Furnace/Incinerator: 1 each x \$2,591.30/each = Cement Board Removal: 288 SF x \$6.48/SF = Fire Door Removal: 7 each x \$129.57/each = Non-ACM Ceiling/Wall Removal (for access): 3,520 SF x \$2.59/SF = Resilient flooring removal, including mastic: 2,650 SF x \$4.28/SF = Carpet removal (over RFC): 660 SF x \$1.30/SF = Sink Undercoating removal: 8 units x \$129.57/unit = XRF Screening for LBP: 3,000 units x \$1.00/unit =	\$2,591.30 \$1,866.24 \$906.99 \$9,116.80 \$11,342.00 \$858.00 \$1,036.56 <u>\$3,000.00</u> \$79,223.79
Subtotal =	\$79,223.79

Total Item T:

\$79,223.79

Item U: Life Safety

Description:

The overall facility is not equipped with an automatic fire suppressant system. Exit corridors are situated such that dead-end corridors are not present. The facility's main East academic building contains 3 main interior stair towers, and the West gymnasium/academic building contains 2 main interior stair towers. The handrails in the stair towers as well in other areas of the building are not compliant with current code requirements as well as some guardrails. There are no exterior stair towers.

The kitchen has one hood protected by an up-to-date Ansul suppression system. Fire extinguishers are provided throughout the two school buildings, though many are not at ADA-compliant height or provided with through-the-wall cabinets. The facility is not equipped with an emergency generator. The existing water supply system is tied into the municipal system. There is a 3" city water supply line which is then reduced to 2" serving the school. The water service is adequate for the present use but is not adequate for a future fire protection system. Rooms with a capacity greater than 50 occupants are equipped with adequate egress.

<u>Recommendations:</u>

Provide a complete sprinkler system that includes a new fire line. Provide for new handrails/guardrails. Provide fire extinguisher cabinets throughout the buildings.

Note 1: This work is recommended as a Priority 3 to coordinate the timing of HVAC & electric replacement.

Note 2: Additionally, the original OFCC assessment report had costs for an underground storage tank and well pump for the fire suppression system which is only needed if the building is served by well water supply. This facility is served by the municipal water supply system, thus those costs have been removed from this report.





Water meter

Kitchen hood

Fire extinguisher not ADA height

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

None at this time

Priority 3 Recommendations:

Install new hand/guardrails that meet current code requirements. Provide an automatic fire suppression system throughout the facility and a dedicated water line connection. An emergency generator is provided in Item D: electrical system as part of the complete system replacement costs. Provide new fire extinguishers through the wall cabinets at ADA height. Costs for providing a well storage tank and pump for the fire suppression system identified incorrectly in the OFCC assessment have been removed herein.

Priority 3 Costs:

Stair Handrails: 13 levels x \$6,478.25/level =	\$84,217.25
Fire extinguisher & cabinets: 17 each x \$757.96/unit =	\$12,885.32
Sprinkler System: 44,733 SF x \$4.86/SF =	\$217,402.38
Dedicated fire water line: 250 LF x \$64.78/LF=	\$16,195.00
Subtotal =	\$330,699.95

Total Item U:

\$330,699.95

Item V: Loose Furnishings

Description:

The typical furniture is somewhat consistent in design and varies in condition from dated/poor to good condition, consisting of office desks & chairs, shelving, tables and chairs, lounge and living room type furnishings, file cabinets, and computer workstations.

According to the district, no furniture update has occurred since the last OFCC assessment. The facility's furniture and loose equipment were evaluated and on a scale of 1–10 the overall facility received a rating 3 out of 10 due to age, condition, and due to the fact that it lacks some of the design manual required elements.

Typical Classroom furniture

Typical Classroom furniture

Recommendations: Replace outdated, worn furniture.

Priority 1 Recommendations: None at this time.

Priority 2 Recommendations:

None at this time.

Priority 3 Recommendations:

Provide for replacement of outdated furnishings.

Priority 3 Costs:

New furniture: 44,733 SF x \$10.71/SF =

\$479,090.43

Total Item V:

\$479,090.43

Item W: Technology

Description:

The typical classroom is equipped with data ports in each classroom as well as wireless access through the building. A new PA system (head units) is present in the building. There are no telephones provided in the classrooms, but they do utilize handheld radios for communication.

The facility is not equipped with a centralized clock system. Specialized electrical/sound systems requirements of the gymnasium, stage, student dining, and music spaces are inadequately provided and what is present is outdated. The district is transitioning from ceiling-mounted projectors to 86" Promethean touchscreen interactive panels in the classrooms.

Wireless Access Point in library

86" Promethean Touch Screen Board

2 technology data ports

Recommendations:

Provide for complete replacement of technology systems to meet Ohio School Design Manual requirements and due to technological advances in 3-5 years.

Priority 1 Recommendations:

None at this time.

Priority 2 Recommendations:

To meet OSDM requirements and to remain current with technological advancements it is recommended that an allowance for updates/replacement of the technology systems is required.

Priority 2 Costs:

Technology replacement: 44,733 sf x 16.85/sf =

\$753,751.05

Priority 3 Recommendations: None at this time.

Total Item W:

\$753,751.05