ELKHART LAKE - GLENBEULAH SCHOOL DISTRICT

DRAFT MASTER PLAN—FACILITIES ASSESSMENT REPORT

PRA Project No. 220066 | February 20, 2023

prA

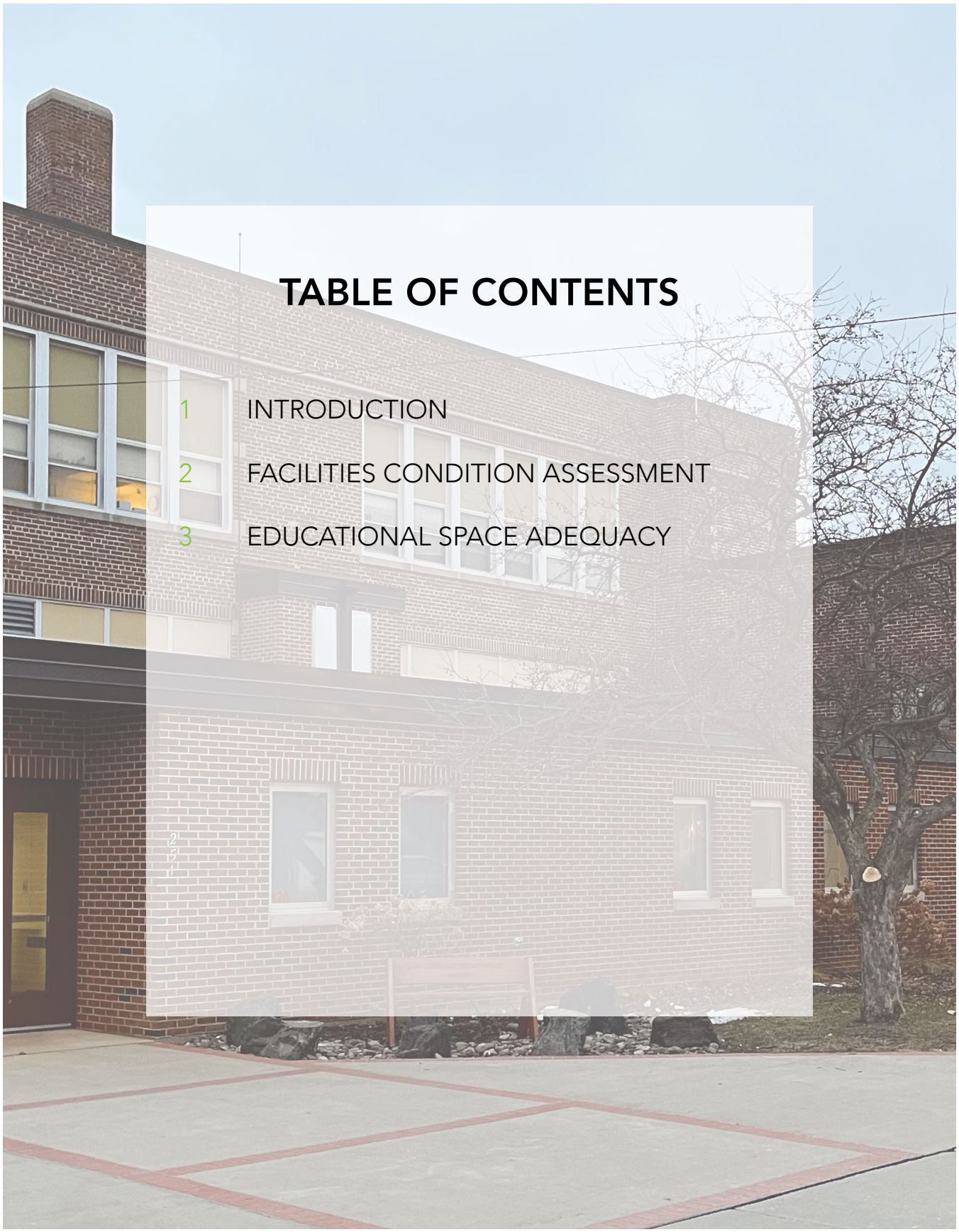


TABLE OF CONTENTS

1 INTRODUCTION

ELKHART LAKE - GLENBEULAH SCHOOL DISTRICT

ADMINSTRATION TEAM

Dr. Adam Englebretson - Superintendent
Ryan Faris - High School Principal
Dr. Jeanne Courneene - EMS Principal

BOARD OF EDUCATION

Jim Henschel - President
Mike Meeusen - Vice President
Joel Schuler - Treasurer
Erica Spatz - Clerk
Sarah Rudnick
Sarah Tegen
Grant Stecker

PLUNKETT RAYSICH ARCHITECTS, LLP

Steve Kieckhafer - Principal - Educational Planner
Molly Ryan - Project Designer

JOS. SCHMITT CONSTRUCTION

Steven Schmitt - Owner
Keith Isken - Project Executive
Jake Schurr - Project Manager

MSA PROFESSIONAL SERVICES, INC

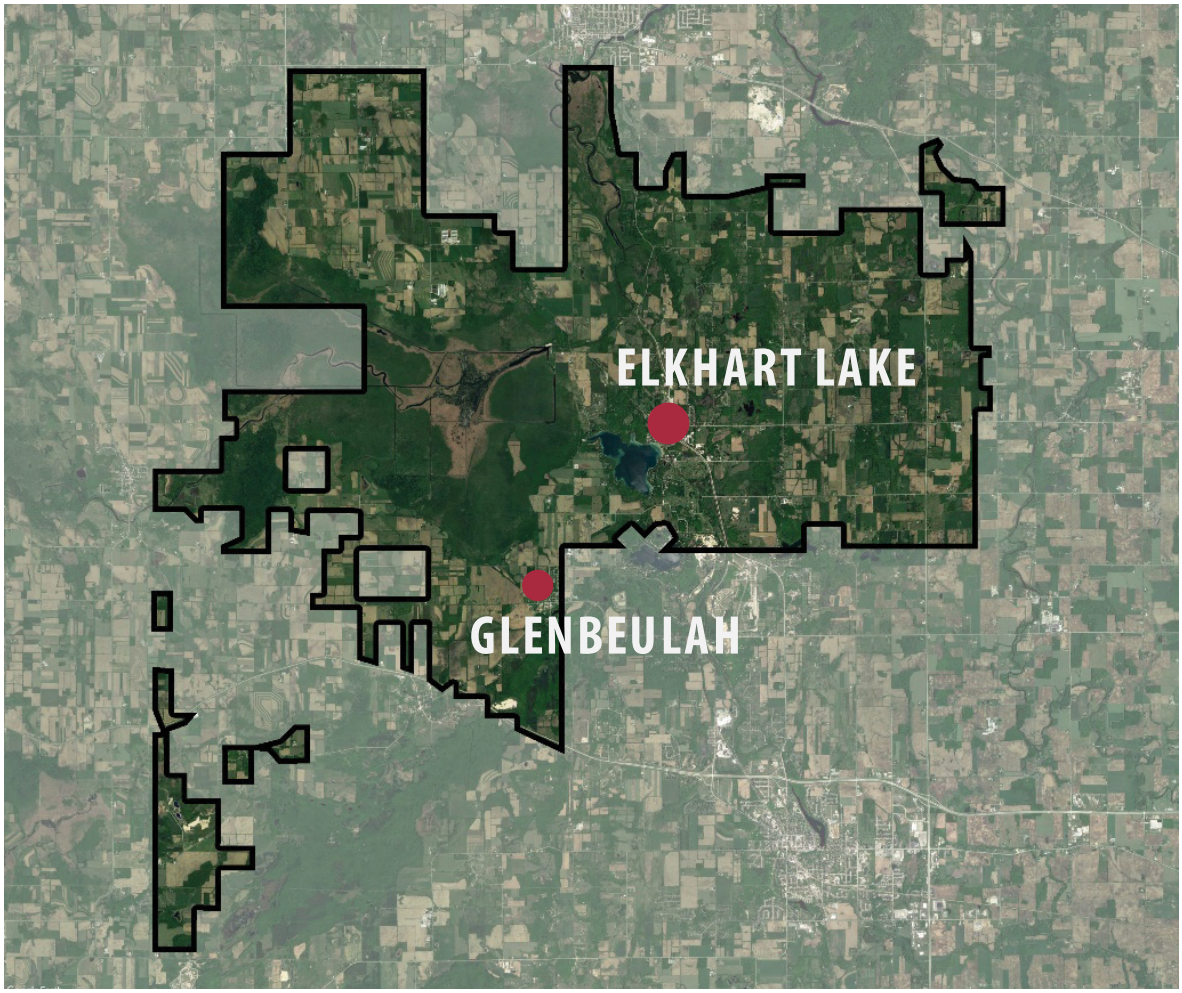
Ken Sorensen
Mike Pasineau
Macen Leonardi
Curt Krupp

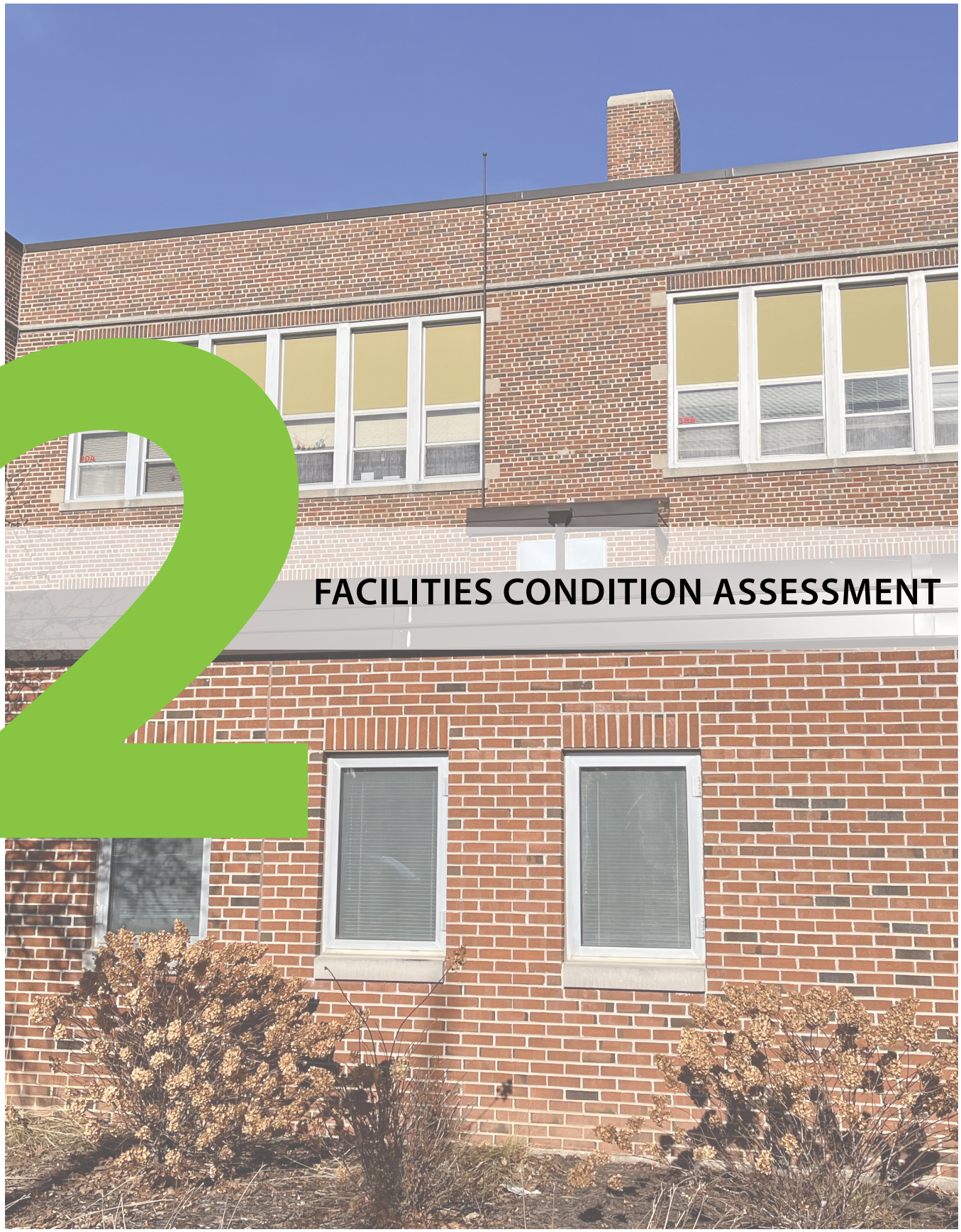
INTRODUCTION

This study is intended to survey and document the physical characteristics of the Elkhart Lake Elementary/Middle School and Elkhart Lake High School buildings. The survey reviews the appearance, condition, and current uses of the buildings. The result of this study is a detailed and prioritized maintenance list to address material conditions and bring the buildings to current code/safety standards. Food service, pools, athletics, and other specialty reviews were not undertaken with this study.

The process included a review of available existing floor plans and a walk-through of all District buildings. The review makes comments based on exposed conditions and is non-destructive in nature.

The buildings were toured separately by the architectural, mechanical, electrical, and plumbing teams over the course of June 2022 - December 2022.





2 FACILITIES CONDITION ASSESSMENT

REFERENCE INFORMATION

When evaluating buildings, it is important to consider the life expectancy—both of the building as a whole and each individual component. Typically building elements fall into one of several categories when evaluating life cycle expectations, these categories speak to replacement feasibility.

Structural components and Concealed or Inaccessible components are not recommended for replacement. While minor repairs can be undertaken, these should be designed to last the lifespan of the building. This includes column systems, footings, floor, slabs, basement walls, and roof construction. When these components start to fail, it is typically recommended to vacate a building. Additional components are considered "Cost Prohibitive or Impractical" for replacement—replacement is technically feasible but not recommended for cost reasons. This includes exterior walls (recladding may be reasonable depending on the material).

Additional components fall into "replaceable" categories—Major Building, Mechanical, Electrical, Plumbing, Roofing, and Site. These pieces are designed to be replaced during the life of a building and include items like windows, doors, floor finishes, ceilings, roof coverings, plumbing fixtures, etc. The following report focuses on replaceable elements.

To consider the recommended lifespan for an entire building, it is important to look at the age of the oldest portion of and the anticipated service life for the Structural and Concealed/Inaccessible components.

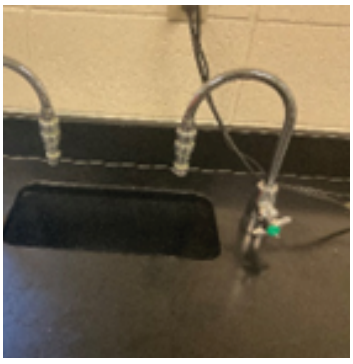
For the Elkhart Lake - Glenbeulah School District, this assessment has reviewed the Elementary / Middle School building and the High School building.

It is important to note that the numbers on the following page are reference numbers only. While not recommended, components can be extended beyond this age (or have been known to fail earlier). Reference Service Lifes are provided for maintenance planning purposes.

	Component	Reference Service Life* (Years)
Structural	Poured footings + foundations	100
	Concrete block	66-100
	Coated Steel + Steel Framing	100
Cladding	Brick Masonry	100
	Cast Stone Masonry	100
	Natural Stone Masonry	100
	Siding—Wood	10-50
	Siding—Vinyl	50
Other Exterior	Gutters + Downspouts	30
	Window/Storefront—Aluminum	40
Interior Materials	Gypsum Board	50
	Doors—Wood	30
	Tile (Wall + Floor)	50
	Carpet	11-25
	Vinyl Tiles (VCT, SVT, VET, VT)	15-20
	Rubber Flooring	30
	Acoustic Ceiling Tiles	30
Site	Concrete Paving	40
	Asphalt Paving	25

*All life expectancies are based off proper installation and regular maintenance
*Reference Service Life data based off ASTM E 2136, ASHRAE, and other available industry standards

	Component	Reference Service Life* (Years)
Roofing	Membrane	12-25 (per warranty)
	Asphalt Shingles	15-30
	Metal	20-50
Mechanical	Boiler	30-35
	Air Handling Unit	30-35
	Unit Ventilators	20-25
	Package Rooftop Unit	17-20
	Chiller	25-30
	Air-Cooled Condensing Unit	20-25
	Hot Water System Pumps	20-25
	Ductwork	25-40
	Exhaust Fans	5-15
Electrical	Service + Distribution	30
	Lighting + Branch Wiring	20
Plumbing	Piping	15-40
	Fixtures	15-25
	Waste Piping	50-100
	Hot Water Heater	11-14



*All life expectancies are based off proper installation and regular maintenance
*Reference Service Life data based off ASTM E 2136, ASHRAE, and other available industry standards

1938
ORIGINAL BUILDING

1956
CAFETERIA / ELEMENTARY ADDITION

1957
ART ROOM / ELEMENTARY ADDITION

1977
IMC ADDITION

1989
MIDDLE SCHOOL ADDITION

ELEMENTARY / MIDDLE SCHOOL

ADDRESS: 251 Maple Street, Elkhart Lake

SITE SIZE: 4.7 acres

SITE DETAIL: This site has an adequate play structure area and uses the practice football field for outdoor play space.

SITE ACCESS: Vehicular traffic enters parking lot from Washington Street on the west side of the building. Bus parking for student drop off and pick up is from the south end on Maple Street. Pedestrian access is available on all sides of the building with the main entrance on the south.

BUILDING SIZE: 58,326 sq ft

ENROLLMENT: 323 students

BUILDING AGE:
Original building - 1938
Cafeteria / Elementary addition - 1956
Art room / Elementary addition - 1957
IMC addition - 1977
Middle School addition - 1989

GRADE LEVELS: PK - 8th grade

SPRINKLERED: No

OTHER FUNCTIONS: The gymnasium is currently used for indoor recess, minimal physical education, and for Boys Wrestling.

The original building was constructed in 1938 as the High School. When the new High School was built in 1966, this building became the Elementary / Middle School.

SCHOOL TYPE	MIN. ACREAGE	PLUS	RECOMMENDED SIZE	ACTUAL SIZE	ADEQUATE SIZE
Elementary / Middle School	15	1 acre per 100 students	19 acres	4.7 acres	NO

CONDITION KEY

GOOD	No major needs anticipated in next 15 years. Meets or exceeds expectations for a modern educational facility.
GOOD TO FAIR	No major needs anticipated in next 10 years. Meets minimum expectations for a modern educational facility.
FAIR	No major needs anticipated in next 5 years. Components may be at or nearing expected service life.
FAIR TO POOR	No major immediate needs. Comonents are likely past expected service life.
POOR	Major immediate needs. Comonents are at or nearing failure.

CATEGORY	COMMENTS	CONDITION
ACCESSIBILITY		FAIR
ACCESS TO BUILDING (ACCESSIBLE ENTRANCE)	RENOVATED FOR SECURE ENTRY	GOOD
ACCESS TO STUDENT SPACES	MOST AREAS ACCESSIBLE, SEVERAL STAIRCASES	GOOD TO FAIR
DOOR HARDWARE	SOME OLDER DOORS HAD HARDWARE REPLACED	FAIR
TOILET ROOMS	NEED UPGRADING OF THE OLDER ROOMS	FAIR TO POOR
PLAY EQUIPMENT	MANY STRUCTURES HAVE BEEN UPDATED	GOOD
SAFETY + SECURITY		FAIR TO POOR
SITE USE SEPARATION	SHARE SPACE WITH HIGH SCHOOL	GOOD TO FAIR
SECURE ENTRY SEQUENCE	RENOVATED FOR SECURE ENTRY	GOOD
LIFE SAFETY ISSUES	EXIT PATH CIRCULATION IS DIFFICULT	FAIR TO POOR
COMPARTMENTALIZATION	DIFFICULT TO ACHIEVE	POOR
FIRE PROTECTION	NOT PRESENT	POOR
SITE		FAIR TO POOR
STORM WATER/DRAINAGE	SEVERAL REPORTED DRAINAGE ISSUES	POOR
HARDSCAPE (PAVING + PARKING)	MINOR REPAIRS, SEVERAL CONCERN AREAS	GOOD TO FAIR
ATHLETICS		TBD
PLAY/OUTDOOR LEARNING SPACE	SEVERAL EQUIPMENT PIECES	GOOD
SPACE TO EXPAND	LIMITED WITH ADJACENT HIGH SCHOOL	POOR
EXTERIOR		FAIR TO POOR
MATERIAL CONDITION	GOOD TO FAIR	FAIR TO POOR
ENERGY EFFICIENCY	GOOD TO FAIR	FAIR TO POOR
INTERIOR		
MATERIAL CONDITION	GOOD TO FAIR	TBD
CIRCULATION/WAYFINDING	GOOD TO FAIR	TBD
SYSTEMS		FAIR TO POOR
HVAC	ELEMENTARY REPLACEMENT IS NOISY, SEVERAL AREAS LACK A/C	FAIR TO POOR
ELECTRICAL – LIGHTING	SOME LED REPLACEMENTS	FAIR
ELECTRICAL – SYSTEMS	NEED FOR OUTLETS	POOR
PLUMBING	OLD AND DETERIATING SYSTEM	POOR
TECHNOLOGY	UPDATED EQUIPMENT	GOOD

ACCESSIBILITY

OBSERVATIONS

Accessible parking is available on the street and on the surface parking lot. The parking lot is not adjacent to the main entrance to the building. There are several floor levels throughout the building with a few spaces limited to accessibility. Accessible toilet rooms are present, but not every toilet room as accessible features.

SAFETY & SECURITY

OBSERVATIONS

The property has perimeter fencing for protection from high traffic street and privacy from adjecent private residences. The main entrance has a call phone system to allow visitors to the building and into a secure vestibule. The building would be difficult to compartmentalize into separate areas in an intruder scenario. Building additions and renovations were completed prior to a fire protection system requirement. With any major alterations to the building, it would be advantageous to install a fire protection system.

SITE

OBSERVATIONS

It has been reported that the district has dealt with storm water concerns for several years, have made corrections, but water problems continue to occur. The adjacent High School utilizes a majority of the site leaving limited space for the Elementary / Middle School. Outdoor play structures are in good condition with equipment and surface improvements made over the past several years.

EXTERIOR

OBSERVATIONS

Updates to the exterior of the building have been made in the past when necessary. A few deficiencies are present with sidewalks, asphalt, and landscaping. Areas of the building materials are deteriorating around the perimeter.

INTERIOR

OBSERVATIONS

In general, the materials within the interior of the building, are worn and aging; cabinetry, ceilings, and doors/frames especially. Flooring materials in many areas are in good condition.

MECHANICAL

The following report is the result of a site visit by Ken Sorensen of MSA Professional Services, Inc. that occurred on Monday, June 20, 2022. Site observations, existing drawing review and interviews with facility staff were used in preparing this report.

The original building was constructed in 1938. Building additions were completed in 1956, 1957,1977, 1989 and 2015.

HEATING

OBSERVATIONS

The presently installed boiler plant consists of (1) AERCO Benchmark Boiler and (1) CAMUS DynaMax boiler. These separated combustion boilers are rated at 94% thermal efficiency while burning natural gas. The AERCO boiler has an input capacity of 1,000,000 BTUH while the CAMUS boiler has an input capacity of 500,000 BTUH.

The piping and pumping arrangement for this boiler plant is installed in a Primary / Secondary arrangement with a dedicated In-line circulating pump for each boiler.

Heating water supply and return piping is in good condition.

Hot water supply and return piping insulation is in good condition.

Existing valves and other hot water specialties installed during the 2015 building upgrade project are in good operating condition.

The existing boilers and pumps are in good operating condition.

RECOMMENDATIONS

The existing boiler plant should operate for several years without excessive service and repair required.

Provide regular testing of the hot water distribution system. Add chemical treatment and corrosion inhibitors as required to maintain recommended water quality standards for: pH, Conductivity, Hardness, chlorides, etc.

Continue scheduled and preventative maintenance.

VENTILATION & AIR CONDITIONING OBSERVATIONS

This facility includes multiple areas that are designed and operating as heating and ventilation only systems. Other areas of the building have been upgraded to include air conditioning.

Indoor air handling units No. 1 & 2 were added through the 1989 building addition and renovation project. These units provide heating and ventilation only. All control devices for these units are pneumatic. These units have been well maintained and are in fair operating condition after 30+ years of service.

Air handling unit No.3 provides heating, ventilation and air conditioning to a portion of the 1989 building renovation project. All control devices at this unit are pneumatic. This unit is accessible only through removal of ceiling tile. Facility operating staff indicated that frequent service and repairs are required for this equipment.

Air conditioning was added to a portion of the facility through packaged rooftop units and split system fan coil units as part of the 2015 building expansion and renovation project.

Other existing roof mounted packaged units were identified as existing to remain during the 2015 renovation project. These units are now approaching their anticipated life expectancy.

It was reported there is a concern of the air distribution system in classrooms due to excessive and disruptive noise. This work was completed in 2015. The unit above Classroom 206 has been reported numerous times to be very disruptive to delivering instruction.

The ductwork distribution systems connected to the facility air handling systems are constructed of sheet metal. Ductwork joints, seams and connections are not all sealed properly causing conditioned air leakage into the ceiling cavity.

HVAC equipment, systems and devices installed in 2015 and later are in good

MECHANICAL (CONTINUED)

operating condition and should remain operational without excessive service or repair for several years.

RECOMMENDATIONS

Remove and replace all pneumatic controls with direct digital control equipment and devices wired into the building automation system.

Remove and replace existing indoor air handling unit No.3 and the connected roof mounted air cooled compressor condensing unit located on roof above as part of any upcoming facility renovation or equipment upgrade project.

Existing HVAC system distribution ductwork should be sealed and insulated to present code requirements during the time of equipment replacement.

Continue with preventative maintenance.

TEMPERATURE CONTROLS

OBSERVATIONS

The Elementary school portion of this facility includes building automation, direct digital controls graphics and software to provide remote monitoring and adjustment from onsite and offsite internet connected devices.

The Middle school portion of the facility utilizes pneumatic temperature controls.

Older ventilation equipment, dampers and valves have not been upgraded. The present pneumatic temperature control system provides the operating personnel a very limited amount of monitoring and adjustment for some equipment and devices.

RECOMMENDATIONS

A temperature controls upgrade including updates to valves, dampers, sensors, software and graphics is recommended.

Provide software, graphics and system component updates to existing BAS. Provide monitoring and adjustment from onsite operator workstation and through remote internet connected smart devices.

ELECTRICAL

The following report is the result of a site visit by Mike Pasineau of MSA Professional Services, Inc. that occurred on Thursday, June 20, 2022. Site observations, existing drawing review and interviews with facility staff were used in preparation of this report.

The original building was constructed in 1938. Building additions were completed in 1956, 1957, 1977, 1989 and 2015.

MAIN ELECTRICAL SERVICE OBSERVATIONS

There is (1) electrical service serving this facility. The service is a 120/208 volt, 3 phase, 4 wire, 2000-amp service. This service is fed underground from a pad mounted utility transformer. The service is located in the second floor mechanical mezzanine. The service switchboard is an older Square D Power Style switchboard with a Bolt-Loc main fusible switch. The distribution section, connected to the main service disconnect section, has room for additional breakers. It appears that the main service switchboard dates to the 1989 building improvement project. The service switchboard has room for additional breakers.

The serving utility is WE Energies.

RECOMMENDATIONS

The existing main electrical service is over 30 years old, contains a main fusible switch and is nearing the end of its useful life. Consider replacing the main switchboard if a new building addition or renovation project occurs.

PANELBOARDS OBSERVATIONS

There are numerous age classes of panelboards throughout the facility with the majority of them being Square D NQOD type panelboards. These panelboards date to the 1989 building improvement project. These panels appear to be in fair condition.

Additionally, there are Cutler Hammer Loadcenters located in the facility that are nearing the end of their useful life.

There are also Square D NQ type panelboards that were recently installed, in general have room for additional breakers and are in good condition.

RECOMMENDATIONS

The Cutler Hammer Loadcenters and Square D NQOD type panelboards are nearing the end of their useful lives and should be replaced based on their age and condition.

Provide new replacement panelboards in each of these locations.

The Square D NQ type panelboards are in good condition and can remain. Add to the existing panelboards as necessary.

GENERATOR
OBSERVATIONS

This building does not have a standby generator.

RECCOMMENDATIONS

One option is to continue the use of battery backup exit lights and egress fixtures.

Another option would be to consider adding a new standby generator and remove battery backup exit lights and egress lighting, provide power to data closets, phones, keyless entry, coolers and freezers as well as circulation pumps on boilers.

Provide complete, new, code approved egress lighting paths throughout the facility.

INTERIOR AND EXTERIOR LIGHTING
OBSERVATIONS

The majority of the light fixtures throughout the facility are T8 Fluorescent type fixtures.

The LMC and serving kitchen spaces have been upgraded to LED lighting.

A few very old T12 fluorescent type and incandescent type fixtures remain in some janitorial and maintenance spaces.

RECCOMMENDATIONS

A possible upgrade to all LED lighting should be considered with all new occupancy controls and dimmer switches. Focus on energy rebates may be available.

We did not verify shared neutral loads on LED or any existing ciricuits. This should be done by a qualified electrician prior to adding any additional LED lighting. We would recommend a separate neutral be installed on any shared neutral loads.

ELECTRICAL (CONTINUED)

EMERGENCY LIGHTING
OBSERVATIONS

Emergency lighting is accomplished through battery backup emergency egress light fixtures.

The exit lights are LED and incandescent with battery backup.

We did not verify full egress compliance during our walk through but assume some areas could use upgraded egress lighting to comply with current codes.

RECCOMMENDATIONS

Replace all incandescent exit lights with new LED.

See recommendations from generator section.

WIRING DEVICES
OBSERVATIONS

The receptacles and switches are commercial grade 15 and 20 amp with plastic and stainless steel plates. The devices vary in age and condition and for the most part show signs of general wear and tear.

RECOMMENDATIONS

Replace wiring devices and plates that are damaged.

Add additional receptacles and circuits as necessary.

We did not verify if circuits contained independent grounding conductors. This should be done by a qualified electrical contractor or at a minimum verify grounding continuity in all circuits. It was common in schools in Wisconsin to use the conduit as a grounding system on some older facilities. Over time the conduit may have disconnected causing ungrounded circuit conditions. We always recommend a separate grounding conductor be installed in every conduit.

FIRE ALARM SYSTEM
OBSERVATIONS

The fire alarm is a Honeywell Notifier addressable system in the facility that dates to 2021 and is located in the lower level elevator equipment room. The system head end appears to be in good working condition.

There are horn/strobe devices in all public spaces including corridors, main office area, LMC, etc.

There are strobe devices in private spaces including offices and toilet rooms.

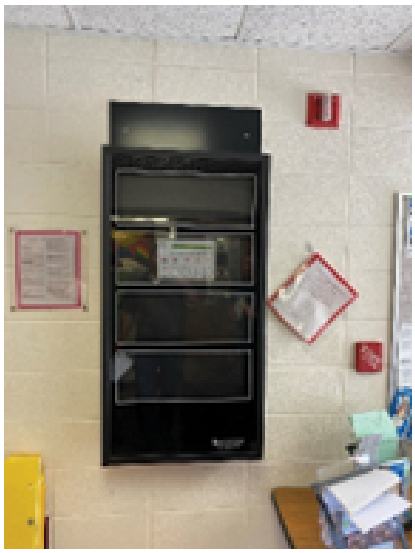
There are smoke detectors present in the facility.

There are duct smoke detectors present in the facility.

The building is not sprinkled.

RECOMMENDATIONS

The existing fire alarm system head end was replaced one year ago, appears to be in good working condition and can remain. If a new building addition is added, a new voice addressable system will be required.



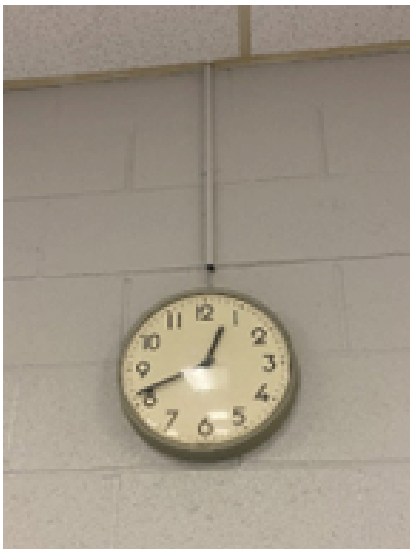
CLOCK SYSTEM
OBSERVATIONS

The existing clock system contains numerous, old 24V Franklin clocks throughout the facility. Staff indicated that the existing 24V clock system is failing.

RECOMMENDATIONS

We recommend replacing the existing clock system with a new wireless master clock system with a GPS receiver or an IP based master clock system.

Replace all hard wired synchronized clocks with battery or 120 volt powered GPS clocks.



PUBLIC ADDRESS SYSTEM
OBSERVATIONS

The existing public address system is a Rauland Telecenter that was installed in 2012. The district indicated that they are in the process of updating their intercom system with a new Boutique VOIP 4 zone

ELECTRICAL (CONTINUED)

system and will be operated through their new phone system.

There is a mixture of surface wall mounted and flush ceiling mounted speakers throughout the facility. The surface wall mounted speakers appear to be very old.

RECOMMENDATIONS

We recommend the replacement of all damaged speakers throughout the facility.

Additionally, the surface wall mounted speakers appear to be very outdated and are nearing the end of their useful life. Replace the old wall mounted speakers as necessary with all new speaker wiring.

DATA / TELEPHONE

OBSERVATIONS

Fiber is used to connect all data closets throughout the facility.

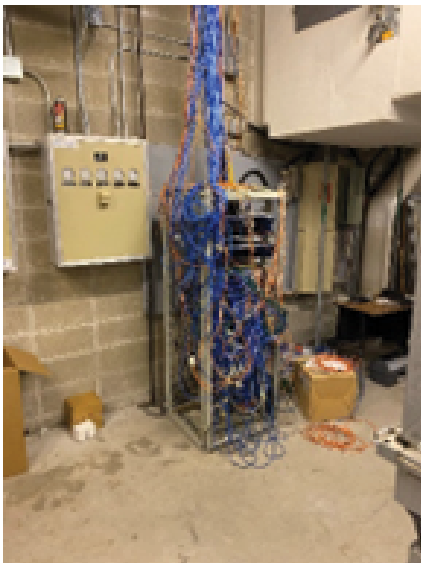
There is a total of (4) data closets located throughout the facility. There are (3) remote IDFs and (1) MDF located in the second floor mezzanine.

The data cable is mixture of CAT 5 and CAT 6 data cable and through a random sampling of data cables connected to the data racks, it does not appear to be plenum rated data cabling.

Data cabling does not appear to be properly supported above the ceilings.

Wireless access points (WAPs) are present in the facility.

The district is in the process of upgrading their existing phone system to a new NEC Univerge type VOIP system.



RECCOMMENDATIONS

The facility contains does not contain plenum ceilings. If plenum ceilings are

added in future renovation or addition projects, all non-plenum cabling would be required to be replaced with plenum cabling.

Additional plenum rated CAT 6 data cabling can be added to rooms as needed.

We noted numerous areas where data cabling was not properly supported above the ceilings and was laying on ceiling grid. Provide support for all data cabling above ceilings throughout the facility.

ACCESS CONTROL SYSTEM
OBSERVATIONS

There is a Keyscan door access control system that serves numerous exterior doors throughout the facility.

There is a video intercom system at the main office exterior entry.

RECCOMMENDATIONS

Expand the existing door access control system as necessary.

CCTV SYSTEM
OBSERVATIONS

The existing CCTV system is a digital watchdog type system with a mixture of cameras throughout the facility. There are cameras located throughout the interior and exterior of the building.

The facility could use additional cameras for a broader coverage.

RECOMMENDATIONS

Expand the existing CCTV system as necessary.

PLUMBING

The following report is the result of a site visit by Macen Leonardi of MSA Professional Services, Inc. that occurred on Monday, June 20, 2022. Site observations, existing drawing review and interviews with facility staff were used in preparing this report.

The original building was constructed in 1938. Building additions were completed in 1956, 1957,1977, 1989 and 2015.

DOMESTIC WATER SYSTEM
OBSERVATIONS

Water Service consists of a 3" Ductile piping supplied by the local municipal water utility with a 3" water meter with bypass piping and valves. It serves the entire domestic water system.

The piping system material is a mix of copper and galvanized steel. The valve types are gate and ball. The copper piping system is in fair condition. The galvanized steel piping system has exceeded its expected service life.

The majority of the piping system is copper and galvanized steel. Original galvanized piping can be found throughout the building. There are no reports of any major leaks, broken or cracked pipes. The majority of the piping is not insulated. Valve types consist of gate valves and ball valves. The majority of the isolation valves are not in an accessible location and hard to operate. The galvanized piping system is pass its service life expectancy and the copper piping is in fair condition.

The domestic hot water delivery wait time to the most remote fixture is over 30 seconds.

There are two master domestic water thermostatic mixing valve serving the building with an outlet temperature of 110 degree Fahrenheit.

There were testable backflow preventers founded during the site investigation that serves the HVAC equipment. It is in fair condition.

Facility staff comments reports of low water pressure issues on the 3rd floor.

Facility staff comments reports of bad tasting water on the 3rd floor.

Water Softener(s) include:

- One (1) Custom Care with Brine Tank.
  Location: Mechanical Room
  Flow: 35 GPM
  System: Domestic hot water system.
  Condition: Fair
  Domestic Water Heater(s) include:
- One (1) A.O. Smith gas tank type heaters.
  Location: Mechanical Room
  Input: 199900 BTUH
  Tank Size: 100 Gallons
  Tank Temperature = 120 degree Fahrenheit.
  Condition: Passed its expected service life.
  Circulating Pump(s) include:
- One (1) Grundfos Circulating Pump
  Location: Mechanical Room
  Flow: 8 GPM
  Zone: Entire building.
  Condition: Fair

RECOMMENDATIONS

All existing galvanized piping shall be replaced with new insulated copper piping with accessible isolation valves.

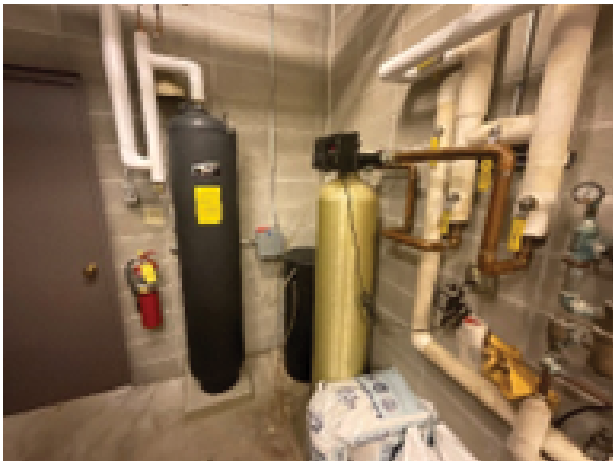
Any future renovations shall account for the resizing of the domestic water mains to provide adequate pressure and flow to any new and existing fixtures.

Provide complete new domestic hot water heating plant equipment sized for any new loads with circulating pumps and master thermostatic mixing valve.

Rebalance the domestic hot water distribution system and extend the piping within two feet of the plumbing fixtures to improve hot water delivery wait time and meet current energy codes.

Backflow preventer shall be maintained / repaired as required and tested once a year.

Water testing shall be acquired to determine water quality and proper treatment filtration equipment.



FIRE SPRINKLER SYSTEM

OBSERVATIONS

There is no automatic fire sprinkler system in the building.

RECOMMENDATIONS

The existing water service is not capable of supporting an automatic fire sprinkler system. Any future renovations required an automatic fire sprinkler system will need a new properly sized water service.

SANITARY DRAIN, WASTE AND VENT SYSTEM

OBSERVATIONS

Sewer lateral discharges to the local municipal sewage utility sewer mains.

The majority of the piping system cast iron drains and waste piping with galvanized vent piping. In renovated areas schedule 40 PVC piping were installed. There are no reports of any major back-ups, clogs, broken or cracked pipes. The cast iron and

PLUMBING (CONTINUED)

galvanized piping system is near its service life expectancy and PVC is in fair condition.

The building does not have solid waste interceptors that serves the art room fixtures.

The building has a grease interceptor that serves the kitchen fixtures and equipment. It is in fair condition.

The building has an acid neutralization basin that serves the science room fixtures. Currently it is being by-passed. It is in fair condition.

The building has a sanitary ejector basin and pump that serves the lower level. It is near its service life expectancy.

RECOMMENDATIONS

Provide entire piping system with auguring and / or jetting cleaning maintenance once a year.

Camera video inspection of all underground piping shall be acquired to determine system quality and proper flow. Replace any problem areas with PVC piping.

All existing cast iron and galvanized piping shall be replaced with new PVC piping.

Provide continual annual maintenance for the grease interceptor, the solid interceptors and the acid neutralization basin.

Provide all floor drains in toilet rooms and kitchen areas with trap seal protection.

Provide cast iron and copper drain piping for all high temperature waste piping serving the dish machine.

Replace the lime stone chips and acid neutralization basin. Provide further investigation for any piping issues upstream of acid neutralization basin.

Provide new sanitary ejector pumps and inspect basin for leaks. Replace basin as if leaks are found.

SANITARY DRAIN, WASTE AND VENT SYSTEM

OBSERVATIONS

Sewer lateral discharges to the on-site retention area.

The building roof has internal roof drain with overflow scuppers and Rain gutters that discharge to grade.

The majority of the piping system cast iron drains and conductor piping. There are no reports of any major back-ups, clogs, broken

or cracked pipes. The cast iron piping system is in fair condition, but will be near its service life expectancy in the next 10 years.

The building has no clear water sump basins and pumps.

OTHER PLUMBING SYSTEMS

OBSERVATIONS

Natural gas system supplies the science room, plumbing equipment and kitchen equipment. The pressure is 2 pounds with regulators at each piece of equipment. The piping system material is black iron steel. It is in fair condition.

Manual gas shut-off valve is located in access panel in the science room. Access Panel requires key to open.

RECOMMENDATIONS

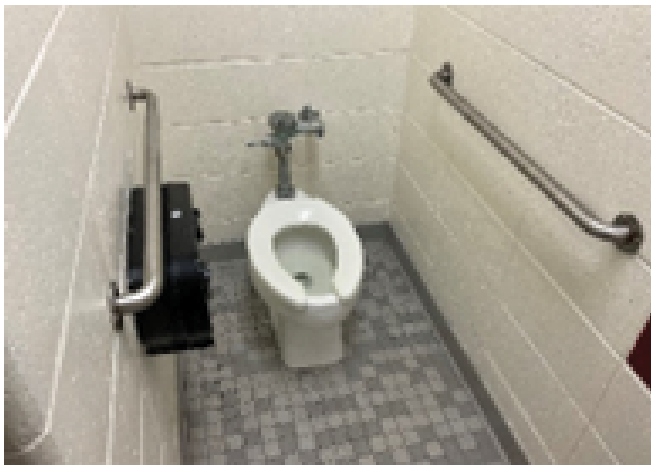
Provide accessible emergency gas shut-off with emergency shut-off solenoid valve.

PLUMBING FIXTURES

OBSERVATIONS

Water Closets are a mixture wall and floor mount with manual lever flush valves. Some water closets are gravity flush tank type.

The majority of the fixtures are in fair condition.
The majority of the fixtures are not ADA compliant.



Lavatories are majority wall mount with manually operated and metered faucet.

The majority of the fixtures are in fair condition.
The majority of the fixtures are ADA compliant.

Urinals are majority floor mount with manual lever flush valve.

The majority of the fixtures are in poor condition.
The majority of the fixtures are ADA compliant.

PLUMBING (CONTINUED)

Showers are majority gang units with manually operated shower handles.

- The majority of the fixtures are in fair condition.
- The majority of the fixtures are ADA compliant.
- Lower Level showers are in poor con dition.

Electrical Water Coolers are a mixture with and without bottle filling stations.

- The majority of the fixtures are in good condition.
- The majority of the fixtures are ADA compliant.
- The electric water cooler on the third floor has bad tasting water per com ments from the facility staff.

Service Sinks are majority wall mount with manually operated faucets.

- The majority of the fixtures are in poor condition.
- The majority of the fixtures do not have backflow preventers.

Sinks – General sinks have stainless steel basins with manually operated facuets.

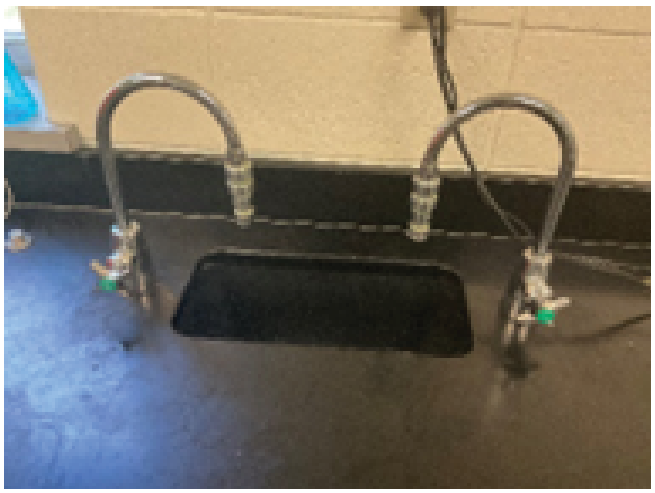
- The majority of the fixtures are in poor condition.
- The majority of the fixtures are not ADA compliant.

Sinks – Art sinks have have stainless steel basins with manually operated facuets without solids interceptor.

- The fixtures are in poor condition.
- The fixtures are not ADA compliant.

Sinks – Science sinks have epoxy resin basins with manually operated gooseneck faucet with vacuum breaker and have centrally located acid neutralization basin.

- The majority of the fixtures are in good condition.
- The majority of the fixtures are ADA compliant.



Emergency Fixture(s).

No emergency eyewash was not ob served to be in science room.
No emergency shower was not ob served to be in science room.

RECOMMENDATIONS

Provide sensor operated flush valves and faucets in toilet rooms.

Provide all new plumbing fixtures and trim accessories. There shall be an appropriate amount of ADA compliant fixtures and installed at an appropriate height for the end user.

Provide wall mounted fixtures where possible in toilet rooms.

Install all new fixtures at an approrfaite height for the enduser.

MAINTENANCE LIST

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
1	SAFETY & SECURITY		The existing clock system contains numerous, old 24V Franklin clocks throughout the facility. Staff indicated that the existing 24V clock system is failing.	We recommend replacing the existing clock system with a new wireless master clock system with a GPS receiver or an IP based master clock system. Replace all hard wired synchronized clocks with battery or 120 volt powered GPS clocks.	
2	SAFETY & SECURITY		There is a mixture of surface wall mounted and flush ceiling mounted speakers throughout the facility. The surface wall mounted speakers appear to be very old.	We recommend the replacement of all damaged speakers throughout the facility. Additionally, the surface wall mounted speakers appear to be very outdated and are nearing the end of their useful life. Replace the old wall mounted speakers as necessary with all new speaker wiring.	
3	SAFETY & SECURITY		Data cabling does not appear to be properly supported above the ceilings.	We noted numerous areas where data cabling was not properly supported above the ceilings and was laying on ceiling grid. Provide support for all data cabling above ceilings throughout the facility.	
4	SAFETY & SECURITY		There is a Keyscan door access control system that serves numerous exterior doors throughout the facility. There is a video intercom system at the main office exterior entry.	Expand the existing door access control system as necessary	
5	SAFETY & SECURITY		The existing CCTV system is a digital watchdog type system with a mixture of cameras throughout the facility. There are cameras located throughout the interior and exterior of the building. The facility could use additional cameras for a broader coverage.	Expand the existing CCTV system as necessary.	
6	INTERIOR		Toilet room, drinking fountain		
7	INTERIOR		Blinds are old, should be replaced		
8	INTERIOR		Need more electrical outlets		
9	INTERIOR		Classroom casework/shelving is old (from the 1960's)		
10	INTERIOR		Need more outlets in many rooms		

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
11	INTERIOR		Blinds are very old, need to be replaced, do not need room-darkening shades		
12	INTERIOR		Ceilings, duct work is open, want celiling, air is loud		
13	INTERIOR		Air moves all day and is loud, no acoustics		
14	INTERIOR		Most classrooms have duct work that is exposed and is very loud and noisy, would be nice to have a dropped ceiling to cover and help with acoustics.		
15	INTERIOR		KG want better doors (file cabinet could be climbed on)		
16	INTERIOR		KG need better cabinets/countertop		
17	INTERIOR		More/better sinks in classrooms		
18	INTERIOR		Better doors to classrooms (shaky door frames and glass)		
19	INTERIOR		More outlets needed		
20	INTERIOR		Door out to parking lot for staff has to be kicked open in summer - door is also narrow		
21	INTERIOR		Would prefer cubbies instead of lockers		
22	INTERIOR		More outlets		
23	INTERIOR		Having a FOB system instead of keys would be really nice		
24	INTERIOR		Lighting is terrible		
25	INTERIOR		Carpet is dirty, eat on floor		
26	INTERIOR		Classroom door is broken		
27	INTERIOR		Electrical outlets		
28	INTERIOR		Better cabinets		

MAINTENANCE LIST (CONTINUED)

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
29	INTERIOR		Sink/faucet is not great or works well		
30	INTERIOR		Whiteboards (over chalkboard) is poor		
31	INTERIOR		Lockers are in bad shape, would prefer to have coat hooks		
32	INTERIOR		Would prefer to replace carpet with a hard surface		
33	INTERIOR		Lighting is really bad		
34	INTERIOR		Door to classroom is hard to open		
35	INTERIOR		Need more outlets everywhere		
36	INTERIOR		Loud mechanical noise		
37	INTERIOR		New lockers		
38	INTERIOR		Heating, cooling, venitlation is an issue upstairs especially, but also downstairs		
40	INTERIOR		Sound echo's, not bad but want improved		
41	INTERIOR		Sound equipment and lighting is very poor		
43	INTERIOR		Gymnasium lighting and sound equipment is out of date		
44	INTERIOR		Key FOBs - Special Ed/Speech Language		
45	INTERIOR		Dimmable lights in all classrooms		
46	INTERIOR		Key FOB system - K-8 Physcial Education		
48	INTERIOR		Provide some cabinetry for Science lab in 5t CR (next to Science)		
49	INTERIOR		Need more white boards in 6th Science Room		
50	INTERIOR		Need a new clock system		

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
52	INTERIOR		Clocks are wrong		
53	INTERIOR		Need new clocks - Art, 3rd, 4th grades		
55	INTERIOR		Doors are old, stick, need to be replaced		
56	INTERIOR		Side door to parking lot is bad, has to be kicked, is narrow, hard to get in		
60	INTERIOR		Doors into some classrooms need replacements		
61	INTERIOR		Door to parking lot sticks and is pretty narrow		
62	INTERIOR		Door to exterior in art room lets a lot of cold air in		
63	INTERIOR		Wood paneling in rooms needs to be updated		
64	INTERIOR		Exposed ceilings in classrooms are not ideal, very loud		
65	INTERIOR		Heating/cooling system does not have a lot of control and Middle school does not have air conditioning, likely affects the rest of the building - not very energy efficient		
66	INTERIOR		Lighting in classrooms is not efficient (dimmable LED would be great)		
67	INTERIOR		Office - need keyless entry, several problems		
68	INTERIOR		Tardy kiosk to open door		
69	INTERIOR		Buzz in, need monitor/speaker, poor lighting		
70	INTERIOR		Keyless entry for main office		
71	INTERIOR		Camera system is very old		
72	INTERIOR		Daycare - lights are old, need dimmers		
73	INTERIOR		Principal - clock system is horrible		
74	INTERIOR		HVAC is inconsistent, fixes don't seem to be fixed		

MAINTENANCE LIST (CONTINUED)

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
75	INTERIOR		Need FOB system		
76	INTERIOR		Doors don't work, need new		
78	INTERIOR		Clock system needs upgrading/fixing		
79	INTERIOR		Key FOB system		
81	INTERIOR		More electrical outletrs		
82	INTERIOR		2nd Floor MS - Need more outlets		
84	INTERIOR		MS gym is not well temperature controlled		
85	INTERIOR		Windows are drafty on MS side of building		
86	INTERIOR		Makerspace - Need more outlets/outlets from ceiling		
87	INTERIOR		Fuzzy - HVAC needs to be finished		
88	INTERIOR		Room 208 - Want AC in classroom		
89	INTERIOR		Rom 208 - Would like lights to be dimmable, LED		
91	INTERIOR		Would like dimmable lights in all classrooms		
92	INTERIOR		Would like window shades		
95	MECHANICAL		Air handling unit No.3 provides heating, ventilation and air conditioning to a portion of the 1989 building renovation project. All control devices at this unit are pneumatic. This unit is accessible only through removal of ceiling tile. Facility operating staff indicated that frequent service and repairs are required for this equipment.	Remove and replace all pneumatic controls with direct digital control equipment and devices wired into the building automation system. Remove and replace existing indoor air handling unit No.3 and the connected roof mounted air cooled compressor condensing unit located on roof above as part of any upcoming facility renovation or equipment upgrade project	

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
96	MECHANICAL		The ductwork distribution systems connected to the facility air handling systems are constructed of sheet metal. Ductwork joints, seams and connections are not all sealed properly causing conditioned air leakage into the ceiling cavity.	Existing HVAC system distribution ductwork should be sealed and insulated to present code requirements during the time of equipment replacement.	
97	MECHANICAL		Older ventilation equipment, dampers and valves have not been upgraded. The present pneumatic temperature control system provides the operating personnel a very limited amount of monitoring and adjustment for some equipment and devices.	A temperature controls upgrade including updates to valves, dampers, sensors, software and graphics is recommended. Provide software, graphics and system component updates to existing BAS. Provide monitoring and adjustment from onsite operator workstation and through remote internet connected smart devices.	
98	ELECTRICAL		The existing main electrical service is over 30 years old, contains a main fusible switch and is nearing the end of its useful life.	Consider replacing the main switchboard if a new building addition or renovation project occurs.	
99	ELECTRICAL		The Cutler Hammer Loadcenters and Square D NQOD type panelboards are nearing the end of their useful lives.	Provide new replacement panelboards in each of these locations.	
100	ELECTRICAL		This building does not have a standby generator.	One option is to continue the use of battery backup exit lights and egress fixtures. Another option would be to consider adding a new standby generator and remove battery backup exit lights and egress lighting, provide power to data closets, phones, keyless entry, coolers and freezers as well as circulation pumps on boilers. Provide complete, new, code approved egress lighting paths throughout the facility.	

MAINTENANCE LIST (CONTINUED)

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
101	ELECTRICAL		A few very old T12 fluorescent type and incandescent type fixtures remain in some janitorial and maintenance spaces.	A possible upgrade to all LED lighting should be considered with all new occupancy controls and dimmer switches. Focus on energy rebates may be available.	
102	ELECTRICAL		Emergency lighting is accomplished through battery backup emergency egress light fixtures. The exit lights are LED and incandescent with battery backup.	Replace all incandescent exit lights with new LED.	
103	ELECTRICAL		The receptacles and switches are commercial grade 15 and 20 amp with plastic and stainless steel plates. The devices vary in age and condition and for the most part show signs of general wear and tear.	Replace wiring devices and plates that are damaged. Add additional receptacles and circuits as necessary.	
104	PLUMBING		The galvanized steel piping system has exceeded its expected service life. The majority of the piping is not insulated.	All existing galvanized piping shall be replaced with new insulated copper piping with accessible isolation valves.	
105	PLUMBING		The domestic hot water delivery wait time to the most remote fixture is over 30 seconds	Provide complete new domestic hot water heating plant equipment sized for any new loads with circulating pumps and master thermostatic mixing valve. Rebalance the domestic hot water distribution system and extend the piping within two feet of the plumbing fixtures to improve hot water delivery wait time and meet current energy codes.	
106	PLUMBING		Facility staff comments reports of low water pressure issues on the 3rd floor. Facility staff comments reports of bad tasting water on the 3rd floor.	Water testing shall be acquired to determine water quality and proper treatment filtration equipment.	

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
107	PLUMBING		The majority of the piping system cast iron drains and waste piping with galvanized vent piping. In renovated areas schedule 40 PVC piping were installed. There are no reports of any major back-ups, clogs, broken or cracked pipes. The cast iron and galvanized piping system is near its service life expectancy and PVC is in fair condition.	Camera video inspection of all underground piping shall be acquired to determine system quality and proper flow. Replace any problem areas with PVC piping. All existing cast iron and galvanized piping shall be replaced with new PVC piping. Provide cast iron and copper drain piping for all high temperature waste piping serving the dish machine.	
108	PLUMBING		The floor drains in toilet rooms and kitchen areas are not equipped with trap seal protection.	Provide all floor drains in toilet rooms and kitchen areas with trap seal protection.	
109	PLUMBING		The building has an acid neutralization basin that serves the science room fixtures. Currently it is being by-passed. It is in fair condition.	Replace the lime stone chips and acid neutralization basin.	
110	PLUMBING		The building has a sanitary ejector basin and pump that serves the lower level. It is near its service life expectancy.	Provide new sanitary ejector pumps and inspect basin for leaks. Replace basin as if leaks are found.	
111	PLUMBING		The majority of the piping system cast iron drains and conductor piping. There are no reports of any major back-ups, clogs, broken or cracked pipes. The cast iron piping system is in fair condition, but will be near its service life expectancy in the next 10 years.	Camera video inspection of all underground piping shall be acquired to determine system quality and proper flow. Replace any problem areas with PVC piping.	
112	PLUMBING		Manual gas shut-off valve is located in access panel in the science room. Access Panel requires key to open.	Provide accessible emergency gas shut-off with emergency shut-off solenoid valve.	
113	PLUMBING		Water closets are a mixture of wall and floor mount with manual level flush valves. Some water closets are gravity flush tank type.	Provide sensor operated flush valves and faucets in toilet rooms.	

1966
ORIGINAL BUILDING

1977
CLASSROOM ADDITION

2011
WEIGHT ROOM

2015
ACCESSIBLE LIFT ADDITION

HIGH SCHOOL

ADDRESS: 201 Lincoln St, Elkhart Lake

SITE SIZE: 21.2 acres

SITE DETAIL: The property is utilized very efficiently, maximizing every available space on the site, making it difficult for any additional site uses. A steep slope in the northwest corner of the property makes that area of the site difficult to utilize.

SITE ACCESS: Vehicular traffic enters site from Hwy 67, N Lincoln St. on the southeast side of the building. Upon entering, a pedestrian pick-up/drop-off drive is adjacent to the front entrance, this drive in not orientated in the proper direction for the function. The drive described also has handicap parking and visitor parking spaces, then leads back to Hwy 67, N Lincoln St. Continuing on the entry drive to the west leads to the primary parking lot of around 140 spaces and 5 handicap spaces. The drive continues around the building to the north and leads back to Hwy 67, N Lincoln St.

BUILDING SIZE: 58,892 sq ft

ENROLLMENT: 136 students

BUILDING AGE:
1966 - Original building
1977 - Classroom addition
2011 - Weight room addition
2015 - Accessible Lift addition

GRADE LEVELS: 9th - 12th

SPRINKLERED: No

SCHOOL TYPE	MIN. ACREAGE	PLUS	RECOMMENDED SIZE	ACTUAL SIZE	ADEQUATE SIZE
High School	30	1 acre per 100 students	33	21.2 acres	NO

CONDITION KEY

GOOD	No major needs anticipated in next 15 years. Meets or exceeds expectations for a modern educational facility.
GOOD TO FAIR	No major needs anticipated in next 10 years. Meets minimum expectations for a modern educational facility.
FAIR	No major needs anticipated in next 5 years. Components may be at or nearing expected service life.
FAIR TO POOR	No major immediate needs. Comonents are likely past expected service life.
POOR	Major immediate needs. Comonents are at or nearing failure.

CATEGORY	COMMENTS	CONDITION
ACCESSIBILITY		FAIR
ACCESS TO BUILDING (ACCESSIBLE ENTRANCE)	LIFT INSTALLED DOES NOT CONVENIENT	GOOD TO FAIR
ACCESS TO STUDENT SPACES	SEVERAL DOORS UPGRADED, OTHER DOORS TO BE COMPLETED	GOOD TO FAIR
DOOR HARDWARE	SMALLER ROMS MAKE MANEUVERING DIFFICULT	GOOD TO FAIR
TOILET ROOMS		FAIR
PLAY EQUIPMENT		
SAFETY + SECURITY		GOOD TO FAIR
SITE USE SEPARATION		FAIR
SECURE ENTRY SEQUENCE		GOOD TO FAIR
LIFE SAFETY ISSUES		GOOD
COMPARTMENTALIZATION	BUILDING DOES NOT HAVE THE BEST ABILITY TO COMPARTMENT	
FIRE PROTECTION	BUILDING DOES NOT HAVE SPRINKLER SYSTEM	
SITE		FAIR
STORM WATER/DRAINAGE	HAS BEEN CONCERN AND CORRECTIONS ATTEMPTED	FAIR
HARDSCAPE (PAVING + PARKING)		GOOD
ATHLETICS	HAS BEEN CONCERN AND CORRECTIONS ATTEMPTED	FAIR
PLAY/OUTDOOR LEARNING SPACE		GOOD
SPACE TO EXPAND	WOULD BE DIFFICULT TO UTILIZE ANY SITE SPACE	POOR
EXTERIOR		FAIR
MATERIAL CONDITION	NORMAL WEAR OF MATERIALS WITH MINOR BLEMISHES	FAIR
ENERGY EFFICIENCY		FAIR
INTERIOR		GOOD TO FAIR
MATERIAL CONDITION	UPGRADES HAVE BEEN DONE, MORE AREAS TO ACCOMPLISH	GOOD TO FAIR
CIRCULATION/WAYFINDING		
SYSTEMS		FAIR
HVAC		FAIR
ELECTRICAL – LIGHTING		FAIR
ELECTRICAL – SYSTEMS		FAIR
PLUMBING		FAIR
TECHNOLOGY		GOOD TO FAIR

ACCESSIBILITY

OBSERVATIONS

Handicap parking spaces provided, west parking lot have a distance from parking space to entry. Ramps within the building are difficult for a person with disability. The single person lift that was installed is not convenient, that requires District staff to provide access and operation of the unit. It was reported that the lift is not desirable, but appreciates that there is some means of vertical accessibility.

SAFETY & SECURITY

OBSERVATIONS

A monitored and controlled, secure entrance was modified at the main entrance with access to the main office. Several visitors to the building enter from the west side parking lot and utilize a call to the office system, this configuration creates vulnerability of security. The building Principal is located adjacent to the main entrance and create vulnerability at the current location.

SITE

OBSERVATIONS

The site utilization is maximized, every available area of land that can be developed is being utilized. Taking any portion of the site will jeopardize the use of another function while it has been reported that the District has storm water problems. Several attempts to correct has been implemented, which have helped, while problems remain to occur. The steep slope at the northwest portion of the site make development of the area difficult.

EXTERIOR

OBSERVATIONS

A monitored and controlled, secure entrance was modified at the main entrance with access to the main office. Several visitors to the building enter from the west side parking lot and utilize a call to the office system, this configuration creates vulnerability of security. The Principal's office is located adjacent to the main entrance and creates vulnerability at the current location.

INTERIOR

OBSERVATIONS

The interior of the building is very well maintained and several material replacements have been completed and have been appreciated by the staff. It would be recommended to complete material replacements. It was reported that the lockers should be replaced. Several components of the building are original and in fair condition. It is recommended for replacement or refinish.

MECHANICAL

The following report is the result of a site visit by Ken Sorensen of MSA Professional Services, Inc. that occurred on Monday, June 20, 2022. Site observations, existing drawing review and interviews with facility staff were used in preparing this report.

The original building was constructed in 1966. Building renovations and upgrades were completed in 1977, 2015 and 2021.

HEATING

OBSERVATIONS

The presently installed boiler plant consists of (1) AERCO-Benchmark Boiler. The separated combustion boiler is rated at 94% thermal efficiency while burning natural gas. The boiler has an input capacity of 1,500,000 BTUH. This boiler was installed during the 2015 building upgrade project.

The piping and pumping arrangement for this boiler plant is installed in a Primary / Secondary arrangement with a dedicated In-line circulating pump for the boiler.

Heating water supply and return piping is in good condition.
Hot water supply and return piping insulation is in good condition.

Existing valves and other hot water specialties installed during the 2015 boiler replacement and building renovation project are in good operating condition.

RECOMMENDATIONS

The existing boiler is in good operating condition.

The existing H.W. System distribution pumps are in good operating condition.

School operating staff has indicated that excessive service and maintenance is not presently required.

Provide regular testing of the hot water distribution system. Add chemical treatment and corrosion inhibitors as required to maintain recommended water quality standards for: pH, Conductivity, Hardness, chlorides, etc.

Continue scheduled and preventative maintenance.

Heating water supply and return piping is in good condition.

Hot water supply and return piping insulation is in good condition.

Existing valves and other hot water specialties installed during the 2015 building upgrade project are in good operating condition.

The existing boilers and pumps are in good operating condition.

RECOMMENDATIONS

The existing boiler plant should operate for several years without excessive service and repair required.

Provide regular testing of the hot water distribution system. Add chemical treatment and corrosion inhibitors as required to maintain recommended water quality standards for: pH, Conductivity, Hardness, chlorides, etc.

Continue scheduled and preventative maintenance.

PACKAGED ROOFTOP HEATING, VENTILATION & AIR CONDITIONING

OBSERVATIONS

A 2015 building renovation and equipment upgrade project removed (6) existing packaged rooftop heating, ventilation and air conditioning systems and replaced them with Variable Air Volume (VAV) packaged rooftop units.

The Kitchen area received (2) Mitsubishi Electric ductless split system air conditioning units as part of the 2015 project. Controls for the kitchen area cooling units are standalone electronic and not included on the building temperature controls system. These systems utilize refrigerant type: R-410A.

A 2019 building renovation and equipment upgrade project removed the facilities remaining (5) existing packaged rooftop

MECHANICAL (CONTINUED)

heating, ventilation and air conditioning systems that were not upgraded in 2015.

Heating and ventilation is provided to the facility locker rooms and storage spaces East of the gymnasium through a roof mounted make-up air unit manufactured by Reznor. This make-up air unit has exceeded the anticipated service life for equipment of this type.

All existing packaged rooftop units installed through the 2015 and 2019 equipment upgrade projects utilize refrigerant type: R-410A. These units are in good operating condition.

An existing detached workout / exercise facility receives Heating ventilation and air conditioning through (1) residential level split system.

The indoor portion of this residential system is a natural gas fired furnace that was installed in 2019. This unit is in good operating condition.

The evaporator cooling coil and outdoor mounted, air-cooled compressor condensing unit connected to the furnace are much older. This refrigeration equipment has exceeded the anticipated service life for this type of equipment, and is utilizing a refrigerant type that is no longer manufactured (R-22).

The residential split system refrigeration circuit and outdoor equipment should be replaced as funds become available or when excessive service and maintenance become necessary. The full R-22 refrigerant charge should be reclaimed to cylinder as part of HVAC split system removal process.

RECOMMENDATIONS

Continue all scheduled service and mainenance items.

Consider filter efficiency upgrades at all ventilation air handling equipment to MERV 13 filter media.
Consider implementation of Bi-Polar Ionization cold plasma technology for further particle reduction, defense against air borne pathogens and volatile organic compounds (VOCs). See supplemental

information provided for this technology.

SPECIALTY SYSTEMS DEDICATED TO TECH ED STUDIES

OBSERVATIONS

Welding booths and welding exhaust fans are present. The exhaust fan and make-up air system for technical education welding are in average / poor operating condition. These systems have exceeded their anticipated service life.

Wood shop dust collection system is present. The dust collector is in fair operating condition.

Heating and make-up air systems for the technical education area are natural gas fired.

RECOMMENDATIONS

Any future expansion or renovation to the technical education welding program should include equipment upgrades to the exhaust and natural gas fired make-up air systems.

System replacement is suggested as a low priority item when funding is available, when frequent service and maintenance become necessary or at the time of equipment failure.
Provide frequent cleaning as well as recommended service and maintenance to specialty systems.

TEMPERATURE CONTROLS

OBSERVATIONS

The building automation and control system is comprised of Distech and Trane technology, graphics and software.

Onsite and offsite monitoring and adjustment is available through internet connected devices.

The current building automation system is up to date and in good operating condition.

RECOMMENDATIONS

Continue to provide software, graphics and system component updates as building support systems and equipment are upgraded, removed and replaced.

ELECTRICAL

The following report is the result of a site visit by Mike Pasineau of MSA Professional Services, Inc. that occurred on Thursday, June 20, 2022. Site observations, existing drawing review and interviews with facility staff were used in preparation of this report.

The original building was constructed in 1966. Building additions were completed in 1977, 2015, and 2021.

MAIN ELECTRICAL SERVICE
OBSERVATIONS

There are (2) electrical services serving this facility. The first is a 120/208 volt, 3 phase, 4 wire, 2000-amp service. This service is fed underground from a pad mounted utility transformer and a wall mounted CT and meter cabinet located on the southwest corner of the building. The service is located in the lower level boiler room. The service switchboard is a Square D QED Series 2 type switchboard and serves the entire main high school building and concessions building. The service switchboard has room for additional breakers. An Emerson 500 series surge protective device was present.

The second electrical service to the facility is a 120/240, single phase, 200-amp service fed underground from a utility pad mounted transformer and meter pedestal on the west side of the fitness center building. The service panelboard is in the first floor mechanical room. The service panelboard is a Siemens type Loadcenter and serves only the fitness center building. The service loadcenter has room for additional breakers. No surge protective device was found for this service.

The serving utility is WE Energies.

RECOMMENDATIONS

Both existing main electrical services to the facility buildings appear to be in good condition, have room for additional breakers and can remain. Add to the existing services as necessary.

If a large building addition is constructed or if construction is located at the service location, a new larger service or service relocation may be required.

PANELBOARDS
OBSERVATIONS

There are numerous age classes of panelboards throughout the facility with many of them being very old. The oldest panelboards in the building are ITE type panelboards as well as Square D QO Loadcenters. These panels are over 30 years

old and are at the end of their useful life. Additionally, there are numerous Square D NQ type panelboards that were recently installed, in general have room for additional breakers and appear to be in good working condition.

RECOMMENDATIONS

The panels older than 30 years are at the end of their useful life and should be replaced based on their age and condition. Provide new replacement panelboards and new feeders in existing conduit in each of these locations.

The Square D NQ type panelboards are in good condition and can remain. Add to the existing panelboards as necessary.

GENERATOR
OBSERVATIONS

This standby generator is a Kohler 120/208V, 3-phase, 4 wire, natural gas fired 60kW unit.

The generator is located outside on the west side of the building. The generator was installed in 2014 and appears to be in good condition.

The generator feeds two Kohler transfer switches. The two transfer switches separate life-safety from non-life-safety loads.

The life-safety transfer switch feeds a 70A 120/208V panelboard. The non-life-safety transfer switch feeds a 225A 120/208V panelboard. Both emergency panelboards contain a Mersen surge protective device.

ELECTRICAL (CONTINUED)

RECCOMMENDATIONS

Continue to provide routine testing and service to the generator and transfer switches.

INTERIOR AND EXTERIOR LIGHTING
OBSERVATIONS

All standard classrooms, main office space and cafeteria contain LED flat panel type fixtures with occupancy sensors and dimming controls.

All remaining spaces throughout the facility contain T8 fluorescent type fixtures.

A few very old T12 fluorescent type and incandescent type fixtures remain in some janitorial and maintenance spaces.

The majority of the exterior fixtures are LED type fixtures. Numerous, old wall mounted HID type fixtures remain on the exterior of the building, but do not appear to be operational.

RECCOMMENDATIONS

A possible upgrade to all LED interior lighting should be considered with all new occupancy controls and 0-10v dimming.

The existing exterior wall mounted HID type fixtures are no longer in use and should be removed.

We did not verify shared neutral loads on LED or any existing circuits. This should be done by a qualified electrician prior to adding any additional LED lighting. We would recommend a separate neutral be installed on any shared neutral loads.

EMERGENCY LIGHTING
OBSERVATIONS

Emergency lighting is fed off of the standby generator.

There are also battery backup bug-eye type egress fixtures located in the facility. Due to there being a standby generator, these fixtures are no longer needed.

The exit lights are incandescent and LED and are fed off the standby generator.

We did not verify full egress compliance during our walk through but assume some areas could use upgraded egress lighting to comply with current codes.

RECCOMMENDATIONS

Replace all incandescent exit lights with new LED.

Remove all battery backup egress fixtures throughout the facility.

Ensure full egress lighting compliance throughout the facility and add light fixtures to the life-safety emergency panelboard as necessary.

WIRING DEVICES

OBSERVATIONS

The receptacles and switches are commercial grade 15 and 20 amp with plastic and stainless steel plates. The devices vary in age and condition and for the most part show signs of general wear and tear.

The wood shop equipment was fed through the floor. The floor devices and conduit appeared to be dated and nearing the end of their useful life. The metals shop contains bus duct to feed the shop equipment.

RECOMMENDATIONS

Replace wiring devices and plates that are damaged.

Add additional receptacles and circuits as necessary.

The Floor fed devices and bus duct located in the shop areas are outdated. Consider replacing with cord drops to provide power to the shop equipment.

We did not verify if circuits contained independent grounding conductors. This should be done by a qualified electrical contractor or at a minimum verify grounding continuity in all circuits. It was common in schools in Wisconsin to use the conduit as a grounding system on some older facilities. Over time the conduit may have disconnected causing ungrounded circuit conditions. We always recommend a

ELECTRICAL (CONTINUED)

separate grounding conductor be installed in every conduit.

FIRE ALARM SYSTEM

OBSERVATIONS

The fire alarm is a Honeywell Notifier addressable system in the facility that dates back to 2014. The head end control panel is located in the lower level boiler room and appears to be in good operating condition.

There are pull stations by all exterior doors.

There are horn/strobe devices in all public spaces including corridors, main office area, LMC, etc.

There are strobe devices in private spaces including offices and toilet rooms.

There are smoke detectors present in the facility. Numerous smoke detector devices throughout the facility did not appear to be properly supported.

There are duct smoke detectors present in the facility.

The building is not sprinkled.

RECOMMENDATIONS

The existing fire alarm system is less than 10 years old and appears to be in good operating condition.

Ensure that the existing fire alarm devices are properly supported and operational. Repair or replace damaged devices.

Many code updates have been adopted since the time of installation of the existing fire alarm system. A plan for the replacement of the existing fire alarm system in the next 10 years could be considered. The new system would provide a new, code approved voice addressable fire alarm system throughout the entire facility.

CLOCK SYSTEM
OBSERVATIONS

The existing clock system contains numerous, old 120V Simplex and American Time clocks. The clocks are fed off of a Simplex master clock located in the high school office.

RECOMMENDATIONS

Consider replacing the old 120V clocks and head end with a new GPS clock system with all new clocks throughout the facility.

PUBLIC ADDRESS SYSTEM
OBSERVATIONS

The existing public address system is a Rauland Telecenter that was installed in 2012. The district indicated that they are in the process of updating their intercom system with a new Boutique VOIP 4 zone system and will be operated through their new phone system.

A majority of the speakers throughout the facility appear to be very old. There is a mixture of old surface mounted speakers, flush mounted combination clock/speakers and flush ceiling mounted speakers. Many of these speakers appear to be damaged or do not appear to be properly supported in the ceilings.

RECOMMENDATIONS

We recommend the replacement of damaged speakers and speakers that are not properly supported with new ceiling mounted speakers with all new speaker wiring connected to the new VOIP system.

DATA / TELEPHONE
OBSERVATIONS

Fiber is used to connect all data closets throughout the facility including interconnection to the fitness center building and concession stand building.

There is a total of (4) data closets located throughout the facility. There are (3) remote IDF's and (1) MDF located in the lower level boiler room.

The data cable is a mixture of CAT 5 and CAT 6 and through a random sampling of data cables connected to the data racks, does not appear to be plenum rated.

Data cable does not appear to be properly supported above the ceilings.

Wireless Access Points (WAPs) are present in the facility.

ELECTRICAL (CONTINUED)

The district is in the process of upgrading their existing phone system to a new NEC Univerge type VOIP system.

RECCOMMENDATIONS

The facility contains plenum ceilings. We recommend replacing all non-plenum rated data cabling located in plenum rated ceilings with new plenum rated CAT 6 data cabling.

Additional plenum rated CAT 6 data cabling can be added to rooms as needed.

We noted numerous areas where data cabling was not supported above the ceilings and was laying on ceiling grid. Provide support for all data cabling above ceilings throughout the facility.

ACCESS CONTROL SYSTEM

OBSERVATIONS

There is a Keyscan door access control system that serves numerous exterior doors throughout the facility.

There is a video intercom system at the main office exterior entry.

RECCOMMENDATIONS

Expand the existing door access control system as necessary.

CCTV SYSTEM

OBSERVATIONS

There is an existing Digital Watchdog type CCTV system with a mixture of camera manufacturers located in both the interior and exterior of the building.

There is a mixture of camera manufacturers throughout the facility. There are cameras located throughout the interior and exterior of the building.

The facility could use additional cameras for a broader coverage.

RECOMMENDATIONS

Expand the existing CCTV system as necessary.

PLUMBING

The following report is the result of a site visit by Macen Leonardi of MSA Professional Services, Inc. that occurred on Monday, June 20, 2022. Site observations, existing drawing review and interviews with facility staff were used in preparing this report.

The original building was constructed in 1966. Building additions were completed in 1977, 2015, and 2021.

DOMESTIC WATER SYSTEM
OBSERVATIONS

Water Service consists of a 4" Ductile piping supplied by the local municipal water utility with a 3" water meter with bypass piping and valves. It serves the entire domestic water system.

The piping system material is a mix of copper and galvanized steel. The valve types are gate and ball. The copper piping system is in fair condition. The galvanized steel piping system has exceeded its expected service life.

The majority of the piping system is copper and galvanized steel. Original galvanized piping can be found throughout the building. There are no reports of any major leaks, broken or cracked pipes. The majority of the piping is insulated is in poor condition. Valve types consist of gate valves and ball valves. The majority of the isolation valves are not in an accessible location and hard to operate. The galvanized piping system is pass its service life expectancy and the copper piping is in fair condition.

The domestic hot water delivery wait time to the most remote fixture is over 30 seconds.

There are not master domestic water thermostatic mixing valve serving the building.

There were testable backflow preventers founded during the site investigation that serves the HVAC equipment. It is in fair condition.

Water Softener(s) include:

Two (2) Custom Care with Brine Tank.
Location: Mechanical Room
Flow: 75 GPM
System: Domestic hot water sys tem.

Condition: Passed its expected service life.

One (1) Custom Care with Brine Tank.
Location: N/A.
Flow: 25 GPM
System: Automatic Clothe Washer
Condition: Fair.

Domestic Gas Water Boiler(s) with Storage tank and pump include:

Two (2) A.O. Smith gas tank type heaters.
Location: Mechanical Room
Input: 399900 BTUH
Tank Size: 500 Gallons
Tank Temperature = 120 degree Fahrenheit.
Condition: Passed its expected service life.

Circulating Pump(s) include:

One (1) Grundfos Circulating Pump
Location: Mechanical Room
Flow: 20 GPM
Zone: Entire building.
Condition: Passed its expected service life.

Domestic Electric Water Heater(s) include:

One (1) Electric Water Heater.
Location: FACE Room
Input: 4500/4500kw
Tank Size: 50 Gallons
Storage Tank Temperature = 120
Condition: Good

One (1) Electric Water Heater.
Location: Concessions
Input: 3000kw
Tank Size: 19 Gallons
Storage Tank Temperature = 120
Condition: Good

One (1) Electric Water Heater.
Location: Weight Room
Input: 1500kw
Tank Size: 6 Gallons
Storage Tank Temperature = 120
Condition: Good

RECOMMENDATIONS

All existing galvanized piping shall be replaced with new insulated copper piping with accessible isolation valves.

Any future renovations shall account for the resizing of the domestic water mains to provide adequate pressure and flow to any new and existing fixtures.

Provide complete new domestic hot water heating plant equipment sized for any new loads with circulating pumps and master thermostatic mixing valve.

Rebalance the domestic hot water distribution system and extend the piping within two feet of the plumbing fixtures to improve hot water delivery wait time and meet current energy codes.

PLUMBING (CONTINUED)

Backflow preventer shall be maintained / repaired as required and tested once a year. Water testing shall be acquired to determine water quality and proper treatment filtration equipment.

FIRE SPRINKLER SYSTEM

OBSERVATIONS

There is no automatic fire sprinkler system in the building.

RECOMMENDATIONS

The existing water service is not capable of supporting an automatic fire sprinkler system. Any future renovations required an automatic fire sprinkler system will need a new properly sized water service.

Any renovations in the technical education area will required fire sprinklers for any paint spray / finishing rooms, HVAC dust exhaust duct greater than 10" and a dry fire sprinkler connection to an exterior HVAC dust collector.

SANITARY DRAIN, WASTE AND VENT SYSTEM

OBSERVATIONS

Sewer lateral discharges to the local municipal sewage utility sewer mains.

The majority of the piping system cast iron drains and waste piping with galvanized vent piping. In renovated areas schedule 40 PVC piping were installed. There are no reports of any major back-ups, clogs, broken or cracked pipes. The cast iron and galvanized piping system is near its service life expectancy and PVC is in fair condition. The building has solid waste interceptors that serves the art room fixtures. They are in poor condition.

Grease Interceptor(s) include:

- One (1) Floor mounted, exposed ba sin
  - Location: Kitchen
  - Rating: 20 GPM
  - Capacity: 70 lbs Grease.
  - Equipment is in fair condition.
- One (1) Fully Recessed basin.
  - Location: FACE
  - Rating: 250 GPM
  - Capacity: 1,076 lbs Grease.
  - Equipment is in good condition.
- One (1) Fully Recessed basin.
  - Location: Concessions Storage
  - Rating: 20 GPM
  - Capacity: 70 lbs Grease.
  - Equipment is in good condition.

Acid Waste system includes:

- One (1) Acid Neutralization Basin
  - Location: Custodial
  - Equipment is serviced regularly and is in good condition.

RECOMMENDATIONS

Provide entire piping system with auguring and / or jetting cleaning maintenance once a year.

Camera video inspection of all underground piping shall be acquired to determine system quality and proper flow. Replace any problem areas with PVC piping.

All existing cast iron and galvanized piping shall be replaced with new PVC piping.

Provide continual annual maintenance for the grease interceptor, the solid interceptors and the acid neutralization basin.

Provide all floor drains in toilet rooms and kitchen areas with trap seal protection.

STORM AND CLEAR WATER DRAIN, WASTE AND VENT SYSTEM

OBSERVATIONS

Sewer lateral discharges to the on-site retention area.

The building roof has internal roof drain with overflow scuppers and Rain gutters that discharge to grade.

The majority of the piping system cast iron drains and conductor piping. There are no reports of any major back-ups, clogs, broken or cracked pipes. The cast iron piping system is in fair condition, but will be near its service life expectancy in the next 10years.

The building has a clear water sump basins and pumps serving the drain tile. It is in good condition.

Facility staff comments reports of a leak from the roof from last winter. We are assuming this to be a roof issue and not a roof drain or storm pipe issue.

RECOMMENDATIONS

Provide entire piping system with auguring and / or jetting cleaning maintenance once a year.

Camera video inspection of all underground piping shall be acquired to determine system quality and proper flow. Replace any problem areas with PVC piping.

OTHER PIPING SYSTEMS

OBSERVATIONS

Natural gas system supplies the science room, plumbing equipment and kitchen equipment. The pressure is 2 pounds with regulators at each piece of equipment. The piping system material is black iron steel. It is in fair condition.

Compressed air system supplying technical education shop area's equipment and work stations. The piping system material is black iron steel. The piping system is in fair condition. The air compressor has exceeded its expected service life.

Welding gas system consists of portable gas cylinders.

PLUMBING (CONTINUED)

RECOMMENDATIONS

Any future renovations shall account for the resizing of the compressed air piping mains and air compressor to provide adequate pressure and flow to any new and existing equipment. fixtures where possible in toilet rooms.

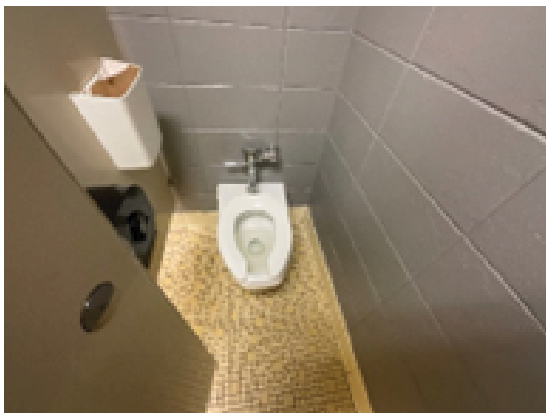
PLUMBING FIXTURES
OBSERVATIONS

Water Closets are majority wall mount with manual lever flush valve with some floor mount tank type and some floor mount with manual lever flush valve. Some water closets are battery sensor operated.

- The majority of the fixtures are in poor condition.
- The majority of the fixtures are not ADA compliant.

Lavatories are majority wall mount with manually operated faucet.

- The majority of the fixtures are in poor condition.
- The majority of the fixtures are ADA compliant.



Urinals are majority floor mount with manual lever flush valve.

- The majority of the fixtures are in poor condition.
- The majority of the fixtures are not ADA compliant.

Showers are majority gang units without manually operated shower handles. The showers are served by a thermostatic mixing valve and operated by a ball valve upstream of all fixtures.

- The majority of the fixtures are in poor condition.
- The majority of the fixtures are not ADA compliant.

Drinking Fountains
- The majority of the fixtures are in poor condition.
- The majority of the fixtures are ADA compliant.

Electrical Water Coolers are a mixture with and without bottle filling stations.
- The majority of the fixtures are in good condition.
- The majority of the fixtures are ADA compliant.

Service Sinks are majority floor mount with manually operated faucets with integral vacuum breaker.
- The majority of the fixtures are in poor condition.
- The majority of the fixtures do not have backflow preventers.

Sinks – General sinks have stainless steel basins with manually operated facuets.
- The majority of the fixtures are in poor condition.
- The majority of the fixtures are ADA compliant.

Sinks – FACE classroom sinks have stainless steel basins with manually operated facuets.
- The majority of the fixtures are in good condition.
- The majority of the fixtures are not ADA compliant.

Sinks – Art sinks have have stainless steel basins with manually operated facuets. The sink discharges to a point of use solids interceptor under each sink.
- The fixture is in poor condition.
- This fixture is not ADA compliant.

Sinks – Science sinks have epoxy resin basins with manually operated gooseneck faucet with vacuum breaker and serrated nozzle. The sink discharges to a centrally located acid neutralization basin.
- The majority of the fixtures are in good condition.
- The majority of the fixtures are ADA compliant.

Emergency Fixture(s).
- Shower is located in the science room and is in good condition.
- Eyewash is located in the technical education shop area is in poor condi tion.

RECOMMENDATIONS

Provide sensor operated flush valves and faucets in toilet rooms.

Provide all new plumbing fixtures and trim accessories. There shall be an appropriate amount of ADA compliant fixtures and installed at an appropriate height for the end user.

Provide wall mounted fixtures where possible in toilet rooms.

Provide new emergency eyewash fixture in the technical education shop area.

Provide monthly testing of all emergency fixtures.

MAINTENANCE LIST

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
1	SAFETY & SECURITY		Numerous smoke detector devices throughout the facility did not appear to be properly supported.	Ensure that the existing fire alarm devices are properly supported and operational. Repair or replace damaged devices. Many code updates have been adopted since the time of installation of the existing fire alarm system. A plan for the replacement of the existing fire alarm system in the next 10 years could be considered. The new system would provide a new, code approved voice addressable fire alarm system throughout the entire facility.	
2	SAFETY & SECURITY		There is a Keyscan door access control system that serves numerous exterior doors throughout the facility. There is a video intercom system at the main office exterior entry.	Expand the existing door access control system as necessary.	
3	SAFETY & SECURITY		The facility could use additional cameras for a broader coverage.	Expand the CCTV existing system as necessary.	
4	SAFETY & SECURITY		There is no automatic fire sprinkler system in the building.	The existing water service is not capable of supporting an automatic fire sprinkler system. Any future renovations required an automatic fire sprinkler system will need a new properly sized water service. Any renovations in the technical education area will required fire sprinklers for any paint spray / finishing rooms, HVAC dust exhaust duct greater than 10" and a dry fire sprinkler connection to an exterior HVAC dust collector.	

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
5	INTERIOR		PE/Athletic Director - Ceilings are bad, need new tile		
6	INTERIOR		All lockers need improvement		
8	INTERIOR		Library - East wall gets wet, need to repaint		
9	INTERIOR		Windows leak water - need protection		
10	INTERIOR		Outside door, gets snow in library		
11	INTERIOR		Need new clock system		
12	INTERIOR		Officer NIMI - Harden the doors, protection, locked		
15	INTERIOR		Want 35 lights on bars		
16	INTERIOR		Want blue perimeter lights		
17	INTERIOR		ES Gym/Auditorium - Upgrade cabling for microphone, currently DMX cable for microphones. Auditorium - ETC monitor		
18	INTERIOR		Sound system ($2,000)		
19	INTERIOR		ES - Classrooms are very noisy after mechanical renovation		
21	INTERIOR		MS - Bathrooms are old		
22	INTERIOR		Door system needs to be a FOB system		
23	INTERIOR		Need outlets in all spaces		
24	INTERIOR		Need more windows		
25	INTERIOR		HVAC system is a problem		
26	INTERIOR		Social Studies - Exterior doors are in pooor condition and should be secure.		
27	INTERIOR		English - Need to update exterior doors		
28	INTERIOR		Fuzzy - Storm water at athletic fields is poor		

MAINTENANCE LIST (CONTINUED)

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
29	MECHANICAL		Heating and ventilation is provided to the facility locker rooms and storage spaces East of the gymnasium through a roof mounted make-up air unit manufactured by Reznor. This make-up air unit has exceeded the anticipated service life for equipment of this type.	Consider filter efficiency upgrades at all ventilation air handling equipment to MERV 13 filter media.	
30	MECHANICAL		The evaporator cooling coil and outdoor mounted, air-cooled compressor condensing unit connected to the furnace are much older. This refrigeration equipment has exceeded the anticipated service life for this type of equipment, and is utilizing a refrigerant type that is no longer manufactured (R-22).	The residential split system refrigeration circuit and outdoor equipment should be replaced as funds become available or when excessive service and maintenance become necessary. The full R-22 refrigerant charge should be reclaimed to cylinder as part of HVAC split system removal process. Consider implementation of Bi-Polar Ionization cold plasma technology for further particle reduction, defense against air borne pathogens and volatile organic compounds (VOCs). See supplemental information provided for this technology.	
31	MECHANICAL		The exhaust fan and make-up air system for technical education welding are in average / poor operating condition. These systems have exceeded their anticipated service life.	Any future expansion or renovation to the technical education welding program should include equipment upgrades to the exhaust and natural gas fired make-up air systems.	
32	MECHANICAL		Technical education area systems are in fair operating condition.	System replacement is suggested as a low priority item when funding is available, when frequent service and maintenance become necessary or at the time of equipment failure.	

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
33	ELECTRICAL		System replacement is suggested as a low priority item when funding is available, when frequent service and maintenance become necessary or at the time of equipment failure.	The panels older than 30 years are at the end of their useful life and should be replaced based on their age and condition. Provide new replacement panelboards and new feeders in existing conduit in each of these locations.	
34	ELECTRICAL		There are spaces throughout the facility that contain T8 and T12 fluorescent type and incandescent type fixtures. There are numerous, old wall mounted HID type fixtures remain on the exterior of the building, but do not appear to be operational.	A possible upgrade to all LED interior lighting should be considered with all new occupancy controls and 0-10v dimming. The existing exterior wall mounted HID type fixtures are no longer in use and should be removed.	
35	ELECTRICAL		There are battery backup bug-eye type egress fixtures located in the facility. Due to there being a standby generator, these fixtures are no longer needed. The exit lights are incandescent and LED and are fed off the standby generator	Replace all incandescent exit lights with new LED. Remove all battery backup egress fixtures throughout the facility. Ensure full egress lighting compliance throughout the facility and add light fixtures to the life-safety emergency panelboard as necessary.	
36	ELECTRICAL		The receptacles and switches are commercial grade 15 and 20 amp with plastic and stainless steel plates. The devices vary in age and condition and for the most part show signs of general wear.	Replace wiring devices and plates that are damaged. Add additional receptacles and circuits as necessary.	
37	ELECTRICAL		The wood shop equipment was fed through the floor. The floor devices and conduit appeared to be dated and nearing the end of their useful life. The metals shop contains bus duct to feed the shop equipment.	The Floor fed devices and bus duct located in the shop areas are outdated. Consider replacing with cord drops to provide power to the shop equipment.	
38	ELECTRICAL		The existing clock system contains numerous, old 120V Simplex and American Time clocks. The clocks are fed off of a Simplex master clock located in the high school office.	Consider replacing the old 120V clocks and head end with a new GPS clock system with all new clocks throughout the facility.	

MAINTENANCE LIST (CONTINUED)

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
39	ELECTRICAL		A majority of the speakers throughout the facility appear to be very old. There is a mixture of old surface mounted speakers, flush mounted combination clock/speakers and flush ceiling mounted speakers. Many of these speakers appear to be damaged or do not appear to be properly supported in the ceilings.	We recommend the replacement of damaged speakers and speakers that are not properly supported with new ceiling mounted speakers with all new speaker wiring connected to the new VOIP system.	
40	ELECTRICAL		The data cable is a mixture of CAT 5 and CAT 6 and through a random sampling of data cables connected to the data racks, does not appear to be plenum rated.	The facility contains plenum ceilings. We recommend replacing all non-plenum rated data cabling located in plenum rated ceilings with new plenum rated CAT 6 data cabling. Additional plenum rated CAT 6 data cabling can be added to rooms as needed.	
41	ELECTRICAL		Data cable does not appear to be properly supported above the ceilings.	Provide support for all data cabling above ceilings throughout the facility.	
42	PLUMBING		The majority of the piping system is copper and galvanized steel. Original galvanized piping can be found throughout the building. There are no reports of any major leaks, broken or cracked pipes. The majority of the piping is insulated is in poor condition. Valve types consist of gate valves and ball valves. The majority of the isolation valves are not in an accessible location and hard to operate. The galvanized piping system is pass its service life expectancy and the copper piping is in fair condition.	All existing galvanized piping shall be replaced with new insulated copper piping with accessible isolation valves.	
43	PLUMBING		The domestic hot water delivery wait time to the most remote fixture is over 30 seconds.	Provide complete new domestic hot water heating plant equipment sized for any new loads with circulating pumps and master thermostatic mixing valve.	

#	DISCIPLINE	PRIORITY	ISSUE	PROPOSED SOLUTION	COST
44	PLUMBING		There are not master domestic water thermostatic mixing valve serving the building.	Rebalance the domestic hot water distribution system and extend the piping within two feet of the plumbing fixtures to improve hot water delivery wait time and meet current energy codes.	
45	PLUMBING		The majority of the piping system cast iron drains and waste piping with galvanized vent piping. In renovated areas schedule 40 PVC piping were installed. There are no reports of any major back-ups, clogs, broken or cracked pipes. The cast iron and galvanized piping system is near its service life expectancy and PVC is in fair condition.	Camera video inspection of all underground piping shall be acquired to determine system quality and proper flow. Replace any problem areas with PVC piping. All existing cast iron and galvanized piping shall be replaced with new PVC piping.	
46	PLUMBING		The floor drains in toilet rooms and kitchen areas are not equipped with trap seal protection.	Provide all floor drains in toilet rooms and kitchen areas with trap seal protection.	
47	PLUMBING		The majority of the piping system cast iron drains and conductor piping. There are no reports of any major back-ups, clogs, broken or cracked pipes. The cast iron piping system is in fair condition, but will be near its service life expectancy in the next 10years.	Provide entire piping system with auguring and / or jetting cleaning maintenance once a year. Camera video inspection of all underground piping shall be acquired to determine system quality and proper flow. Replace any problem areas with PVC piping.	
48	PLUMBING		Natural gas system supplies the science room, plumbing equipment and kitchen equipment. The pressure is 2 pounds with regulators at each piece of equipment. The piping system material is black iron steel. It is in fair condition. Compressed air system supplying technical education shop area's equipment and work stations. The piping system material is black iron steel. The piping system is in fair condition. The air compressor has exceeded its expected service life.	Any future renovations shall account for the resizing of the compressed air piping mains and air compressor to provide adequate pressure and flow to any new and existing equipment.	

3 EDUCATIONAL SPACE ADEQUACY

OVERVIEW

Through interviews with building principals, the superintendent, the Facilities Condition Assessment and space utilization data, this section provides a quantitative measure of spaces needed in each school to support current and future programming. This analysis includes the Elementary / Middle School and the High School of the Elkhart Lake - Glenbeulah School District.

The number of classrooms indicated is based on current space utilization. We have based our building enrollment numbers on data obtained from the Wisconsin Department of Public Instruction, DPI, Third Friday Enrollment Counts from 2010-2011 through 2021-2022 school year.

While no specific policy is in place to limit class size, through discussions with the administration, the following table of maximum classroom student population was determined as a baseline for establishing functional capacities:

Grade	Student/Teach Ratio
PK	15:1
4K – Second Grade	20:1
Third – Fourth Grade	25:1
Fifth – Eighth Grade	28:1
Ninth – Twelfth Grade	30:1

There are three questions that need to be reviewed to establish overall space needs. These questions are:

- Is the existing capacity adequate to service the needs of the district today and in the future? If not, what are the additional space needs required? (Capacity)
- Are there any building space deficiencies that should be addressed immediately? (Educational Space Adequacy)
- What facilities will be required to accommodate visionary programs? (Vision)

All evaluations assume that the District will continue to place students based on available space, does not change the curriculum, will continue to use the rooms as identified, and that the population changes at the expected rate.

Two calculations are utilized to establish the functional capacity of an educational facility. The "Maximum Capacity" is the point where every teaching station in a building is theoretically utilized at maximum occupancy for the specified number of periods out of each day. At this point, the building does not have room to add students without exceeding class size limits. At elementary levels where students spend the majority of their day in a single classrooms, this calculation can be an effective way of monitoring building enrollment however, operating a building at this level will leave little to no scheduling flexibility for changes in enrollment.

The second approach to determining a functional building capacity is establishing a "Target Capacity." This is the point where the building is functioning optimally as an educational facility. When a school exceeds this number, it is an indication that the organization should be planning and preparing for the future of the facility or other facilities within the system before reaching the identified maximum capacity. To arrive at this number, an efficiency factor is applied to the Maximum Capacity number established previously.

This analysis incorporates an operational efficiency factor based upon the grade levels that occupy each building. The factors utilized are considered national benchmarks and are as follows:

Elementary / Middle School
(Grades EC-8): 90%

High School
(Grades 9-12): 80%

These efficiency factors are used to compensate for scheduling inefficiencies and variations in class size. Operating a facility at or below these levels allows for the availability of time and space in the building to support teacher preparation and tutoring activities, the flexibility to accommodate scheduling conflicts between events and classes and unscheduled special assistance to individual students or small groups of students.

ELEMENTARY / MIDDLE SCHOOL

The capacity of an elementary / middle school (PK - 8th grade) can be determined by utilizing existing space configuration information and established guidelines on class size. The capacity can be determined by multiplying the districts maximum student teacher ratio by grade by the number of rooms used (based on the current educational program) multiplied by 90% (which is a planning guideline for the student station utilization factor).

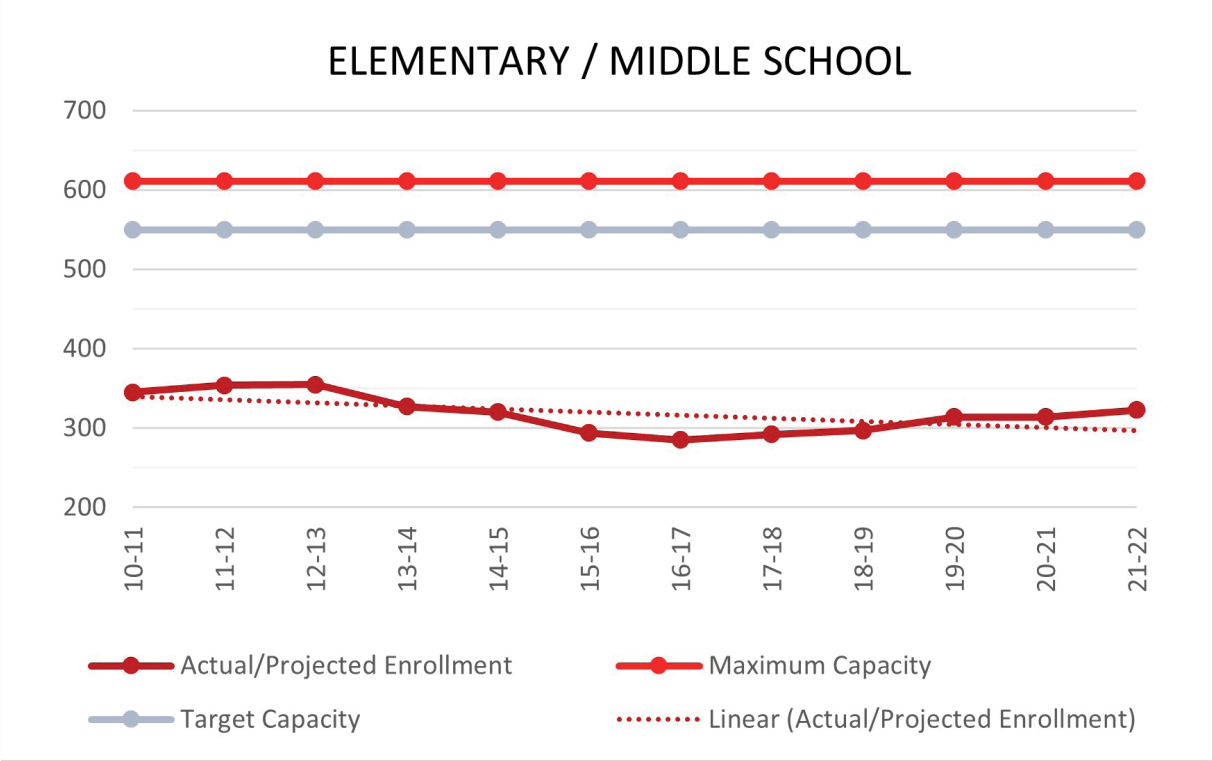
Capacity Determination Formula:

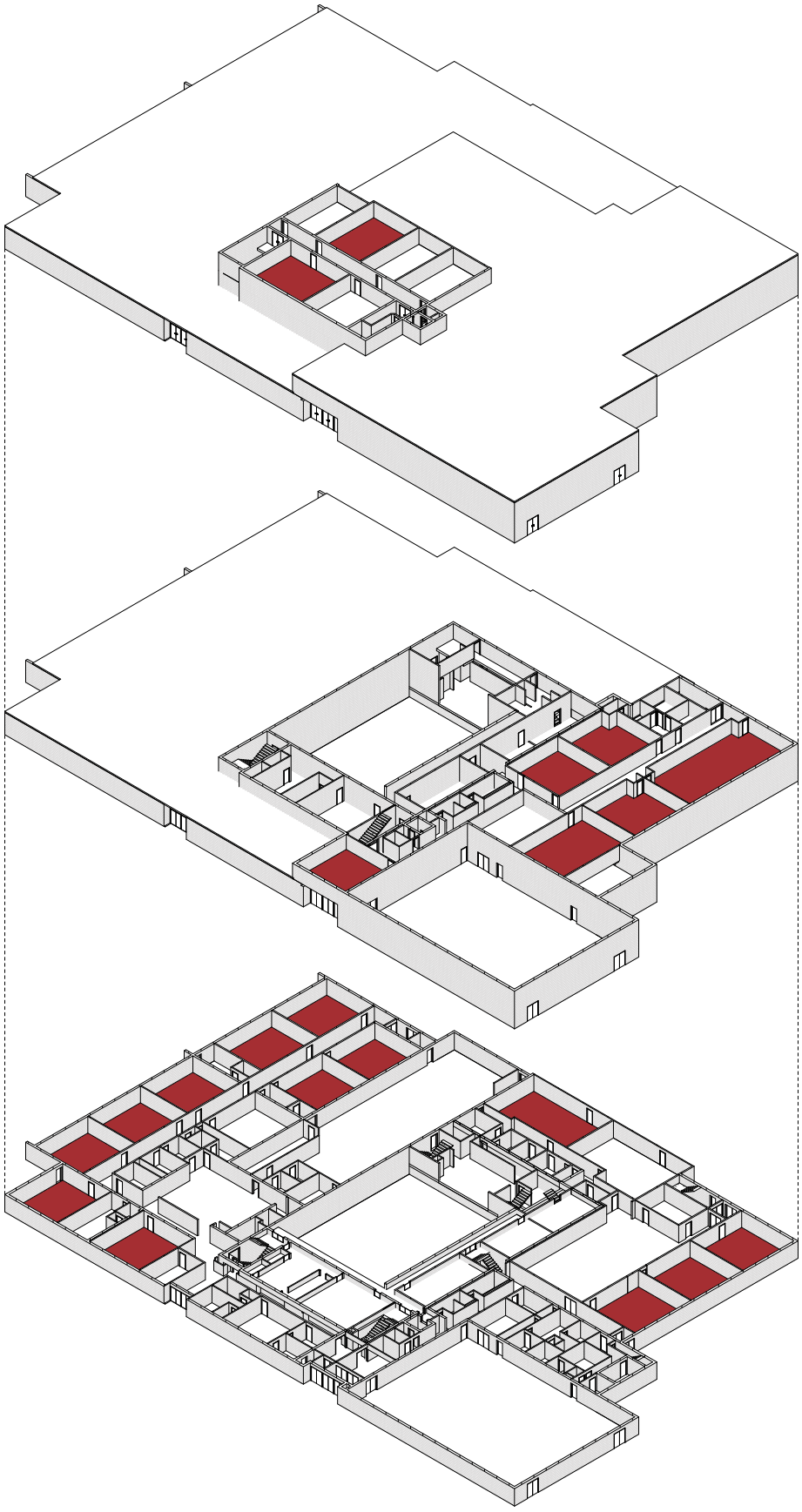
*Number of Classrooms Available * Class Size = Maximum Capacity*

*Number of Classrooms Available * Class Size * 90% = Target Capacity*

Capacity Determination

At the Elkhart Lake Elementary / Middle School, the Maximum Capacity is approximately 600 students and the Target Capacity is approximately 500 students. With a 2021-2022 school year enrollment of 323 students the building is well below the target capacity by over 200 students. The overall enrollment trend has been slightly decreasing for over a decade.





ASSESSING EDUCATIONAL SPACE ADEQUACY

	QTY.	AREA (SF)	EXTN. (SF)
PK	1	1,230	1,230
K4	1	860	860
KINDERGARTEN	1	790	790
KINDERGARTEN	1	850	850
FIRST GRADE	1	790	790
FIRST GRADE	1	790	790
2ND GRADE	1	870	870
2ND GRADE	1	790	790
3RD GRADE	1	830	830
3RD GRADE	1	790	790
FOURTH GRADE	1	850	850
FOURTH GRADE	1	930	930
FIFTH GRADE	1	880	880
FIFTH GRADE	1	870	870
SIXTH GRADE	1	960	960
SIXTH GRADE	1	850	850
SEVENTH GRADE	1	1,020	1,020
SEVENTH GRADE	1	910	910
EIGHTH GRADE	1	870	870
EIGHTH GRADE	1	800	800
SCIENCE	1	960	960
SCIENCE	1	1220	1,220
OPEN CLASSROOM	1	590	590
OPEN CLASSROOM	1	800	800

RECOMMENDED		
AREA (SF)	EXTEN. (SF)	DEFICENT
1,100	1,100	130
1,100	1,100	(240)
1,100	1,100	(310)
1,100	1,100	(250)
900	900	(110)
900	900	(110)
900	900	(30)
900	900	(110)
900	900	(70)
900	900	(110)
900	900	(50)
900	900	30
900	900	(20)
900	900	(30)
900	900	60
900	900	(50)
900	900	120
850	850	60
850	850	20
850	850	(50)
850	850	110
850	850	370
850	850	(260)
850	850	(50)

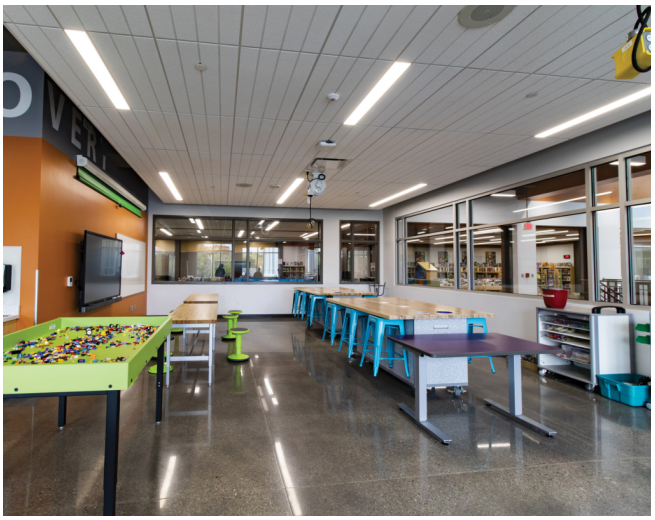
TOTAL AREA DEFICIENT	(950)

ELEMENTARY / MIDDLE SCHOOL VISIONARY SPACE NEEDS

- Collaboration Space

- Maker / Messy Space
- Variety of Spaces (small group)

- Inspired Large Group Space
- Flexible Furniture



NEEDS LIST

#	PRIORITY	NEED	COMMENTS
1		4K, K, 1st 2nd grade - not every room has enough storage cabinets	
2		Needs common area (small group, resources, etc.)	
3		Some classrooms do not have enough storage	
4		Need more storage	
5		Open lobby entry that is useable, inviting entrance	
6		Teachers's desk and new furniture	
7		Elementary side is A/C, Middle School gym is not	
8		Open Foyer/lobby at the front of the school - cozy, formal, collaborative for both staff and students	
9		Need for mobile storage	
10		Need for updated furniture, desks and seating	
11		KG want better furniture	
12		More storage with doors to hide supplies	
13		More counter space for prep	
14		New furniture, desks and seating	
15		Sink outside of the bathroom would be nice - congestion by door into classroom and to bathroom (since this is the only sink there is in the classroom)	
16		More countertop prep space	
17		New furniture, desks and seating (Variety)	
18		4K- sink outside of bathroom is needed	
19		4K-needs better furniture, flexible furniture	

#	PRIORITY	NEED	COMMENTS
20		Furniture, want flexible layout	
21		Would like a common resource area	
22		Corridors are narrow	
23		Handicap accessibility is poor	
24		Upgrade the playground	
25		Mobile flat screen is not desired, want attached to wall, also like flexibility	
26		New furniture, desks, and seating (flexible)	
27		More storage to hide clutter	
28		Only elementary side of the building/middle of the building is air conditioned, spaces on outside walls of the middle school are not	
29		Most teachers have Promethean monitors - some would prefer that these be fixed instead of on a cart - trip hazard, but the raising and lowering is nice	
30		All prefer to have hard surface flooring not carpet (ant problem)	
31		Vision for renovations - modern, open, identity (resorter colors)	
32		Corridors are narrow - would be nice to get lockers out of corridor	
33		Handicap accessibility is really tough throughout the whole building	
34		Office Staff - want a better buzzer entrance system	
35		Camera on entry	
36		Cameras are sometimes unclear	
37		Health room is too cluttered	
38		Need a copy room that keeps this area organized in one area	

NEEDS LIST

#	PRIORITY	NEED	COMMENTS
39		The scond office is small, way tight (student services), no windows, would prefer to be ES/MS	
40		Need a small work area and desk area	
41		MS could use copy area, used student services	
42		Heating/cooling is poor, needs to be addressed in both areas (both have A/C)	
43		Health room setup is a challenge (not accessible)	
44		Would be nice to have a copy room	
45		English - would like to have larger space that is in between the ES and MS	
46		Would like to have a place for the students display culture	
47		Need a phone to be able to talk to parents - communicate a lot over the phone	
48		Need more bulletin boards and more space visuals	
49		Need for technology - currently uses Chromebook	
50		Would be nice to have an area for the EL kids to display their culture - to make them feel like they are part of the school	
51		Collaboration areas would be great.	
52		Music/Choir - Furniture is old, need new chairs	
53		Ramp at back of stage doesn't wrok well, 2 ramps from Library would be better	
54		Would be nice to have wayfinding for smaller students to get to the bathroom	
55		New furniture, particularly chairs, need to be replaced	
56		Need more general storage in gymnasium	
57		Accessibility to stage is not ideal at ES/MS	

#	PRIORITY	NEED	COMMENTS
58		Special Ed/Speech - Need a sensory room	
59		Need a room for swing only	
60		Need a FOB system	
61		The accessibility throughout is poor	
62		Small group work spaces throughout the building would be great	
63		Changing Room	
64		Would like half carpet half hard surface	
65		To have smaller group instruction rooms throughout the school would be ideal (3-4 students at a time)	
66		Reading Specialist - Need to be near Speech, SE	
67		Need outlets, very minimal	
68		Need new furniture	
69		K-8 PE - Need A/C for MS Gym	
70		MS classrooms are not A/C	
71		Need toilet for athletic field (back side of garage with concession)	
72		5th 6th grade - Need A/C	
73		Furniture is old but functional, would prefer more of the functional	
74		Would consider new furniture	
75		Need for air conditioning - none of the outside wall classrooms have A/C	
76		More whiteboard space would be ideal	
77		Would be nice to have dedicated space for collaboration, currently utilize cafeteria (but would need to be right outside the doors)	

NEEDS LIST

#	PRIORITY	NEED	COMMENTS
78		Art, 3rd, 4th gr - desks and furniture are in poor condition, need better cafeteria tables	
79		2nd/3rd grade classrooms do not have natural light, skylights were taken out with roof replacement would like to bring skylights back; shouldn't have interior classrooms.	
80		Want to have small breakout rooms (collaboration at 2nd grade and move)	
81		Need more drinking fountains, none near 3rd grade	
82		Bathrooms needed closer to 4th grade, currently go to basement	
83		Room 301 could be collaboration	
84		Move OT/PT to another place	
85		Classrooms doen't have storage (305 lacking)	
86		4th grade doesn't have sinks	
87		Remove wood paneling in rooms, need upgrading	
88		Open ceilings are poor, sound quality very loud	
89		MS should get AC, MS gym needs AC	
90		Need better window covering/shades	
91		Furniture is really old (tables and desks)	
92		No natural light in some of the interior rooms (2nd grade, 3rd grade, SE) maybe incorporate skylights	
93		No small group rooms or collaboration spaces	
94		Utilize spaces that aren't being used for a better purpose	
95		OT/PT on upper level is not ideal	
96		Storage in classrooms	

#	PRIORITY	NEED	COMMENTS
97		No sinks in 4th grade classrooms - some classrooms that do have sinks have pipes that freeze	
98		Art shares bathroom with the daycare (littles are still learning, leaving doors open, etc. - need their own restrooms)	
99		Office - Need nicer reception counter area, more welcoming and cozy	
100		Should have a reception area	
101		Need work area that is away from reception	
102		Bathrooms are old	
103		Would be nice to have better reception area - a reception counter with an area to sit (more cozy, not with the copy machine right there), separate counter from longer counter	
104		Sit-to-stand desks	
105		Would be nice to have area with mailboxes	
106		Updated bathrooms throughout the school	
107		Daycare - need ADA sink	
108		Special Ed - Classroom needs sink (MS Room 209)	
109		Flexible seating options	
110		Need sensory area, lighting calming space	
111		Want an accessbile kitchen (possibly ED Kitchen?)	
112		Sinks in classroom	
113		Revamp Teacher's Lounge	
114		Principal - Direction with in building is very disorganized	
115		Cafeteria needs to be modernized; need separate spaces, likt it that way. ES is too small; poor space	
116		Need separate Health Room with toilet	

NEEDS LIST

#	PRIORITY	NEED	COMMENTS
117		Need classroom storage	
118		Original lockers/hooks, need to be replaced	
119		Brighter modern cafeteria would be great - need separate cafeterias for current setup - both cafeterias are undersized, ES cafeteria is loud	
120		Need better furniture/more flexibility in cafeteria	
121		2nd Floor MS - Need white board space	
122		Upgrade furniture	
123		More writeable wall surfaces would be great	
124		More flexible seating/furniture	
125		Would like to work in small groups	
126		HVAC is loud in classrooms/corridors (you can hear lockers shaking) - temp is also unpredictable	
127		A space that would be ideal for presentations would be nice	
128		Makerspace - Would like to have windows, natural daylights	
129		Need sinks	
130		Would like to have windows in space	
131		Sinks - currently do not have any, use bathroom sink	
132		Media/Library/IMC - Would like Makerspace closed off, next to library	
133		Want a zen den, size of storage, glass	
134		MS Room 208 - New furniture, different options	

#	PRIORITY	NEED	COMMENTS
135		MS Room 210/213 - want to change sink layout, doesn't need all sinks, doesn't need domonstration table; design for more storage	
136		Need storage (create a room at Computer Room)	
137		New furniture	
138		MS ELA / Science - Would like to keep computer lab set up (science Technology)	
139		Mobile lab stations in Science would be nice	

HIGH SCHOOL

Calculating the capacity of a high school (Grades 9 -12) is more complex than an elementary or middle school. It is based upon the number of educational spaces available within the building, the number of periods each space can be used per day and the number of students a space can accomodate. Because a high school typically supports a greater variety of course offerings, ultimate capacity determination can vary somewhat from year to year as schedules change.

To begin determining a functional capacity, the number of educational spaces is multiplied by the number of students to occupy the space, which has been determined by the District's Class Size Guidelines then multiplied by the usage factor. The usage factor is determined by the actual use of a classroom, divided by the number of periods that the building operates within an instructional day. The resultant calculation is then multipliedby an efficiency factor of 80% which is the planning guideline for the student station utilization in a high school setting. Each classroom or instructional space that has been assigned for student instructino will be factored into the calicualtion. This method will determine how many students are in an assigned instructino space at an y one period of the day. After a period has ended, the students rotate to another instructional space. The perisods that each instructional space is used for will vary depending upon the acceptable number of students assigned. While its effect on the functional capacity of the building is minimal, it should be noted that currently Elkhart Lake High School operates on a traditional 8 period day.

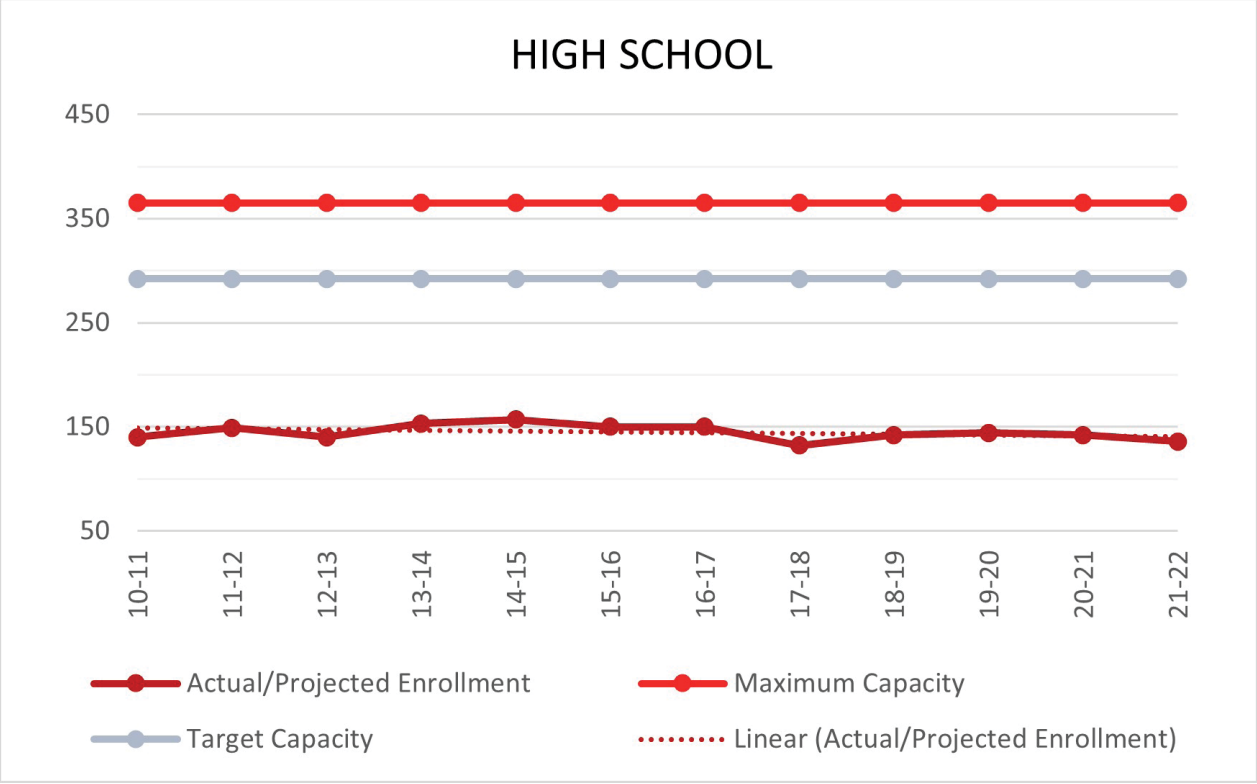
Capacity Determination Formula:

*Number of Classrooms Available * Class Size = Maximum Capacity*

*Number of Classrooms Available * Class Size * 80% = Target Capacity*

Capacity Determination

At Elkhart Lake High School, the Maximum Capacity is approximately 365 students and the Target Capacity is approximately 292 students. With a 2021-2022 school year enrollment of 136 students the building is below the target capacity by over 150 students. The overall enrollment trend has been steady for over a decade.

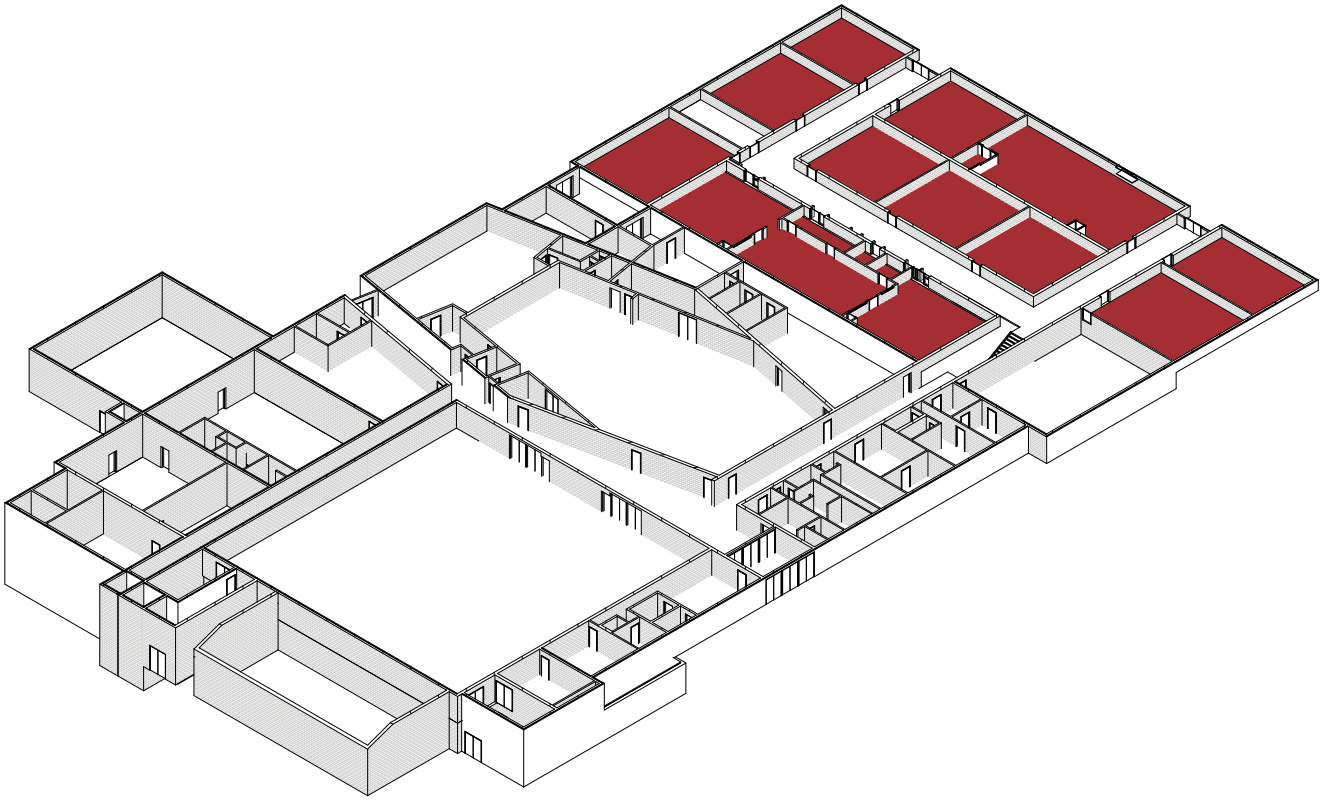


ASSESSING EDUCATIONAL SPACE ADEQUACY

	QTY.	AREA (SF)	EXTN. (SF)
STANDARD CLASSROOM	1	820	820
STANDARD CLASSROOM	1	800	800
STANDARD CLASSROOM	1	850	850
STANDARD CLASSROOM	1	790	790
SCIENCE	1	1,290	1,290
SCIENCE	1	1,290	1,290
PHY-ED STATIONS	1	4,590	4,590
PHY-ED STATIONS	1	4,590	4,590
WEIGHT/FITNESS	1	2,070	2,070
WORLD LANGUAGE	1	830	830
BUSINESS EDUCATION	1	980	980
AG CLASSROOM	1	650	650
ROBOTICS/ENGINEERING	1	1,500	1,500
TECH ED/WOODS	1	1,640	1,640
TECH ED/METALS	1	2,000	2,000
ART	1	1,150	1,150
FACE	1	1,610	1,610
BAND	1	1,470	1,470
CHOIR	1	1,050	1,050

	RECOMMENDED		
	AREA (SF)	EXTN. (SF)	DEFICENT
	800	800	20
	800	800	0
	800	800	50
	800	800	(10)
	1,400	1,400	(110)
	1,400	1,400	(110)
	800	800	30
	1,200	1,200	(220)
	900	900	(250)
	1,400	1,400	(250)
	1,400	1,400	210

TOTAL AREA DEFICIENT	(640)



HIGH SCHOOL VISIONARY SPACE NEEDS

- Collaboration Space

- Maker / Discovery Space
- Variety of Spaces (small group)

- Inspired Large Group Space
- Flexible Furniture

NEEDS LIST

#	PRIORITY	NEED	COMMENTS
1		PE & Athletic Director - Downstairs locker rooms are outdated, embarassing	
2		Gym is bad at ES, wrestling room at HS, don't want to be at ES, feel like a	
3		Create a wrestling room at HS, don't want to be at ES, feel like a guest	
4		Weight room is very small for classroom	
5		Bathrooms are poor, need more locker room space (last updated in 1990's)	
6		Press box is old	
7		Needs to be expanded on top of bleachers	
8		Locker Rooms are very outdated - need new lockers, new ceilings, etc. - just look outdated	
9		Would like legitimate wrestling room, especially for high school kids	
10		Press box needs improvement - would like to tear down and make it bigger, or expand it somehow	
11		ADA accessibility throughout the school is hard for students in wheelchairs	
12		Staff lounge is not a very inviting space	
13		Would like to keep special education spaces a bit more private, with not as much visibility into spaces.	
14		Speakers on athletic fields - need whole new system.	
15		SE - would like calm room to be soundproof	
16		Ramps are not useable, Agriculture is not bad, main corridor ramp is bad	
17		Lounge is not inviting space	
18		Science - Want new desks in instructional classroom	
19		Would like more flexible seating	

#	PRIORITY	NEED	COMMENTS
20		IT - Need new sound system for football stadium ($55,000)	
21		Need new press box with luxury area	
22		Replace HS sound sytem in gym	
23		Need auditorium equipment ($30,000)	
24		Replace district Wi-Fi with wave 74	
25		Replace clock system, make it master with all systems	
26		Upgrade phone system to full VoIP (maybe a Zoom system	
27		Need Key FOB system	
28		Update wiring at ES/MS	
29		Replace security camera system (robotic system)	
30		Replace all servers ($30,000)	
31		Would like system in ES gym to be like auditorium ($30,000 - $50,000)	
32		Should put a pool in (currently co-op with Kiel)	
33		Add on to the garage - cold storage	
34		Need a place to store new tech equipment	
35		Ag - More storage space	
36		Performance space for the ES/MS	
37		Counselor - Need space for partners that are in the building	
38		Need storage	
39		Only having one set of restrooms is an issue	
40		ES gym should be space for performances	

NEEDS LIST

#	PRIORITY	NEED	COMMENTS
41		HS concessions for sports at the gym is needed	
42		Math - make the building look refreshed throughout, especially toilet rooms/fixtures	
43		Need more staff toilet room spaces	
44		Safety needs to be addressed	
45		Tech Ed - Would lbe nice to infill the corner as construction space	
46		Need more space	
47		Locker rooms are outdated, need upgrade	
48		More electrical outlets in general spaces	
49		Would like the school to look brand new/refreshed	
50		More staff bathrooms throughout the school	
51		Short on office spaces in Tech Ed	
52		Storage space is lacking in Tech Ed	
53		Would like a lot more light in general entering the building.	
54		Art - Would love to have a larger room with natural light	
55		Want a clean room and a dirty room	
56		Want a dark room	
57		Need more storage	
58		Need more sinks	
59		More display space would be nice	

#	PRIORITY	NEED	COMMENTS
60		Need new tables, stools, cabinetry, pater drawers, flat files, etc.	
61		Need more storage	
62		Library - more outlets	
63		A loft space, would like that back	
64		Need printer space	
65		Need more storage space	
66		Need a Community Center / Rec Center	
67		Officer NIMI - Connect road from ES/MS to HS	
68		Student Service area needs to be redone at counselor/lounge area	
69		Rebuild HS office	
70		Need an office space	
71		Special Ed - Difficult for wheelchairs to maneuver	
72		Calm space needs to be soundproof	
73		Locker rooms are horrible, need to be redone	
74		ES/MS building has several levels, not in good shape	
75		Room 411 - Need bigger desks for bigger kids	
76		Rooms need natural light	
77		Auditorium - Need storage for equipment	
78		Want LED lighting	
79		Replace house lights and stage lights	
80		Want a choir room, currently on stage	

NEEDS LIST

#	PRIORITY	NEED	COMMENTS
81		Band room is too small	
82		Would like recording room (~200 SF)	
83		ES School - Tear the ES wing down	
84		Need to build a new school	
85		HS - Office is too small	
86		SE students struggle, ramps are a problem	
87		Spec Ed - need a tlilet room that is large enough	
88		Better ADA toilet rooms	
89		Need new furniture, that can be adjustable, in all spaces	
90		Social Studies - Need a place for student athletes to put extra baggage (update locker rooms)	
91		Locker room s are very poor	
92		Lounge and restrooms	
93		Need new furniture	
94		World Language - Furniture is bad and uncomfortable	
95		Need more windows, want to be a comfortable space	
96		Need new furniture	
97		Need technology connectivity	
98		New addition to east offices/library/cafeteria)	
99		Needs more space around athletics area	

#	PRIORITY	NEED	COMMENTS
100		Locker rooms need gutting and to be redone	
101		Need a new front entry, need a gathering area	
102		English - Library and teachers lounge area shabby	
103		Need new furniture	
104		Build a storage building	
105		Ryan - Need storage throughout especially gym	
106		Principal office is very accessible, too accessible	
107		Weight wroom should be expanded	
108		Need wrestling room to get out of the Elementary building	
109		Need better side room, currently at Counselor	
110		Locker Rooms need a face lift	
111		Fuzzy - Get water/toilet at basketball fields	
112		Would like Elementary to eliminiate so many floor levels	
113		Would like circulation throughout the building to be improved	