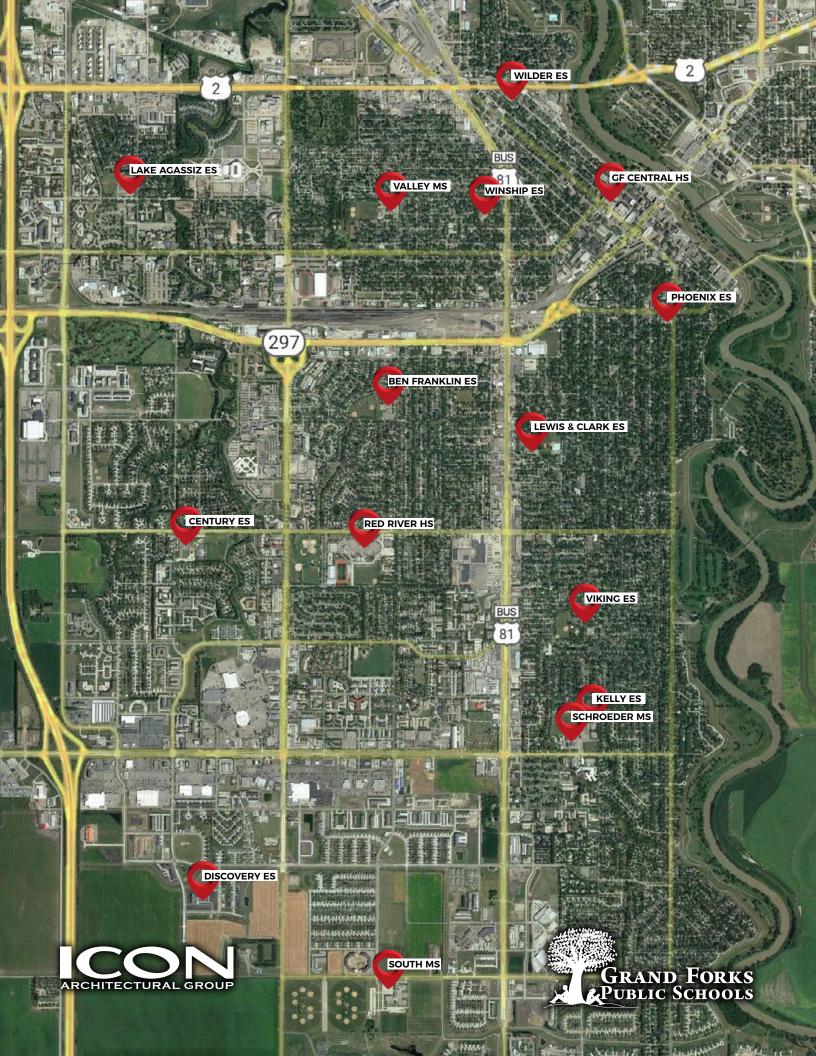




## FACILITY ASSESSMENT FOR GRAND FORKS PUBLIC SCHOOLS

Grand Forks, ND



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# BACKGROUND





## BACKGROUND

## A. INTRODUCTION TO THE PROJECT

This document reviews the current conditions of all facilities within Grand Forks Public Schools, as well as case studies to consider for the resolution of facility issues. This is not intended to represent a design solution, but rather demonstrate the facts observe through our study. ICON Architectural Group (ICON) teamed up with CMTA and Construction Engineers to prepare the information included within this report. The facility assessment was commissioned to assist the District with long-range planning and to address increasing enrollment, changing educational requirements, and aging facilities. This assessment includes input from architects, engineers, educational planners, and Grand Forks Public Schools staff.

The scope of this report is to identify deficiencies within the current facilities including code compliance, Americans with Disabilities Act (ADA) compliance, security, and educational adequacy. The report will apply all costs associated with the upgrades required and deferred maintenance items identified within Grand Forks Central High School, Red River High School, South Middle School, Phoenix Elementary School, Lake Agassiz Elementary School + Head Start, Winship Elementary School, Wilder Elementary School, Viking Elementary School, Discovery Elementary School, Kelly Elementary School, Ben Franklin Elementary School, Century Elementary School, Lewis and Clark Elementary School

Schroeder Middle School, Valley Middle School. Options to consider include renovating the current facilities to meet long-range needs and/or new construction.

## **B. STAFF INPUT**

To further understand how the buildings function for students and staff, ICON hosted two days of meetings with a large cross-section of current staff members of Grand Forks Public Schools who work within the facilities on a day-to-day basis. ICON met with each group individually without district administration present to facilitate an open conversation and honest feedback. These meeting groups included staff from each education department, custodial staff, kitchen staff, special education staff, library, and administration for each of the eight buildings being assessed.

ICON also solicited staff input by encouraging them to fill out a questionnaire regarding the facilities' function for their curriculum. The questions focused on aspects of the facility that are working well and serving their educational purpose as well as educational requirements and activities that are unable to be met due to facility constraints. Respondents had the opportunity to recommend facility improvements that would better foster staff and student success.

## C. ABOUT GRAND FORKS PUBLIC SCHOOLS

The Grand Forks and Grand Forks Air Force Base Public School Districts work together in a unique arrangement to serve approximately 7,400 students who attend schools in the two communities. Approximately 1,600 people are employed, including over 750 teachers and over 850 support and administrative staff. Two grades 9-12 high schools, one alternative high school, three grades 6-8 middle schools, 10 elementary schools, one combined elementary and middle school, and one Head Start Program comprise the arrangement of the schools.

The schools of the two districts expect and receive a strong performance from the students. This is possible because of a rich curriculum design led by highly qualified teachers. Family and community support is strong and instrumental in the success of the schools. Emphasis is given to lower class size, curriculum, staff qualifications, and student achievement. The result is 96%+ average daily attendance, well-behaved students, safe AND comfortable schools, and academic results that exceed those of the state and nation.

## **D. APPLICABLE CODES**

Below is a list of applicable codes and standards that was used to create this assessment.

- North Dakota State Building Code
- 2018 International Building Code (IBC)
- 2018 International Energy Conservation Code (IECC)
- 2018 National Fire Protection Association (NFPA) 70 National Electric Code
- 2018 National Fire Protection Association (NFPA) 72 National Fire Alarm and Signal Code
- 2018 National Fire Protection Association (NFPA) 101 Life Safety Code
- Local Codes
- Uniform Plumbing Code
- International Mechanical Code (IMC)
- International Fuel Gas Code (IFC)
- National Fire Protection Association (NFPA)

# FACILITY ASSESSMENTS





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## GRAND FORKS CENTRAL HIGH SCHOOL

CEN

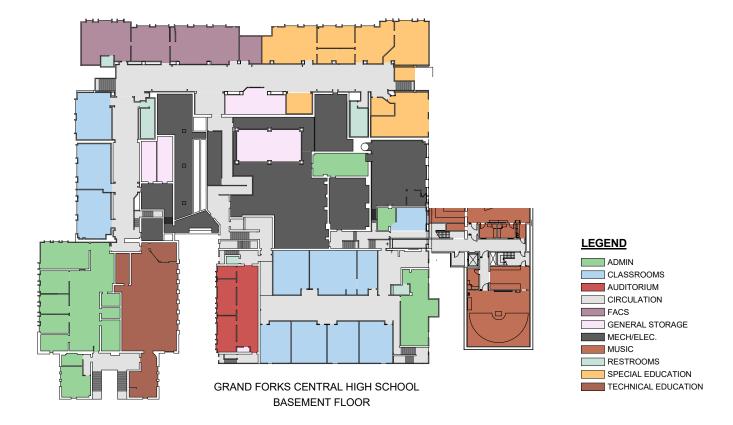
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## FACILITY ASSESSMENT

## **A. EXISTING BUILDING INVENTORY**

Grand Forks Central High School is located at 115 N 4th Street in Grand Forks and is one of two high schools in Grand Forks. The original building's construction was completed in 1917 and several additions and renovations have been completed since. The first addition occurred in 1936, which added an auditorium to the school. Another addition was completed in 1960, with remodeling done to the original building. In 1979, the auditorium was renovated. A gymnasium, pool, and music area were included in a 1985 addition, creating a separate wing of the building. Further remodeling occurred in 1998 and the most recent renovation occurred in 2012 in the auditorium and fine arts area of the building.

Central High School is located in Downtown Grand Forks and is accessible by an alleyway to the north, University Avenue to the southwest, N 5th Street to the southwest, and 1st Avenue N to the southeast. There is a small parking lot designated for staff, a large parking ramp southeast of the building that students can use, and parking on the streets adjacent to the school.

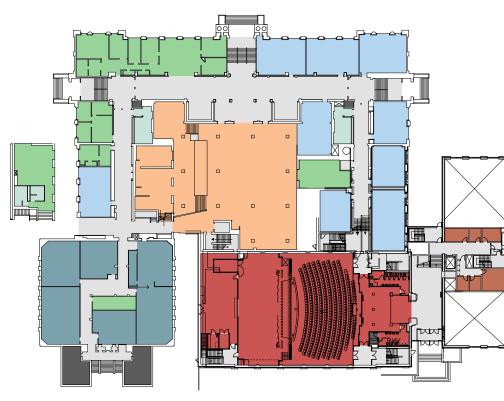


#### **FLOOR PLANS**

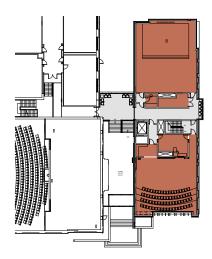
#### **BASEMENT FLOOR**

## **GRAND FORKS CENTRAL HIGH SCHOOL** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

**FLOOR PLANS** 







**FIRST FLOOR** 



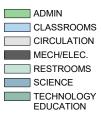
**SECOND FLOOR** 

#### GRAND FORKS CENTRAL HIGH SCHOOL FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

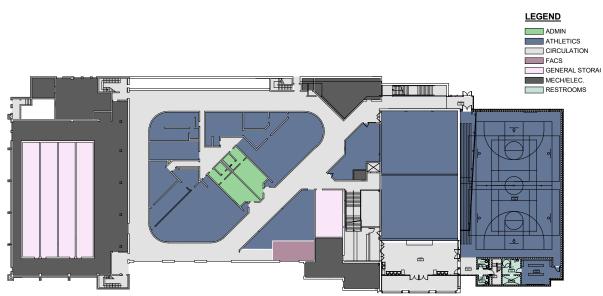
#### **FLOOR PLANS**



#### **LEGEND**



#### THIRD FLOOR

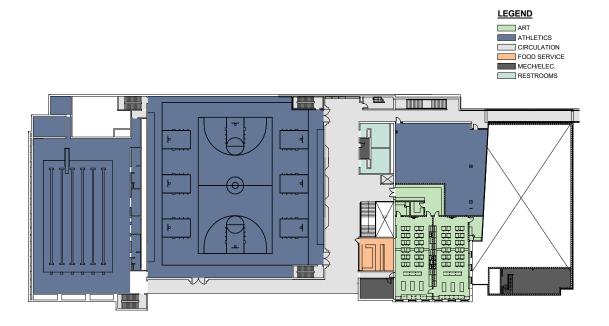


#### INDOOR TRACK/LOCKEROOMS/WEIGHT ROOM/WRESTING ROOM/TRAINING ROOM

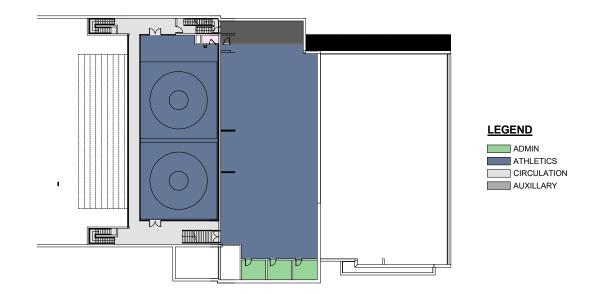
### GRAND FORKS CENTRAL HIGH SCHOOL FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### **FLOOR PLANS**



#### GYMNASIUMS/MUSIC/POOL



**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Grand Forks Central High School's original portion was constructed in 1917 and many renovations and additions have been completed. There are areas in the interior and on the exterior that show signs of wear and tear. Certain finishes, hardware, and appliances in the building are outdated and have seen their end of life. The casework is aged in some areas, but still in good condition (001). Older lockers, such as those located off the commons, are in poor condition, but most other lockers throughout the school are in good condition. Most students do not use the lockers anymore. Overall, for the age of this building, it has been maintained well.

#### SITE

The exterior sidewalks, curbs, and pavement are deteriorating in certain areas (002). On the outside of Door 4, pavers are worn and cracked, exposing the roof and the space below (003).

#### MASONRY

The exterior façade of Central High School can be broken up into three areas: original, athletics, and fine arts. The original building is a combination of large limestone brick and traditional brick. The athletics area of the building is traditional brick and metal panels. The fine arts area of the building is traditional brick, metal paneling, and limestone panels. The limestone brick could undergo cleaning for aesthetics and preservation. There are a few areas where cracks have occurred but have been sealed with caulking. Moisture spots can be seen in multiple locations. The exterior brick surrounding the pool area has suffered severe damage from the moisture in the pool and has been replaced in areas of concern. The pool has since been drained, but the wall assemblies are inadequate to perform as need if the pool is to be filled again. There are several cracks in the brick on the athletics section of the building and the caulking in this area needs attention (004, 005, 006). Many of the weep holes in the brick have been covered. Some dampness in the first few base courses of masonry was observed and could be further investigated to discover the source.

#### ADDITIONAL EXTERIOR MATERIALS

The metal siding is in good condition. Some of the metal flashing on top of the siding was applied edge to edge and not overlapped per manufacturer's written instructions. This should be addressed, as it appears to have caused issues inside the skywalk and will continue to do so in the future.

#### ROOF

Overall, the roof has not had major issues besides some leaking, except for the area of the roof that is over the swimming pool. The roof assembly in this area is a wood structure with copper paneling on top. The wood has suffered severe rotting due to a lack of a vapor barrier and has caused for the copper panels to peel off. The pool is currently drained, but a vapor barrier would have to be added to the roof assembly if the pool were to be filled again.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### ARCHITECTURAL FINISHES CONTINUED

#### **OPENINGS**

General maintenance of the windows is needed as most windows seem to be leaking in the frame. There are some cracked windows in the basement that can be seen from the exterior and the glass panels over Door 13 have broken panels (007). Overall, the doors are in good condition and have the proper hardware required. The only doors with issues are those that have a traditional knob, which need to be switched to ADA compliant handles, and those that do not have proper maneuvering clearances for accessibility.

#### CEILINGS

There are multiple ceiling finishes in the building, which include acoustical ceiling tile (ACT), plaster and gypsum board. The ACT is overall in good condition in most of the classrooms, but there are some areas with water damage (008, 009). Areas of the unpainted gypsum board in the gymnasium also have water damage that is visible (010). In the library, the plaster ceiling has a large crack running through it and paint is peeling from other plastered ceilings in the school (011). There is also notable damage to the ceilings in the theater dressing rooms (012). A section of the ceiling in the pool area was taken out to examine the moisture damage to the roof (013). Options should be considered for the skylights in the building due to expensive and difficult maintenance.

#### WALLS

The walls are mostly masonry and painted gypsum board or plaster. They are in good condition minus a few areas. There are quite a few cosmetic cracks in multiple plaster and brick walls. Several cracks appear to be caused by minor structural shifting (014). A general wall patch repair could be completed to fix any areas of damage or chipping (015). Paint appears to be in good condition with the exception of minor blemishes. Colors appear to be outdated and uncoordinated with other finishes.

#### FLOORING

The flooring is mostly compromised of terrazzo, carpet, and tiling. The terrazzo is in great shape with only a few areas of cosmetic cracking. Some of the carpet has been replaced, but there are still many areas where new carpet is needed (016). All the tile is in good shape. In the athletics area of the building, the surface of the running track is worn very thin and should be replaced. The main gym floor is also very old with uneven patches of the sealant and replacement should be considered (017, 018).

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



## C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

Fire sprinkler systems are installed throughout the majority of the classroom building. A fire suppression system riser and fire department connection were found for the PE building but there looks to be limited distribution and protection within that building. The classroom building cafeteria has some low sidewall sprinkler heads located in column wraps which do not appear to meet NFPA standards for allowable distance between ceiling and sidewall sprinklers. Depending on the level of work performed in either building, sprinkler systems may need to be modified, and it would be required that sprinklers be installed in existing areas that are not currently covered.

#### PLUMBING

The plumbing piping throughout the building is in poor condition and is deteriorated. Some sections of waste and storm piping have recently been replaced or relined where piping has failed. Any remaining waste and storm piping should be replaced to limit future catastrophic failures. Isolation on the domestic water piping is limited and entire building needs to be shut down to isolate and work on upper-level floor piping. Domestic water piping is original to the year the building or addition was constructed.

The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures with the water closets being a mix of tank type and flush valve wall mounted toilets. Maintenance staff reported low water pressure available for upper-level floors which does not allow for flush valves to operate properly. Wall carriers are corroding causing fixtures to pull away from walls and need to be replaced. Wall mounted tank type toilets are beginning to fail, and it is difficult to get replacement parts for. The district has been replacing sensor activated lavatory faucets with manual type as fixtures start to fail. The sink faucets in the classrooms and break rooms are manually operated.

Domestic hot water is produced by three (3) 250 MBH gas fired water heaters with integral storage tanks. Water heaters were installed in 2011 and are in good condition.

Science rooms have glass piping for acid waste/vent system. Glass piping has a tendency to crack and leak. As modifications happen it is recommended that the acid waste/vent system be replaced with CPVC acid rated piping. Neutralization tank in the basement appears to be undersized for the number of fixtures served.

Kitchen plumbing fixtures and piping is relatively new and in good condition. There is no grease interceptor currently installed on the waste line for the three-compartment sink and other grease producing fixtures. It is recommended that a grease interceptor be installed to protect the waste piping system.

The locker rooms have a single water closet and a single urinal for boys' locker rooms and two water closets for girls' locker rooms. A single multiuser restroom is provided off of the main gym. A code study verifying occupant load and required fixture counts should be done for the PE building to verify the number of fixtures is adequate. Showers in locker rooms share common drains which require water pass by adjacent bathers to reach drain.

Domestic water booster pump should be provided to produce adequate operating pressure on upper-level floors to allow proper pressure for flush valve operation. ASSE 1070 compliant thermostatic mixing valves should be added to public lavatories for scald protection.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### HEATING

Heating for the classroom building comes from four (4) non-condensing Thermal Solutions boilers. Boiler and associated pumps were installed in 2011. Multiple circulation pumps and loops are used to distribute hot water throughout the building with the pumps all being of varying ages, but all are in good condition.

Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be mainly welded piping and is in good condition.

Hot water terminal reheat coils are used throughout the building for zoning. Perimeter hot water finned tube radiation is installed in exterior classrooms and offices for supplemental heat. Hot water cabinet unit heater and suspended unit heaters provide heat for vestibules, stairwells, mechanical rooms, and other similar spaces. These are all original to the building and should be replaced with new.

#### VENTILATION AND EXHAUST

The ventilation and exhaust systems in the school include various air handling units, remote duct mounted return fans, packaged rooftop units, and various exhaust fans. The approximately twenty-two (22) air handling units and associated remote return fans original to the classroom and PE buildings are past their useful life and should be replaced. Indoor Air Quality should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates. Existing units have inline starters for fan control, chilled water cooling coils, and pneumatic controls. We recommend these units be replaced with new variable air volume units with VFDs for fan speed modulation, chilled water and heating water coils, and DDC controls. Indoor air handling units for the classroom building are currently installed in stacked mechanical rooms. These spaces are hard to access and may require new units to be installed on roofs or to be consolidated into fewer indoor units in order to re-use the spaces.

Existing pool area air handling unit utilized outside air for dehumidification which limits when during the calendar year dehumidification can take place. Air distribution for the pool utilized wall plenums and construction cavities which leads to condensation and moisture issues. School district to verify in long term planning whether pools will be utilized within the district. If so, we recommend replacing the pool unit with new and running new distribution ductwork.

Ductwork throughout the older portions of the building is original to the building additions and will likely have excessive leakage. Any areas of the building where cooling is proposed will need to have all supply ductwork insulated to meet energy code and limit condensation formation.

Existing wood shop has a utility set fan and bag filter setup for dust collection system located inside the building. The system does not appear to flame suppression or blast relief components. The distribution ductwork layout is efficient and in good condition. School district to determine if CTE spaces are still required in the school building and modify/update as needed.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **AIR CONDITIONING**

Air conditioning systems in the classroom building consist of a water cooled chiller in the basement and a cooling tower on the roof. The water cooled chiller and associated pumps were replaced in 2011 and the cooling tower and pumps were replaced in 2020. Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be mainly welded piping and in good condition. The PE building does not have cooling in most spaces with the only exception being one air handling unit with a remote split system DX condensing unit. Recommend that an air-cooled chiller plant with variable speed base mounted circulation pumps and chilled water piping ran to all air handling units be added to the PE building to meet the requirements of ASHRAE 62.1 for ventilation rates, and ASHREA Standard 55 for cooling and dehumidification.

#### AUTOMATIC TEMPERATURE CONTROLS

Controls throughout the classroom building are pneumatic controls and original to the building. These pneumatic controls offer limited control capability and no ability for monitoring and alarm. There are not proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. The PE building has a new Direct Digital Controls (DDC) system provided by Johnson Controls Inc. (JCI) installed throughout. It is recommended that all existing pneumatic controls be replaced with direct digital controls systems. The DDC system should be integrated with the existing Grand Forks Public School's Building Automation System (BAS). The system would be integrated across the district to allow for single stop monitoring and controls of all buildings in the district.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Power is delivered to facility via multiple electrical services provided by Xcel Energy.
- The main electrical service is provided via 750kVA 480/277V 3-phase padmount transformer located on the south side of the building. Power is routed from the transformer through a CT cabinet that is sitting adjacent to the transformer, and then underground to the main service entrance switchboard. Peak load on this transformer in the past 12 months was 540kW (650A), as provided by Xcel Energy.
- The second electrical service was installed with the 1986 addition and is provided via a 300kVA 480/277V 3-phase
  padmount transformer located at the northeast corner of the building and supplies power to the north addition. Power
  is routed from the transformer to a wall-mounted CT cabinet, and then underground to the main service entrance
  switchboard. Peak loads on this transformer in the past 12 months is 124kW (150A), as provided by Xcel Energy.
- Both services appear to be acceptable, as is. Capacity is more than adequate.
- It was stated by the facilities team that Xcel Energy experiences the occasional loss of phase on the service. This can cause motors to overheat and cause VFD and motor starters to burn up and become unusable. Facilities stated that they have been in contact with Xcel energy about finding a solution to the issue.

#### STANDBY POWER

- Two emergency power generators are located on site.
- The first is located at the interior within the main service entrance space. The generator manufacturer is Kohler and is 480/277V 80KVA. It supplies power for various life safety loads including egress lighting, as well as a few selective mechanical loads.
- The second is located within the basement of the pool area. The generator manufacturer is Kohler and is 480/277V. It supplies power for various life safety loads including egress lighting, as well as a few selective mechanical loads.
- No improvements are suggested to either generator, at this time. Generators appear to have been maintained and tested over time to ensure efficient operation.

#### **POWER DISTRIBUTION**

- The main building service is delivered underground into a 480/277V 3-phase 3000A Cutler Hammer Pow-R-Line C Switchboard that was installed in 1997. Additional sections have been added onto the original switchboard over the years in order to supply added loads. The most recent addition consisting of breaker-style over current devices that was installed in 2016. Power to all areas of the building, outside of the 1986 north addition, is supplied from this main switchboard. This includes various distribution panels, motor control centers, and branch panels. Several pieces of the distribution system, including distribution and branch panels, were updated with the 1998 renovation.
- With peak demand on the service within the past year being 650A, the capacity of the existing switchboard is more than adequate. At this time, there is no recommendation for improvements. At the time of replacement, it is suggested that breaker-type devices are installed in lieu of fused disconnects.
- The second building service is delivered underground into a 480/277V 3-phase 1200A Westinghouse switchboard that was installed in 1986 and is original to the north addition. All power to the 1986 north addition is distributed from this main switchboard.
- The service entrance switchboard at the 1986 addition is well past its useful life and it is recommended that this gear be replaced with a new switchboard with breaker-type overcurrent devices.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



- Several branch panels were noted to have been upgraded and added with the 1998 renovation. Panels that were not replaced were noted to be in fair condition. While several were noted to have plenty of physical capacity available, others were noted to have very little. It was stated by facilities team that it is unknown what several breakers in branch panels around school supply, because of the fact that circuits are added and no labeling is completed at the panels.
- With several panels being well past their useful life, or physically full, it is suggested that these panels be replaced, enlarged, and possibly relocated with any renovation. Several branch panels are located within public circulation areas. While these panels are locked shut, it is suggested that they be relocated to back of house areas for safety reasons.
- In one instance, a two-section motor control center was noted to only be utilizing two buckets out of a possible ten. This comes with the increased usage of VFD's on motors in lieu of the traditional motor starter.
- No improvements are suggested for the motor controls centers. However, it is recommended that, over time, the MCC's be replaced with distribution panel boards and external motor starters.

#### LIGHTING

- While several areas at the interior have been upgraded to LED light fixtures with renovations, the large majority of the building consists of fluorescent and incandescent lighting. Lighting was noted to be less than adequate in several areas, according to Illuminating Engineering Society (IES) recommended lighting levels.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Majority of exterior lighting provided by city-owned pole-mounted street lighting on north, west, and south sides of school. Halogen light fixtures are located at majority of exterior doors, with some doors having LED lighting. A few select doors were noted to have no lighting.
- An upgrade of all exterior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Emergency egress lighting provided via generator or battery back lighting. Exit signage appeared to be adequate. A few select doors to exterior were noted to have no egress lighting, as is required by Building Code.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.
- LIGHTING CONTROL SYSTEMS
- Lighting within large majority of school was noted to be controlled via manual toggle switch. Various areas have been upgraded over the years to automatic lighting controls. Very few areas capable of dimming control.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via centrally-located photocell.
- All exterior lighting control is suggested to be tied into digital lighting management, as outlined in interior lighting portion above.

#### COMMUNICATIONS SYSTEMS

- It was noted by faculty that the backbone cabling between data closets within school had recently been upgraded to 10Gb fiber. Majority of data cabling within school consists of Category 5e cabling, with all newly-installed cabling being Category 6. Telephone systems within majority of classrooms are currently analog. Several wireless access points were noted throughout building. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



- IP phones are located in all classrooms for room-to-room communication.
- Intercom system consists of Simplex 5100 Series Building Communication System. System has the capability of paging specific zones, as desired, but is used primarily for "All-Call" announcements.
- Bell system is operated through intercom system.
- Centrally-controlled clock system is Simplex Time Control Center with clocks located all throughout school. It was stated by faculty that when a Simplex clock becomes unusable, it's typically replaced by an atomic or simple battery-powered clock.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.

#### **SAFETY & SECURITY SYSTEMS**

- With the exception of a few select doors at the interior, it was noted that electronic door security is present on very few doors within building.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel was recently updated to Simplex 4100ES. Panel is capable of voice evacuation, but currently utilized horns throughout school. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices. Several devices appeared to have been updated within the past several years, while others appeared very aged. Areas that are required to have audio/visual notification, per International Building Code, were noted to not have any devices.
- It was stated by the facilities team that, with the continuous additions/extensions of the fire alarm system from addition to addition, the addressable advantages of the system have become increasingly complicated. Even though the system is addressable, it's not always easy to pinpoint where exactly an alarm is coming from without some detailed investigation.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **D. EXISTING DEFICIENCIES**

The analysis of the existing Grand Forks Central High School has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This portion includes assessment of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building are identified and listed below.

- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains. (019)
- Most classroom door approaches in the original portion of the building fail to meet required maneuvering clearances for accessibility. (020)
- Many of the large classrooms in the building lack a required second exit.
- Door hardware throughout the building is not accessible. Most of the non-compliant hardware is on doors in storage areas, janitor closets, mechanical rooms, etc. All classrooms have sufficient door hardware. (021)
- The corridor partition doors with a mullion do not allow sufficient clearance for wheelchairs. (022)
- Many corridor partition doors are missing necessary panic hardware. (023)
- Room signage in the original areas of the building is missing brail and is not ADA compliant.
- Exterior room labeling is incorrect in certain areas, which poses a risk during rescue situations.
- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass. (024)
- All stairs in the original areas of the school are lacking a separate handrail from the guardrail. (025)
- Guardrails at all stairwells do not meet height requirements. (026)
- Handrails on all stairs do not provide the code required extensions at the top and bottom of the stairs. (027)
- Stairs adjacent to the auditorium from the first to the second level exceed 12' in elevation and require an intermediate landing.
- Stairwells lack proper signage within them to show which level someone is on at the landings. (028)
- Landings in the stairwell adjacent to the commons are not deep enough. They need to be as deep as the staircase width. (029)
- Rooms 160, 233, and 323 would be within the stairwells when corridor partition doors are closed and would be open to three levels. This does not follow current fire protection code.
- Stairwells and areas of refuge are missing two-way communication systems.
- Stairwell to the south of the commons/cafeteria has windows on the main level that are not fire-rated, meaning the stairwell is not properly enclosed. (030)
- Stairs adjacent to the staff lounge going down to the basement do not have a handrail.
- The basement has suspended ceilings, which do have sprinklers, but the ceiling structure above is not sprinklered.
- Woodshop in the basement does not have sprinklers.
- Woodshop has no ADA compliant workstations, no accessible sinks, and no accessible eyewash station. (031, 032)
- The pipes underneath the accessible sink in Room 24 are not protected. (033)
- The health professions class (Room 30) does not have an accessible sink. (034)
- Sink in Room 53 is not accessible.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

- Emergency exit in the woodshop should be enclosed within a corridor. The delineated exit requires egress through an intervening space, which is not permitted.
- Interior windows in the commons/cafeteria that face the adjacent stairwell do not have the required safety glass. (035)
- Food service area has many stairs without accessible ramps and most areas lack the sufficient clearances needed. (036)
- The kitchen ceiling tile is not a scrubbable surface, as required by code. (037)
- Both faculty restrooms are not accessible due to the absence of an accessible stall. (038)
- All door hardware in the main office is not accessible.
- Main office lacks an accessible station/desk area. (039)
- The conference room (Room 141) sink is not accessible. (040)
- Restrooms in the basement are not accessible. They lack sufficient clearances and have no accessible stalls.
- Special education restroom in the basement is not accessible as it is lacking all necessary grab bars.
- Both men's and women's restrooms in the main office are not accessible. (041, 042)
- The nurse's office restroom is not accessible as it is lacking sufficient clearances. (043)
- Both men's and women's restroom on the third floor are not accessible due to the absence of accessible stalls.
- Men's restroom on the third floor is lacking a lower, accessible urinal.
- All accessible stalls and restrooms are lacking a vertical grab bar.
- Display cases throughout the school do not have required safety glass. (044)
- The walls in the offices in Rooms 228 and 317 do not allow sufficient clearances for accessibility. (045, 046)
- Classrooms with interior windows to the commons area are missing sprinklers 12" from the windows for fire safety.
- All science labs in the building and the biology office in Room 306 are missing an accessible sink. (047)
- Platforms in the science classrooms only have stairs and are not accessible. (048)
- Eyewash station in the science lab (Room 320) is not accessible. (049)
- Casework within the biology office (Room 306) lacks sufficient clearances for accessibility. (050)
- Ramp in the basement that leads to the renovated fine arts area is missing handrails on both sides of the ramp. (051)
- Women's restroom outside of the auditorium is not accessible due to the absence of an accessible stall.
- Both restrooms adjacent to the dressing rooms are not accessible. (052)
- Sinks in all the dressing rooms are not accessible. (053)
- Art classrooms (Rooms 102 and 103) lack an accessible work area and the sinks do not have enough clearance underneath to comply with ADA standards. (054)
- Cultural kitchen (Room 83) lacks an accessible workstation. (055)
- Sink in the staff lounge in the basement is not accessible. (056)
- Ramp to the athletics wing of the building is too steep, as it does not have the necessary intermediate landing, and lacks handrails on both sides. (057)
- Walkway to the athletics wing is not sprinklered. (058)
- End doors before entering the athletics wing should have an illuminated exit sign. (059)
- The guardrail and handrails on the stairs leading up to the wrestling room do not meet height requirements. (060)
- Middle handrail is needed on stairs leading up to ROTC gym, as well as a separate handrail from the guardrail. (061)
- Wrestling room and auxiliary gym are not sprinklered. (062, 063)
- Both men's and women's showers in the pool area do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers. (064)
- Both men's and women's restrooms in the pool area are not accessible. They lack sufficient clearances to have an accessible stall. (065)
- Guardrail and handrail for stairwells leading down to the track and locker rooms do not meet code requirements.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

- Per occupancy loads, both the girl's and boy's locker room doors need to swing outwards.
- Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers. (066, 067)
- Door hardware in the locker rooms is not accessible.
- Both the girls' and boys' team locker rooms are not accessible. There is no accessible stall with proper handrails.
- Physical education staff bathrooms and showers are not accessible and do not meet clearance requirements. (068)
- Health classroom in the lower level is not sprinklered.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The casework is aged in some areas, but still in good condition.



The exterior sidewalks, curbs, and pavement are deteriorating in certain areas



On the outside of door 4, pavers are worn and cracked, exposing the roof and the space below.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS





There are several cracks in the brick on the athletics portion of the building and the caulking in this area needs attention.

There are several cracks in the brick on the athletics portion of the building and the caulking in this area needs attention.



There are several cracks in the brick on the athletics portion of the building and the caulking in this area needs attention.



There were some cracked windows in the basement that could be seen from the exterior and the glass panels over door 13 had broken panels.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The ACT is generally in good condition in most of the classrooms, but there are some areas with water damage.



The ACT is generally in good condition in most of the classrooms, but there are some areas with water damage.



Portions of the unpainted gypsum board in the gymnasium also have water damage that is visible.



In the library, the plaster ceiling has a large crack running through it and paint is peeling from other plastered ceilings in the school.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



There is also some notable damage to the ceilings in the theater dressing rooms.



A portion of the ceiling in the pool area was taken out to examine the moisture damage to the roof.



Several cracks appear to be caused by minor structural shifting.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



A general wall patch repair could be completed to fix any areas of damage or chipping.



The main gym floor is also very old with uneven patches of the sealant and replacement should be considered.



Some of the carpet has been replaced, but there are still many areas where new carpet is needed.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The main gym floor is also very old with uneven patches of the sealant and replacement should be considered.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.

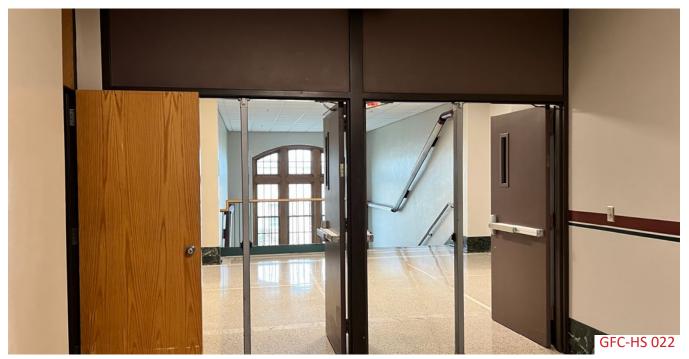


Most classroom door approaches in the original portion of the building fail to meet required maneuvering clearances for accessibility.



Door hardware throughout the building is not accessible. Most of the non-compliant hardware is on doors in storage areas, janitor closets, mechanical rooms, etc. All classrooms have sufficient door hardware.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The corridor partition doors with a mullion do not allow sufficient clearance for wheelchairs.



Many corridor partition doors are missing necessary panic hardware.

## CENTRAL GRAND FORKS CENTRAL HIGH SCHOOL

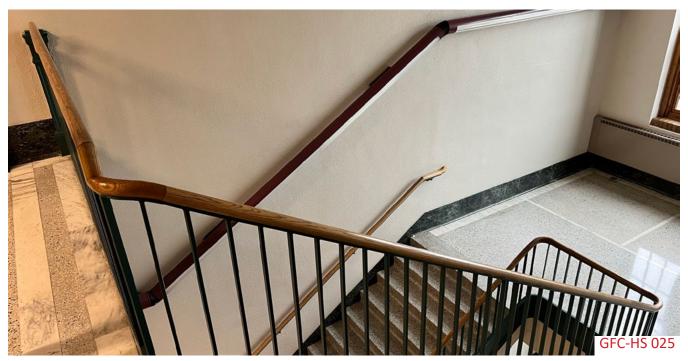
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass.



Handrails on all stairs do not provide the code required extensions at the top and bottom of the stairs.



All stairs in the original areas of the school are lacking a separate handrail from the guardrail.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Guardrails at all stairwells do not meet height requirements.



Stairwells lack proper signage within them to show which level someone is on at the landings.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Landings in the stairwell adjacent to the commons are not deep enough. They need to be as deep as the staircase width.



Stairwell to the south of the commons/cafeteria has windows on the main level that are not fire-rated, meaning the stairwell is not properly enclosed.



Woodshop has no ADA compliant workstations, no accessible sinks, and no accessible eyewash station.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Woodshop has no ADA compliant workstations, no accessible sinks, and no accessible eyewash station.



The pipes underneath the accessible sink in Room 24 are not protected.



The health professions class (Room 30) does not have an accessible sink.



Interior windows in the commons/cafeteria that face the adjacent stairwell do not have the required safety glass.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Food service area has many stairs without accessible ramps and most areas lack the sufficient clearances needed.



The kitchen ceiling tile is not a scrubbable surface, as required by code.



Both faculty restrooms are not accessible due to the absence of an accessible stall.



Main office lacks an accessible station/desk area.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The conference room (Room 141) sink is not accessible.



Both men's and women's restrooms in the main office are not accessible.



Both men's and women's restrooms in the main office are not accessible.



The nurse's office restroom is not accessible as it is lacking sufficient clearances.

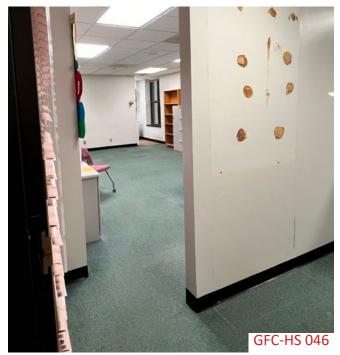
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Display cases throughout the school do not have required safety glass.



The walls in the offices in Rooms 228 and 317 do not allow sufficient clearances for accessibility.



The walls in the offices in Rooms 228 and 317 do not allow sufficient clearances for accessibility.

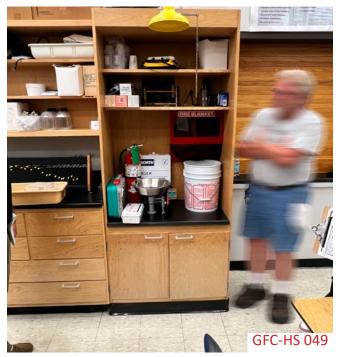
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



All science labs in the building and the biology office in Room 306 are missing an accessible sink.



Platforms in the science classrooms only have stairs and are not accessible.



Eyewash station in the science lab (Room 320) is not accessible.



Ramp in the basement that leads to the renovated fine arts area is missing handrails on both sides of the ramp.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Casework within the biology office (Room 306) lacks sufficient clearances for accessibility.



Both restrooms adjacent to the dressing rooms are not accessible



Sinks in all the dressing rooms are not accessible.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Art classrooms (Rooms 102 and 103) lack an accessible work area and the sinks do not have enough clearance underneath to comply with ADA standards.



Cultural kitchen (Room 83) lacks an accessible workstation.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Sink in the staff lounge in the basement is not accessible.



Ramp to the athletics wing of the building is too steep, as it does not have the necessary intermediate landing, and lacks handrails on both sides.



Walkway to the athletics wing is not sprinklered.



End doors before entering the athletics wing should have an illuminated exit sign.

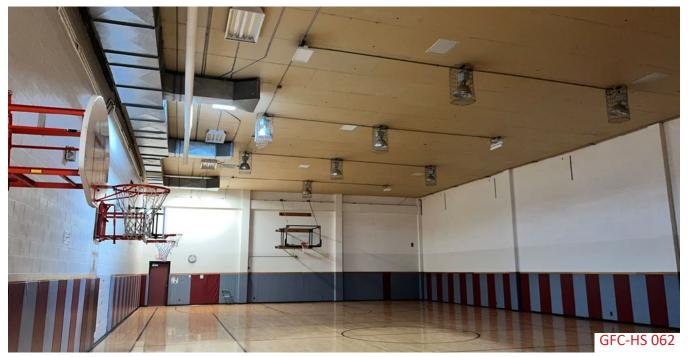
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The guardrail and handrails on the stairs leading up to the wrestling room do not meet height requirements.



Middle handrail is needed on stairs leading up to ROTC gym, as well as a separate handrail from the guardrail.



Wrestling room and auxiliary gym are not sprinklered.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Wrestling room and auxiliary gym are not sprinklered.



Both men's and women's showers in the pool area do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers.



Both men's and women's restrooms in the pool area are not accessible. They lack sufficient clearances to have an accessible stall.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers.



Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers.



Physical education staff bathrooms and showers are not accessible and do not meet clearance requirements.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	14,045 SF	7,792 SF	6,253
Art	3,555 SF	3,390 SF	165
Athletics	52,798 SF	47,320 SF	5,478
Audiotorium	11,335 SF	10,864 SF	471
Business Education	5,068 SF	5,600 SF	-532
Circulation	64,534	79,277 SF	-14,743
Classrooms	28,949 SF	33,150 SF	-4,201
FACS	3,133 SF	4,020 SF	-887
Food Service/Cafeteria	8,888 SF	16,526 SF	-7,638
Library/Media Center	7,574 SF	4,233 SF	3,341
Mechanical/Electrical	22,329 SF	19,819 SF	2,510
Music	9,850 SF	9,255 SF	595
Science	10,278 SF	9,800 SF	478
Restrooms	3,418 SF	6,606 SF	-3,188
Special Education	4,117 SF	6,120 SF	-2,003
Technical Education	4,980 SF	6,620 SF	-1,640
Technology Education	3,297 SF	3,000 SF	297

Total Missing Square Footage -15,244

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### SAFETY/SECURITY

- Alarm and announcement systems need updating.
- Commons area is very small and at times very loud.
  - This is not safe for students and can cause anxiety for students and staff.
- The main office is too small.

#### AIR QUALITY/CONTROL

- There is inconsistent heating and cooling (either very hot or very cold throughout the building.
- There is little to no air movement throughout the hallways.
- Air handlers in the gym don't always work.
- Weight equipment started to rust because of the humidity.

#### LACK OF LEARNING AND SUPPORT SPACES

- Special education spaces are too small.
- Office restrooms are very small.
- There is only one staff restroom in the entire school located in the teachers' lounge.
- There aren't enough private spaces for students.
- There is a need for space for outdoor activities.

#### PARKING

• There are not enough parking spaces for staff.

#### **TOP PRIORITIES**

- 1. Safety and ADA Accessibility Improvements
- 2. Improved HVAC System
- 3. Increased Learning and Support Space (Classrooms, Special Education, Athletics, etc.)

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# Grand Forks, ND 11/2/2022

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Facility Assessment									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Code Compliance									
Add handicap accessible water fountains throughout the building	1	10 Ea	\$21,957.58 / 1	Ea \$219,576					\$219,576
Upgrade door hardware with ADA hardware	2	50 Ea	\$979.96 / 1	Ea \$48,998					\$48,998
Add a second required exit in the large classrooms	з	11 Ea	\$3,911.09 / 1	Ea \$43,022					\$43,022
Upgrade door hardware with ADA hardware for storage areas, janitor closets, mechanical	4	40 Ea	\$997.82 / 1	Ea \$39,913					\$39,913
Repute corridor partition door frames and doors without a mullion to allow sufficient classroof for whealtheirs	S	20 Ea	\$6,095.95 / I	Ea \$121,919					\$121,919
Replace hardware for the corridor partition doors with necessary panic hardware	9	30 Ea	\$1,230.20 /1	Ea \$36,906					\$36,906
Replace room signage in the original areas of the building with ADA compliant signs	7	-	/						\$29,846
Correct the exterior room labeling that is incorrect in certain areas	8	50 Ea	\$125.76 /1	Ea \$6,288					\$6,288
Replace wire glass throughout the building that is no longer up to code (frame to remain)	6	300 Ea	\$544.96 / I	Ea \$163,488					\$163,488
Add a separate handrail to the existing guardrail in all stairs in the original areas of the school	10	320 LF	\$131.40 / 1	LF \$42,048					\$42,048
Replace guardrails in stairwells that are not tall enough for code compliance	11	800 LF	\$311.80 / 1	LF \$249,444					\$249,444
Extend handrails on all stairs that do not extend the required 12" past the stairwells	12	120 LF	\$153.64 / 1	LF \$18,437					\$18,437
Add a landing to the stairs adjacent to the auditorium from the first to the second level that has a 12' increase in elevation (not sure if this is doable)	13	1 Ea	\$163,102.34 / 1	Ea \$163,102					\$163,102
Add necessary signage to stairwells within them to show which level one is on at the landings	14	40 Ea	\$218.53 / 1	Ea \$8,741					\$8,741
Expand landings in the stairwell adjacent to the commons that are not deep enough	15	6 Ea	\$124,852.78 / 1	Ea \$749,117					\$749,117
Remodel the entrances of rooms 160, 221, 233, 310, and 323 since they are within the stairwells when corridor partition doors are closed and would be open to three levels. This does not follow current fire protection code.	16	2 Ea	\$57,124.85 / I	Ea \$285,624					\$285,624
Add two-way communication systems to stairwells and areas of refuge	17	1 Ea	\$125,471.89 / 1	Ea \$125,472					\$125,472
Replace windows located on the main level in the stairwell south to the	18	2 Ea	\$7,614.91 / I	Ea \$15,230					\$15,230
commons/cafeteria with fire-rated glazing Add handrails to the stairs that are adjacent to the staff lounge going down to the	19	40 LF	\$120.28 / LF	.F \$4,811					\$4,811
Add sprinklers (and new water service) to the ceiling structure above that is not sprinklered in the basement (is this only for GFC LL or is this also needed for the fine arts and whether cost)	20	56,675 SF	\$13.03 / \$	/ SF \$738,369					\$738,369
and admictures of each. Add sprinklers in the woodshop in the basement	21	3,025 SF	\$7.55 / \$	SF \$22,848					\$22,848
In the Woodshop, add an ADA compliant workstations, accessible sink, and accessible evewash station	22	1 Ea	/	Ea \$28,704				×	\$28,704
Protect the pipes underneath the accessible sink in Room 24 with a removable PLAM Panel	23	1 Ea	\$1,268.76 / I	Ea \$1,269				×	\$1,269
Replace casework (10 If of base, top, and upper cabinets) in the health professions class (Room 30) to create an accessible sink	24	1 Ea	\$16,905.00 / I	Ea \$16,905				×	\$16,905
Replace casework (10 If of base, top, and upper cabinets) in the room 53 to create an accessible sink	25	1 Ea	\$16,905.06 / I	Ea \$16,905				х	\$16,905
Create a corridor for the emergency exit in the woodshop	26	1 Ea	/	Ea \$24,561					\$24,561
Replace interior windows in the commons/cafeteria that face the stairwell adjacent with the required tempered glass for safety	27	4 Ea	\$3,578.80 / 1	Ea \$14,315					\$14,315

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# Grand Forks Central High School Grand Forks, ND 11/2/2022



Facility Assessment									J		
Description	ltem Number	Takeoff Qty	Total (	Total Cost/Unit		5 yr Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Add wheel chair lifts in the food service area that has many stairs without accessible ramps	28	1	Ea \$81,556.74	6.74 /	Ea	\$81,557					\$81,557
Replace the ceiling in the kitchen with a scrubbable surface (including serving line and	29	2,875 S	SF \$	\$10.53 /	SF	\$30,283					\$30,283
Remove the toilet partitions to make the faculty restrooms ADA accessible	30	2 E	Ea \$7,1:	\$7,110.30 /	Ea	\$14,221					\$14,221
Replace doorknobs in the main office on the main level with ADA compliant hardware	31	20 E	Ea \$9(	\$908.51 /	Ea	\$18,170					\$18,170
Create one accessible station/desk area in the main office	32	1	Ea \$8,0:	\$8,018.49 /	Ea	\$8,018					\$8,018
Replace casework (9 If of base, top, and upper cabinet) in the conference room (Room 141) to make the sink accessible	33	1	Ea \$16,102.05	/	Ea	\$16,102				×	\$16,102
Remodel the restrooms in the basement that lack sufficient clearances for accessibility and have no accessible stalls (with in the existing bathroom footprint)	34	2	Ea \$40,010.86	.0.86 /	Ea	\$80,022				×	\$80,022
Add necessary grab bars in the special education restroom in the basement	35	1	Ea \$55	\$594.16 /	Ea	\$594					\$594
Create ADA compliant men's and women's restrooms in the main office by shrinking the offices adjacent to them	36	300 5	SF \$29	\$296.47 /	SF	\$88,941				×	\$88,941
Remodel the nurse's office restroom to create sufficient clearances for accessibility	37	50 S	SF \$64	\$640.90 /	SF	\$32,045					\$32,045
Move toilet stalls around in the men's and women's restroom on the third floor to create accessible stalls	38	2 E	Ea \$26,912.38	2.38 /	Ea	\$53,825					\$53,825
in the men's restroom on the third floor, add a lower accessible urinal as well as grab bars adiacent to the urinal	39	1 E	Ea \$9,72	\$9,728.07 /	Ea	\$9,728					\$9,728
Add vertical grab bars in all accessible stalls and restrooms	40	100 E	Ea \$15	\$158.84 /	Ea	\$15,884					\$15,884
Replace the glass in the display cases throughout the school with the required tempered place	41	10 E	Ea \$4,5:	\$4,516.99 /	Ea	\$45,170					\$45,170
accessibility	42	2 E	Ea \$3,55	\$3,551.45 /	Ea	\$7,103					\$7,103
modely sprinklers in the classrooms with interior windows to the commons area for fire sefery	43	9	Ea \$1,08	\$1,085.94 /	Ea	\$9,773					\$9,773
Create an ADA sink in all science labs in the building and the biology office in room (10 If of base and too per room)	44	8	Ea \$14,970.94	/	Ea	\$119,768				×	\$119,768
Build wood ramp (12ft x 5ft) to the platform in the science classroom	45	60 S	SF \$(	\$61.92 /	SF	\$3,715					\$3,715
Add an accessible eyewash station in the science lab (Room 320)	46	1 E	Ea \$12,547.20	/	Ea	\$12,547					\$12,547
Create a ADA workstation in the biology office (Room 306) by replacing the lower casework and top (61f)	47	1	Ea \$7,03	\$7,023.06 /	Ea	\$7,023				×	\$7,023
Add handrails to the ramp in the basement to the renovated fine arts area	48	50 L	LF \$12	\$120.28 /	L,	\$6,014					\$6,014
Move toilet stalls in the women's restroom outside of auditorium to create accessible stall.	49	1	Ea \$10,557.66	/	Ea	\$10,558					\$10,558
Create ADA accessible restrooms adjacent to the dressing rooms by expanding room into adjacent space (does not include major structural modifications)	50	2 E	Ea \$38,045.53	5.53 /	Ea	\$76,091				×	\$76,091
Create an ADA accessible sink in one of dressing rooms by replacing 3ft of base cabinets and top	51	1 E	Ea \$10,164.15	64.15 /	Ea	\$10,164				х	\$10,164
Replace casework (6if of base cabinet and top)in Art classrooms (Rooms 102 and 103) to create an accessible work area with ADA comoliant sinks	52	2 E	Ea \$15,075.26	/	Ea	\$30,151				×	\$30,151
Replace casework (12lf of lower cabinets, top, and upper in cultural kitchen to create an accessible workstation	53	1	Ea \$18,598.10	/	Ea	\$18,598				×	\$18,598
Replace casework (10 If of base cabinet and top) and sink in the staff lounge in the basement to make it ADA accessible	54	1 E	Ea \$14,077.83	/	Ea	\$14,078				х	\$14,078

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Facility Assessment									
	ltem .				5 yrs Deferred	10 yrs	Educational	Synergistic with other	
lding by adding an	55	1akeoff Qty 800 SF	\$191.67	SF \$153,336	36 Maint	Deterred Maint	Adequacy	neeas	<b>1 otal Cost</b> \$153,336
intermediate landing, and add handrails (is this even feasible) Add an illuminated exit sign to the end doors hefore entering the athletics	56	2 Fa	\$1 882 08 /	Fa \$3.764	64				¢3.764
Add a lower water fountain in the weight room	57	-	\$21,957.58 /	V	58				\$21,958
Add a guardrail on top of the CMU on the stairs leading up to the wrestling room and raise existing handrails.	58	1 Ea	\$6,436.61 /	Ea \$6,437	37				\$6,437
Add a middle handrail on stairs leading up to ROTC gym as well as adding a separate handrail from the guardrail	59	1 LF	\$14,457.61 /	LF \$14,458	58				\$14,458
Remove and replace concrete in men's and women's showers in the pool area so each individual showerhead can have its own drain per code	60	2 Ea	\$31,868.96 /	Ea \$63,738	38				\$63,738
In the men's and women's restrooms in the pool, expand bathroom into existing area to gain sufficient clearances.	61	2 Ea	\$25,193.08 /	Ea \$50,386	86				\$50,386
Replace guardrail and handrail for stairwells leading down to track and locker rooms	62	120 LF	\$175.55	/ LF \$21,066	66				\$21,066
Replace door swing (outward) in the girls' and boys' locker room	63	2 Ea	\$3,601.24	/ Ea \$7,202	02				\$7,202
Remove and replace concrete in all locker rooms showers that so each shower head has an individual drain	64	2 Ea	\$73,711.64	Ea \$147,423	.23			×	\$147,423
Upgrade door hardware in the locker rooms with ADA hardware	65	10 Ea	\$908.51 /	Ea \$9,085	85				\$9,085
Remodel the girls' and boys' team locker room restrooms to create an accessible stall with	99	2 Ea	\$20,638.79 /	Ea \$41,278	78			×	\$41,278
proper nationalis. Remodel physical education staff bathrooms and showers to create an ADA compliant	67	2 Ea	\$62,735.94 /	Ea \$125,472	72			>	\$125,472
restrooms by expanding into existing spaces								<	
Total Code Compliance		316,568 SF	\$14.91	SF \$4,721,600		\$0 \$0	\$0	\$0	\$4,721,600
Security	-								
Administration Office Relocation and Secure Entrance (Remodel)	68		\$667.36 /				\$2,299,038	×	\$2,299,038
Total Security		3,445 SF	\$667.36 <i> </i>	SF	\$0 \$(	\$0 \$0	\$2,299,038		\$2,299,038
Addition/Remodel (Educational Adequacy)									
Administration	69	SF	\$339.20	/ SF			\$0		\$0
Art	70	SF	\$351.74 <i>\</i>	/ SF			0\$		¢
Athletics	71	SF	\$360.52 /	SF			\$0		\$0
Auditorium	72	SF	\$485.35 /	SF			\$0		\$0
Business Education	73	532 SF	\$376.82 <i>i</i>	' SF			\$200,468		\$200,468
Circulation	74	14,743 SF	\$376.83	/ SF			\$5,555,648		\$5,555,648
Classrooms	75	4,201 SF	\$376.82 /	SF			\$1,583,017		\$1,583,017
Common Spaces	76	SF	\$393.12 /	SF			0\$		¢\$
FACS	77	887 SF	\$393.12 <i>\</i>	/ SF			\$348,698		\$348,698
Food Service/Cafeteria	78	7,638 SF	\$458.33 /	/ SF			\$3,500,704		\$3,500,704
Library/Media Center	79	SF	\$395.63 /	' SF			\$0		\$0
Mechanical/Electrical	80	SF	\$307.85	SF			0\$		\$0
Music	81	SF	\$401.90 \	/ SF			\$0		\$0
Restrooms	82	3,188 SF	\$464.61 /	' SF			\$1,481,183		\$1,481,183
Science	83	SF	\$431.99 <i>/</i>	SF			\$0		\$0
Special Education	84	2,003 SF	\$340.28 /	' SF			\$681,573		\$681,573
Technical Education	85	1,640 SF	\$381.83	/ SF			\$626,209		\$626,209

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# Grand Forks Central High School Grand Forks, ND 11/2/2022



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Facility Assessment									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	t	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Technology Education	86	SF	\$394.37	/ SF			\$0		\$0
Total Adequacy		34,832 SF	\$401.2 <b>8</b>	SF	\$0 \$0	\$0	\$13,977,500		\$13,977,500
Capital Maintenance									
Interior Upgrades									
Replace certain finishes, hardware, and appliances in the building are outdated.	87	316,568 SF	\$26.35 /	SF	\$8,341,567			×	\$8,341,567
Replace aged casework in 40 classrooms (20lf base, top, and upper assumed in each class room	88	2,400 LF	\$389.57 /	/ rt	\$934,976			Х	\$934,976
Replace the older lockers (9 locker areas in the original building, 50 lockers per locker area, cional view	68	450 Ea	\$785.20 /	Ea	\$353,341				\$353,341
Replace ACT in classrooms with water damage (assumed 20 classrooms averaging 936 sf)	06	18,720 SF	\$9.20 /	/ SF	\$172,141				\$172,141
Patch and paint the unpainted gypsum board in the gymnasium that has water damage	91	14,175 SF	\$7.53 /	/ SF	\$106,722				\$106,722
Repair the large crack in the plaster ceiling In the library and paint	92	1 Ea	\$29,713.91 /	Ea	\$29,714				\$29,714
Repair the damage to the ceilings in the theater dressing rooms	93	1,000 SF	\$5.02 /	SF	\$5,019				\$5,019
Repair the portion of the ceiling in the pool area was taken out to examine the moisture damage to the roof	94	1 Ea	\$12,548.10 /	/ Ea	\$12,548				\$12,548
Remove skylight (50ft x 50ft) and infill with joists decking and roof (similar to RRHS)	95	2,500 SF	\$379.55 /	SF	\$948,884				\$948,884
Repair cracks in plaster and brick walls	96	316,568 SF	\$1.25 /	/ SF	\$397,233				\$397,233
A general wall patch repair to fix any areas of damage or chipping	97	316,568 SF	\$0.94 /	SF	\$297,925				\$297,925
Repair cracking in the terrazzo floor	98	1 Ea	\$62,740.53 /	Ea	\$62,741				\$62,741
Replace ageing carpet in 20 classrooms	66	18,720 SF		SF	\$193,997				\$193,997
Replace running track in the athletics area of the building	100	6,250 SF		SF	\$124,640				\$124,640
Replace the gym floor in the main gym floor that is also very old	101	14,175 SF	\$22.17 /	SF	\$314,288				\$314,288
Interior Upgrades Subtotal		316,568 SF	\$38.84 /	SF					\$12,295,734
Exterior Upgrades									
Replace some of the exterior sidewalks, curbs, and pavement that are in rough condition	102	8,000 SF	\$19.99 /	/ SF \$159,925	925				\$159,925
Remove pavers the outside of door 4 and replace with concrete	103	400 SF	\$49.93 /	SF \$19,972	972				\$19,972
Clean the limestone brick could undergo for aesthetic purposes.	104	9,000 SF		SF	\$169,399				\$169,399
Reseal caulking where cracks have occurred in the brick	105	5,000 SF	\$13.80 /	SF	\$69,015				\$69,015
Clean moisture spots that can be seen in multiple locations in the brick.	106	10,000 SF		SF	\$188,222				\$188,222
Remove all of the exterior brick surrounding the pool, add proper moister barrier, cavity insulation and new face brick in area has suffered severe damage from the moisture in the pool (nothing figured for the interior of the building)	107	10,500 SF	\$77.88	/ SF	\$817,699				\$817,699
Retouch the caulking in the several cracks in the brick on the athletics portion of the building and the caulking	108	1,000 SF	\$194.50 /	/ SF	\$194,496				\$194,496
Expose the weepholes in the brick that have been covered.	109	1,000 SF	\$62.74 /	SF	\$62,741				\$62,741
Clean the traditional brick that has some rising damp portions	110	1,000 SF	\$62.74 /	SF	\$62,741				\$62,741
Redo the metal flashing on top of the siding that was applied edge to edge and not overlapped how it should be	111	875 LF		/ LF \$24,584	584				\$24,584
Replace the roof assembly in the pool section with metal joist and deck and a proper vapor barrier	112	10,000 SF	\$174.68 /	/ SF	\$1,746,775			×	\$1,746,775

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# Grand Forks Central High School Grand Forks, ND 11/2/2022



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Description	ltem Number	Takeoff Qty	Total Cost/Unit		Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	with other needs	Total Cost
General maintenance of the windows as needed that appear to be leaking in the frame	113	258 Ea	\$501.92 <i> </i>	Ea	\$129,496					\$129,496
Replace windows in the basement and broken glazing at door 13	114	4 Ea	\$4,166.04 /	Ea	\$16,664					\$16,664
Replace the roof when it nears the end of its useable lifetime	115	110,244 SF	\$30.71 /	SF		\$3,385,593	~		×	\$3,385,593
Upgrade exterior door hardware with ADA hardware	116	10 Ea	\$908.55 /	/ Ea	\$9,086					\$9,086
Exterior Upgrades Subtotal		316,568 SF	\$22.29	/ SF						\$7,056,407
Electrical Upgrades										
Gear to be replaced with a new switchboard with breaker-type overcurrent devices in the service entrance switchboard at the 1986 addition that is well past its useful life	117	92,497 SF	\$2.88 /	SF	\$266,647					\$266,647
Replace, enlarge and relocate several panels that are well past their useful life, or obvisically full.	118	316,568 SF	\$1.28 /	SF	\$404,405					\$404,405
Upgrade of all interior lighting controls throughout to digital lighting management	119	316,568 SF	\$1.88 /	SF	\$595,849					\$595,849
Upgrade of all exterior lighting controls throughout to digital lighting management	120	316,568 SF	\$0.19 <i>/</i>	SF	\$59,585					\$59,585
Update the existing intercom system with a new IP system throughout entire school.	121	316,568 SF	\$1.88 /	SF		\$595,849				\$595,849
Add additional door security all exterior doors with access control and monitoring	122	316,568 SF	\$0.30 /	SF	\$94,111					\$94,111
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Buildine Code	123	316,568 SF	\$0.69 /	SF	\$218,478					\$218,478
Add egress lighting to doors to exterior as is required by Building Code	124	316,568 SF	\$0.04 /	SF	\$12,548					\$12,548
Electrical Upgrades Subtotal		316,568 SF	\$7.10 /	SF						\$2,247,473
Mechanical Upgrades										
Add sprinklers to the walkway to the athletics wing (no new water service)	125	640 SF	\$7.53 /	SF	\$4,818					\$4,818
Add sprinklers to the wrestling room and auxiliary gym (no new water service)	126	10,750 SF		SF	\$101,820					\$101,820
Add sprinklers to the health classroom in the lower level	127	635 SF	\$11.31 /	SF	\$7,185					\$7,185
Modify existing sprinklers to meet NFPA standards (not including costs of areas above that are not sprinkled)	128	316,568 SF	\$0.63 /	SF	\$198,616				×	\$198,616
Replace waste and storm piping to limit future catastrophic failures and add isolation on the domestic water piping	129	316,568 SF	\$8.78 <i> </i>	SF	\$2,780,630				×	\$2,780,630
Upgrade plumbing fixtures including wall carriers, and wall mounted tank type toilets that	130	316,568 SF	\$1.25 /	SF	\$397,233				×	\$397,233
are beginning to rail and narto get replacement parts for Replaced acid waste/vent system with CVC acid rated piping and upgrade the Replaciation stability the hecomore for the criano come	131	1 LS	\$156,851.30 /	SI	\$156,851					\$156,851
Add grease interceptor in the kitchen	132	1 LS	\$37,644.30 /	LS	\$37,644					\$37,644
Add domestic water booster pump to the third floor and add thermotactic mixing valves to the nublic lavatories for scald non-retion	133	316,568 SF	\$0.19 /	SF		\$59,585	10			\$59,585
Replace original radiators and cabinet unit heaters	134	316,568 SF	\$6.90 /	SF		\$2,184,780	0			\$2,184,780
Replace the 22 air handling units that are past their useful life, upgrade with new variable air volume unites with VFDs for fan speed modulation, chilled water and heating coils	135	316,568 SF	\$11.23 <i>/</i>	SF		\$3,555,048	8			\$3,555,048
Replace pool dehumidification with a new distribution ductwork	136	1 LS	\$313,702.57 /	LS		\$313,703				\$313,703
Replace ductwork in the older portions of building that have excessive leaking and replace cooling supply ductwork	137	316,568 SF	\$7.53	/ SF	\$2,383,397					\$2,383,397

Grand Forks Central High School Grand Forks, ND 11/2/2022								-85	CONSTRUCTION	
Facility Assessment										
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Jnit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Add a flame suppression or blast relief system to the existing wood shop dust collection	138	1 LS	\$ \$62,740.51	/ 15	\$62,741					\$62,741
Add an air cooled chiller plant with variable speed base mounted circulation pumps and chilled water piping for the PE building	139	316,568 SF	: \$4.40	/ SF			\$1,392,839			\$1,392,839
Replace all existing pneumatic controls with a direct digital control system	140	316,568 SF	: \$12.00	/ SF			\$3,799,150			\$3,799,150
Mechanical Upgrades Subtotal		316,568 SF	: \$55.08	/ SF						\$17,436,040
Total Capital Maintenance		316,568 SF	F \$123.31	/ SF	\$8,142,286	\$25,701,379	\$5,191,989	\$0		\$39,035,654
Total Construction Cost		354,845 SF	F \$169.18 / SF	/ SF	\$12,863,886	\$25,701,379	\$5,191,989	\$16,276,539		\$60,033,792
*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	litions, CM f	ees, permits, i	insurances, bond	s, taxes						
Contingencies & Soft Costs										
Design Contingency	141	5.0%			\$643,194.28	\$1,285,068.94	\$259,599.47	\$813,826.93		\$3,001,690
Construction Contingency	142	5.0%			\$643,194.28	\$1,285,068.94	\$259,599.47	\$813,826.93		\$3,001,690
Escalation	143	0.0%			\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	144	7.0%			\$900,471.99	\$1,799,096.51	\$363,439.26	\$1,139,357.70		\$4,202,365
FF & E	145	2.0%			\$257,277.71	\$514,027.57	\$103,839.79	\$325,530.77		\$1,200,676
Owner Contingency	146	1.5%			\$192,958.28	\$385,520.68	\$77,879.84	\$244,148.08		\$900,507
Total Contingencies & Soft Costs					\$2,637,097	\$5,268,783	\$1,064,358	\$3,336,690		\$12,306,927
Total Facility Assessment Cost Estimate		354,845 SF	F \$203.87	SF	\$15,500,982	\$30,970,161	\$6,256,347	\$19,613,229		\$72,340,720
Total Critical & Educational Adequacy		354,845 SF	F \$98.96	SF						\$35,114,211

# COST ANALYSIS CONTINUED

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C. MECHANICAL/ELECTRICAL ASSESSMENT	56
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# RHS RED RIVER HIGH SCHOOL

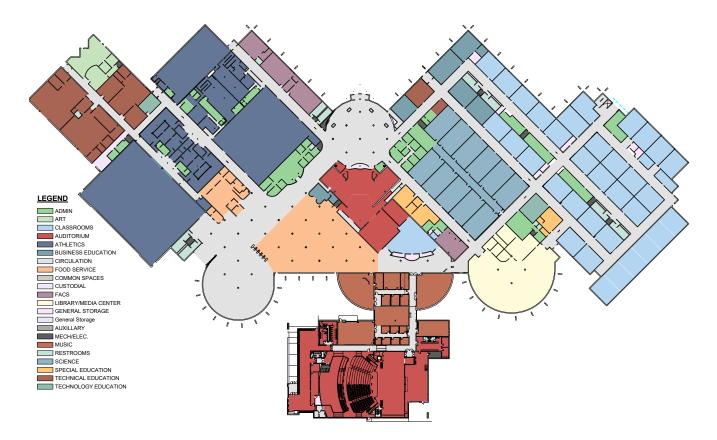
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **FACILITY ASSESSMENT**

# **A. EXISTING BUILDING INVENTORY**

Red River High School is located at 2211 17th Avenue S in Grand Forks and was built in 1967. An addition was added in 1995, to accommodate ninth grade moving into the building. This addition included new common spaces, classrooms, and a gymnasium. The Performance Hall was completed in 2013, adding an auditorium and musical support spaces to the school. There are six softball and baseball fields to the west of the school, a track with a turf infield to the southwest of the school, and numerous grass fields directly south of the school. The Eagles Arena and Blue Line Club Arena are located directly west of the track complex and houses ice hockey rinks used by the District.

The main building is accessible by S 25th Street to the west, 17th Avenue S to the north, 20th Avenue S to the south, and Knudsvig Drive that runs between the high school and the track. There are faculty parking lots to the north and east sides of the school and student parking lots to the west.

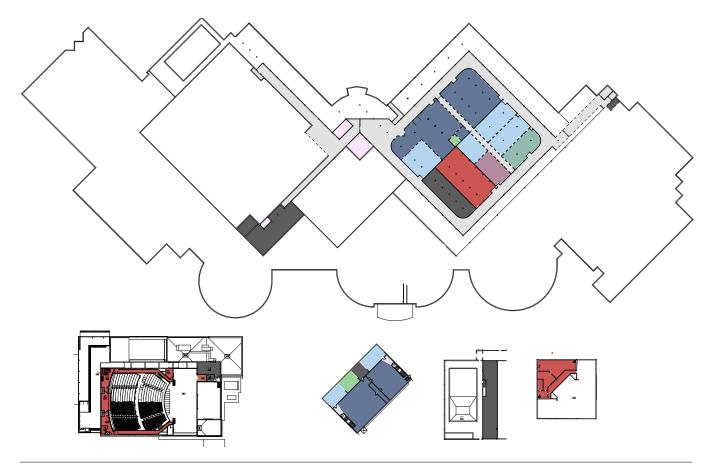


#### **FLOOR PLANS**

#### MAIN FLOOR

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### **FLOOR PLANS**



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UPPER AND LOWER OVERALL FLOOR PLAN
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**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **B. ARCHITECTURAL FINISHES**

#### SUMMARY

The original building of Red River High School was built in 1967 and a major addition occurred in 1995. A current issue with the school is their pool, which is not filled because the filter can no longer be welded to and cannot be repaired. The aquatics room is currently being used as storage (001). The District is hesitant to fix the entire pool system because the pool is not big enough to host meets, so if the school were to fill in the pool, a change in programming for that area would be necessary. The building is in good condition, but there is typical depreciation seen within the school and areas that need a refresh.

The original casework of the building (002) and fixtures in the library (003) are dated and replacement should be considered. Renovation is recommended for the training room (Room 603) (004) and the coaches office (005). Metal partitions near the main gym should be removed to ensure the stairwell always stays open (006). Countertops in the art classrooms have wear and tear damage. The Rider Room needs new hardware and seating as it is currently out of date (007, 008).

#### SITE

Large portions of the concrete work outside of the school are in poor condition. The concrete drives could use some attention, but the curb has been heavily damaged by snowplows and should be replaced or repaired (009). The concrete pads outside of Doors 9 (010), 10, and 16 (011) are cracked and/or sinking. All pads should be checked to ensure adequate conditions. The concrete pads at Doors 7 and 17 should connect to public walkways in case of an evacuation.

#### MASONRY

The exterior of the building is either traditional brick or limestone brick. No visible issues were seen with the exterior brick. Many of the interior walls are painted concrete masonry units (CMU). The caulking in the CMU near the music rooms appears to be lifting and should be redone (012, 013). There is cracking in the CMU wall in the locker rooms that can be seen from both sides (014, 015).

#### ADDITIONAL EXTERIOR MATERIALS

Exterior walls of the Performance Hall addition have siding above the brick. There is also siding on exterior walls of the stage and support spaces, where the walls rise above the surrounding roof. All siding appears to be in good condition.

#### ROOF

Roof repair has only been done in patches, otherwise, all of the roof is from 1995. A roof replacement needs to occur in the near future as the current roof's life expectancy is coming close. Green roof and siding near the north entrance of the school should be repainted because it is multiple shades of green.

#### **OPENINGS**

The exterior sealing of the building could use some attention to secure the barrier of the building. The weather stripping in the openings in the automotive and manufacturing/production classrooms are in poor condition and need to be redone (016). There is a large hole in the garage door in the automotive classroom (017). Many of the metal doors to the exterior are rusted badly on the bottom and should get replaced (018). The interior windows to the main office have poor sealing that need retouching (019).

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### ARCHITECTURAL FINISHES CONTINUED

#### CEILINGS

The acoustical ceiling tiles (ACT) are in poor condition in many areas of the building. Rusting can be seen in the grids in the health classroom and numerous spots have noticeable water damage (020, 021). There are areas of the ceiling that are damaged and have tiles falling off in the locker rooms (022) and the original auditorium. The soffits on the exterior portion of the main entrance are deteriorating (023) and the gypsum board in the vestibule is also compromised (024). All ceiling that is at risk of falling should be repaired to prevent accidents in the future. Removing and filling the skylight is recommended as it is difficult and expensive to maintain.

#### WALLS

The interior walls are typically painted CMU, painted gypsum board, or gypsum board covered in vinyl. The vinyl wall covering should be removed as it is peeling up throughout the school (025). The women's physical education locker room could use corner guards and other corners should be inspected to see where future damage can be prevented (026). There is a hole in the custodial closet in the 500 hall that should be repaired to stop water from entering the wall assembly. The piping and fire sprinklers in the basement walls have deteriorated the CMU walls where they are inserted (027, 028). The painted gypsum board in the individual music practice rooms (030) and outside the renovated auditorium (029) needs a general repair as it is damaged and chipping.

#### FLOORING

The typical flooring in Red River High School is either carpeting or various types of tiles. Much of the carpeting in the classrooms has been replaced, but the corridors still need to be redone (031, 032). All of the brown ceramic and vinyl composition tile in the building is outdated and should get replaced (033, 034). The vestibule tiles are in especially bad condition (035) and the Door 7 vestibule is missing tiles (036). The main gym floor is nearing its life expectancy, but has been very well maintained, so a new gym floor has less precedence. The tile is ripped up in numerous art and technological education classrooms because there was a chemical issue (037, 038). New baseboards and tile should be placed in this area, or the current polished concrete floors should be refined to look more finished. The running track material in the basement is lifting up in several spots and needs to be replaced (039).

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



# C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

Fire sprinkler systems are installed throughout the basement and the performing art spaces in the building. The rest of the building does not have any fire suppression system installed. The performing arts area fire protection service has a fire pump to deliver required flow. Hose connections are provided on both sides of the stage for fire suppression.

Depending on the level of work performed in the building, sprinkler systems may need to be modified, and it would be required that sprinklers be installed in existing areas that are not currently covered.

#### PLUMBING

Plumbing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in exposed spaces appear to be in relatively good condition. School maintenance staff reported that there have not been issues with the plumbing piping leaking or the piping deteriorating to the point of causing blockage.

The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures with the water closets being wall mounted manual flush valve operated toilets. Urinals and lavatories are manual operated. The sink faucets in the classrooms and break rooms are manually operated.

Domestic hot water for the building is produced by two (2) 500 MBH gas fired water heaters with integral storage tanks. Water heaters were installed in 2020 and are in good condition. Two (2) 432 gallon storage tanks of the same age are provided for additional stored hot water capacity. A thermostatic master mixing valve tempers the hot water to 130 deg F for distribution through the building.

Science rooms have CPVC piping for acid waste/vent system. Neutralization tank for the system is located in the basement. The kitchen three compartment sink has a above grade grease interceptor installed to protect the waste piping system. The auto shop did not appear to have any oil/inflammable waste traps.

Locker rooms are provided with thermostatic mixing valves to temper the hot water to the showers to limit scald potential. Shower rooms are laid out with shower heads and controls along perimeter walls with a central drain in the middle of the room. This causes bath water to pass by other bathers to reach the drain. Recommend separate drains be provided for each shower stall to meet plumbing code requirements.

Thermostatic mixing valves meeting ASSE 1070 requirements should be added to public lavatories for scald protection.

#### HEATING

Heating for most of the building comes from three (3) condensing Thermal Solutions AMP-4000 boilers. Boilers, heating system pumps, and mechanical room piping were installed in 2020. The performing arts wing has a

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



separate boiler plant consisting of three (3) Weil McLain 750 BMH boilers and circulating pumps. The performing arts boiler plant was installed in 2011.

Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in good condition.

Perimeter hot water finned tube radiation is installed in exterior classrooms and offices for supplemental heat. Hot water cabinet unit heater and suspended unit heaters provide heat for vestibules, stairwells, mechanical rooms, and other similar spaces.

Heat exchangers are provided between the heating water and the heat pump water piping loops. Heat from the boiler plants is transferred to the heat pump loop as the heat pump loop temperature drops.

#### VENTILATION AND EXHAUST

The ventilation and exhaust systems in the school include various air handling units, remote duct mounted return fans, packaged rooftop units, energy recovery units, unitary heat pumps and various exhaust fans. Two (2) air handling units serving the gymnasium space are original to the building from the 1973 and two (2) air handling units serving the auto and wood shop spaces were installed in the 1960's. All rooftop air handling units throughout have been recently replaced over the past five years. Heat pumps throughout the building have all been replaced between 2020 and 2022.

Dedicated outdoor air system (DOAS) units provide proper ventilation to the unitary heat pumps throughout the building. Recently replaced air handling units are provided with code required outside airflow rates and proper controls. The four (4) original air handling units noted in the paragraph above should be replaced with new variable air volume units with VFDs for fan speed modulation, DX cooling coils, heating water coils, and DDC controls.

Existing pool area unit utilized outside air for dehumidification which limits when during the year dehumidification can take place. Air distribution for the pool does not extent into the space with supply and return grilles being located on the same wall of the pool. Without distribution through the space there is not proper distribution of the chloramine gases and there is not proper airflow across wall surfaces which can create moisture buildup. School district to verify in long term planning whether pools will be utilized within the district. If so, we recommend replacing the pool unit with new and running new distribution ductwork.

Existing wood shop has a dust collection system located outside the building that is original and at the end of its useful life. The distribution ductwork layout is efficient and in good condition. Automotive shop does not appear to have CO/ NO2 detection with required emergency exhaust. School district to determine if CTE spaces are still required in the school building and modify/update as needed.

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#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### AIR CONDITIONING

Air conditioning in the school comes primarily from water source heat pumps with a cooling tower to reject heat from the system. The heat pump loop cooling tower and associated circulating pumps were replaced in 2016. RTUs and DOAS units have packaged DX cooling to condition ventilation air.

Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in good condition.

Two (2) gym air handling units, and two (2) auto/wood shop air handling units do not have air conditioning. Recommend that DX cooling coils and condensing units or water source heat pumps be provided for spaces that do not currently have air conditioning to meet the requirements of ASHRAE 62.1 for ventilation rates, and ASHREA Standard 55 for cooling and dehumidification.

#### AUTOMATIC TEMPERATURE CONTROLS

Controls throughout the building are a Direct Digital Controls (DDC) system provided by Johnson Controls Inc. (JCI), installed between 2020 and 2022 during the heat pump replacement project. Some pneumatic controls remain where original air handling units or supplemental heating devices are still in operation. It is recommended that all existing pneumatic controls be replaced with DDC systems. The DDC system should be integrated with the existing Grand Forks Public School's Building Automation System (BAS). The system would be integrated across the district to allow for single stop monitoring and controls of all buildings in the district.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Power is delivered to facility via multiple electrical services provided by Xcel Energy.
- The main electrical service is provided via 1000kVA 480/277V 3-phase padmount transformer located near southwest entrance of the building. Power is routed from the transformer through a CT cabinet that is sitting adjacent to the transformer, and then underground to the main service entrance switchboard located at the basement level. Peak loads on this transformer in the past 12 months was 566kW (682A), as provided by Xcel Energy.
- The second electrical service was installed for dedicated utility power to the fire pump in the performance hall. The service consists of a 75KVA 480/277V 3-phase padmount transformer located at the southeast corner of the performance hall.
- Both services appear to be acceptable, as is. Capacity is more than adequate.
- It was stated by the facilities team that Xcel Energy experiences the occasional loss of phase on the service. This can cause motors to overheat and cause VFD and motor starters to burn up and become unusable. Facilities stated that they have been in contact with Xcel energy about finding a solution to the issue.

#### **STANDBY POWER**

- Two emergency power generators are located on site. Both generators utilize diesel fuel and are tested on a weekly basis.
- The first was installed in 1993 and is located at the exterior adjacent to the southwest utility transformer. The generator is 480/277V 219KVA and is manufactured by Magnetek. It supplies power for various life safety loads including egress lighting, as well as a few selective mechanical loads.
- The second is located adjacent to the performance hall. The generator manufacturer is Cummins and is 480/277V 125KVA. It supplies power for various life safety loads including egress lighting.
- No improvements are suggested for either generator, at this time. Generators appear to have been maintained and tested over time to ensure efficient operation.

#### POWER DISTRIBUTION

- The building's main electrical service is delivered underground into a 480/277V 3-phase 2500A Siemens Type SB3 switchboard. Switchboard was updated in 1997 and is in fair condition. Power to all areas of the building, outside of the performance hall fire pump, is supplied from this main switchboard. This includes various distribution panels, motor control centers, and branch panels. Several pieces of the distribution system, including distribution and branch panels, were updated with the renovations over time.
- Several branch panels were noted to have been upgraded or added after the flood of 1997. In most cases, panels that were not replaced were noted to be original to building and past their useful life.
- With peak demand on the service within the past year being 682A, the capacity of the existing switchboard is more than adequate. At this time, there are no recommendations for improvements.
- The second building service is delivered underground into a 480/277V 3-phase 25hp fire pump that was installed with the performance hall in 2011.
- In a few instances, it was stated that power was routed from 480V panels at the interior, up to step-down transformers located on the roof, and back down to 208V panels at the interior. While this is not a direct violation of Code, it is suggested that, if these systems are ever upgraded, the step-down transformers are relocated to the interior to reduce the possibility of precipitation entering the building through penetrations made by the electrical conduit and feeder.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



• No improvements are suggested for the motor controls centers. However, it is recommended that, over time, the MCC's are replaced with distribution panel boards and external motor starters. In several cases, this has already been achieved while using motor control center buckets as disconnects only.

#### LIGHTING

- While several areas have been upgraded to LED light fixtures with renovations, the large majority of the building interior consists of fluorescent and incandescent lighting. Performance hall and theater area were noted to still be utilizing T12 fluorescent bulbs. Lighting was noted to be less than adequate in several areas, according to Illuminating Engineering Society (IES) recommended lighting levels.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Majority of exterior lighting consists of building-mounted wallpacks, recessed cans in the entrance canopies, and polemounted parking lot lighting. It was stated that lighting at the northwest student loop was far less than adequate for safety.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Emergency egress lighting provided via generator or battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

#### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Various areas have been upgraded to automatic lighting controls over the years. Very few areas currently utilize dimming control.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via centrally-located photocell.
- All exterior lighting control is suggested to be tied into digital lighting management, as outline in interior lighting portion above.

#### COMMUNICATIONS SYSTEMS

- It was noted by faculty that the backbone cabling between data closets within school had recently been upgraded to 10Gb fiber. Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Dedicated wireless access points within classrooms were not observed. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. System has the capability of paging specific zones, as desired, but is used primarily for "All-Call" announcements. Recessed speakers were noted to be located all throughout circulation areas, in all classrooms, and in almost all "normally-occupied" spaces. Speakers also observed at exterior canopies.
- IP phones are located in all classrooms for room-to-room communication.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done via hardwiring. Large majority were analog clocks with digital clocks in some public areas. It was stated that as clocks become unusable, they are replaced by simply battery-power clocks.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of projectors, smartboards, and classroom sound reinforcement.

#### SAFETY & SECURITY SYSTEMS

- With the exception of a few select doors at the interior and exterior entrance doors, it was noted that electronic door security is present on very few doors within building.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4100ES. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices. Several devices appeared to have been updated within the past several years, while others appeared very aged. Various areas that are required to have audio/ visual notification, per International Building Code, were noted to not have any devices.
- It was stated by the facilities team that coverage of all notification devices is far less than adequate.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **D. EXISTING DEFICIENCIES**

The analysis of the existing Red River High School has been broken down into three categories: code compliance/Americans with Disabilities Act (ADA) compliance, education adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below.

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This portion of the assessment of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the buildings are identified and listed below.

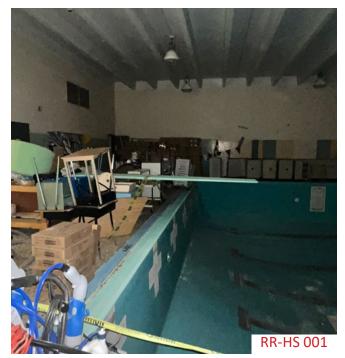
- The school has no sprinklers aside from the Performance Hall addition.
- Door hardware on numerous doors throughout the building is not accessible (040, 041). This includes the hardware in the locker rooms and a large percentage of the support spaces that are not classrooms.
- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass. (042)
- Sinks within classrooms and offices are not accessible. (043, 044)
- All men's and women's locker rooms are not accessible, as they do not have sufficient clearances at the entrances and do not have accessible stalls with the required turning space (045, 046).
- All men's and women's locker rooms have hand dryers that exceed height requirements. (047)
- Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers. (048)
- The restrooms in the men's and women's physical education staff offices are not accessible as they lack sufficient clearances and handrails. (049)
- All three men's locker rooms are missing a lower urinal. (050)
- Restrooms adjacent to the family and consumer science classrooms do not have sufficient clearances at the entrance for accessibility.
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains (051, 052).
- The restroom in the main office is not accessible. (053)
- Many restrooms in the building are not accessible. Most restrooms where a larger stall is present do not meet clearance requirements for accessibility. (054)
- There is exposed wood structure in the storage area in the physical education office that is combustible and should be covered for fire safety. (055)
- The staff lounge restroom is not accessible. (056)
- The restroom in the technological education office (Room 610) is not accessible. (057)
- The kitchen ceiling tile is not a scrubbable surface, as required by code.
- The history classroom on the second floor has divergent path and distance issues because occupants in the room must pass through multiple rooms before reaching a corridor exit.
- The doors into the I.D. classrooms (Rooms 102, 104 and 106) fail to meet required maneuvering clearances for accessibility. (058)
- Display cases throughout do not have required safety glass. (059)
- Handrails on the stairs from the original auditorium backstage to the commons do not provide the code required extensions at the top and bottom of the stairs. (060)
- The original auditorium does not have wheelchair accessibility.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

- The stairs in the stage scene shop do not have handrails on both sides, as required by code. (061)
- The Rider Room is missing handrails on the ramps. (062, 063)
- Eyewash stations in the automotive and manufacturing/production classrooms (Rooms 608 and 612) are not accessible. (064 (Wood Shop), 065 (Auto Shop))
- Science labs do not have accessible stations. (066)
- Platforms in the science classrooms are not accessible. (067)
- Glass within the science storage area is not safety glass, as required by code. (068)
- The stairwell into the basement is missing a separate handrail from the guardrail.

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The aquatics room is currently being used as storage.



Renovation is recommended for the training room (Room 603) and the coaches office.



The original casework of the building and fixtures in the library are dated and replacement should be considered.

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Metal partitions near the main gym should be removed to ensure the stairwell always stays open.



The Rider Room needs new hardware and seating as it is currently out of date.



The Rider Room needs new hardware and seating as it is currently out of date.



The concrete pads outside of doors 9, 10, and 16 are cracked and/or sinking, but all pads should be double checked to ensure adequate conditions.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The concrete drives could use some attention, but the curb especially has been heavily damaged by snowplows and should be replaced or repaired.



The concrete pads outside of doors 9, 10, and 16 are cracked and/or sinking, but all pads should be double checked to ensure adequate conditions (Door 9), (Door 16).

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The caulking in the CMU near the music rooms appears to be lifting and should be redone.

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There is cracking in the CMU wall in the locker rooms that can be seen from both sides.



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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The weather stripping in the openings in the automotive and manufacturing/production classrooms are in poor condition and need to be redone.



There is a large hole in the garage door in the automotive classroom as well.

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Many of the metal doors to the exterior are rusted badly on the bottom and should get replaced.



The interior windows to the main office have poor sealing that needs retouching.



Rusting can be seen in the grids in the health classroom and numerous spots have noticeable water damage.



Rusting can be seen in the grids in the health and numerous spots have noticeable water damage.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



There are portions of ceiling that are damaged and falling off in the locker rooms and the original auditorium (Locker).



The soffits on the exterior portion of the main entrance are deteriorating and the gypsum board in the vestibule is also compromised.



The soffits on the exterior portion of the main entrance are deteriorating and the gypsum board in the vestibule is also compromised.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The vinyl wall covering should be removed as it is peeling up throughout the school.



The women's physical education locker room could use corner guards and other corners should be inspected to see where future damage can be prevented.



The piping and fire sprinklers in the basement walls have deteriorated the CMU walls where they are inserted.



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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The painted gypsum board in the individual music practice rooms and outside the renovated auditorium need a general repair as they are damaged and chipping (Outside auditorium), (Practice room).



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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Much of the carpeting in the classrooms has been replaced, but the corridors still need to be redone.



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All of the brown ceramic and vinyl composition tile in the building is outdated and should get replaced.



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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The vestibule tiles are especially in bad condition.



The vestibule tiles are especially in bad condition and the door 7 vestibule is partly missing tiles.



The tile is ripped up in numerous art and technological education classrooms because there was a chemical issue.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The tile is ripped up in numerous art and technological education classrooms because there was a chemical issue.



The running track material in the basement is lifting up in several spots and needs to be replaced.



Door hardware on numerous doors throughout the building is not accessible



Door hardware on numerous doors throughout the building is not accessible

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass.



Sinks within classrooms and offices are not accessible.



All men's and women's locker rooms are not accessible, as they do not have sufficient clearances at the entrances and do not have accessible stalls with the required turning space

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Sinks within classrooms and offices are not accessible.



All men's and women's locker rooms are not accessible, as they do not have sufficient clearances at the entrances and do not have accessible stalls with the required turning space



The restrooms in the men's and women's physical education staff offices are not accessible as they lack sufficient clearances and handrails.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



All men's and women's locker rooms have hand dryers that exceed height requirements.



Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



All three men's locker rooms are missing a lower urinal.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains



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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The restroom in the main office is not accessible.



Many restrooms in the building are not accessible. Most restrooms where a larger stall is present do not meet clearance requirements for accessibility.

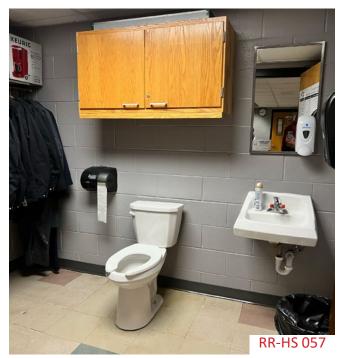


There is exposed wood structure in the storage area in the physical education office that is combustible and should be covered for fire safety.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The staff lounge restroom is not accessible.



The restroom in the technological education office (Room 610) is not accessible.



The doors into the I.D. classrooms (Rooms 102, 104 and 106) fail to meet required maneuvering clearances for accessibility.

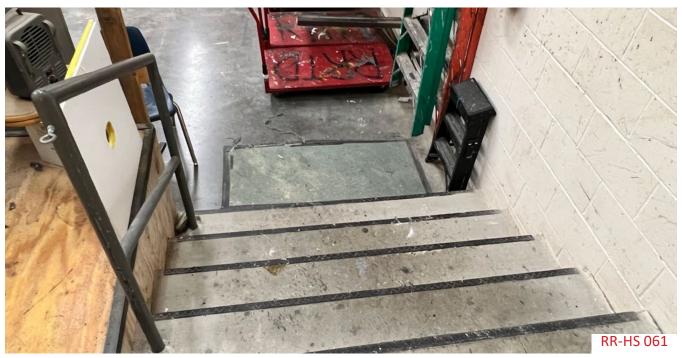


Handrails on the stairs from the original auditorium backstage to the commons do not provide the code required extensions at the top and bottom of the stairs.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Display cases throughout do not have required safety glass.



The stairs in the stage scene shop do not have handrails on both sides, as required by code.

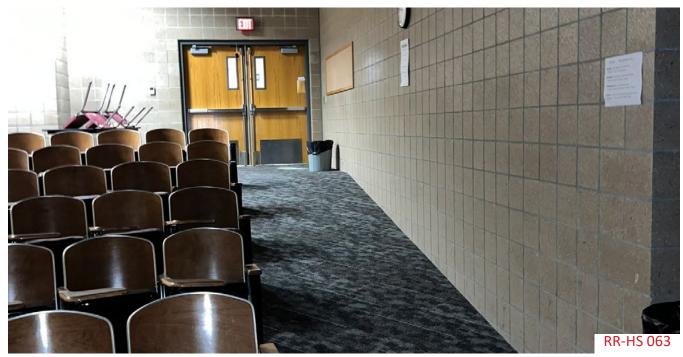
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The Rider Room is missing handrails on the ramps.



Eyewash stations in the automotive and manufacturing/ production classrooms (Rooms 608 and 612) are not accessible.



The Rider Room is missing handrails on the ramps.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Eyewash stations in the automotive and manufacturing/ production classrooms are not accessible.



Science labs do not have accessible stations.



Platforms in the science classrooms are not accessible.



Glass within the science storage area is not safety glass, as required by code.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	11,633 SF	9,260 SF	2,373
Art	2,930 SF	3,040 SF	-110
Athletics	58,239 SF	55,820 SF	2,419
Auditorium	37,019 SF	27,634 SF	9,385
Business Education	5,600 SF	5,800 SF	-200
Circulation	85,963 SF	100,771 SF	-14,808
Classrooms	38,147 SF	33,200 SF	4,947
FACS	6,081 SF	5,720 SF	361
Food Service/Cafeteria	15,997 SF	17,178 SF	-1,181
Library/Media Center	11,090 SF	4,908 SF	6,182
Mechanical/Electrical	9,445 SF	25,193 SF	-15,748
Music	10,802 SF	8,610 SF	2,192
Restrooms	2,877 SF	8,398 SF	-5,521
Science	16,084 SF	15,850 SF	234
Special Education	2,479 SF	2,910 SF	-431
Technical Education	12,850 SF	11,770 SF	1,080
Technology Education	2,965 SF	3,000 SF	-35

Total Missing Square Footage	-8,861
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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### LACK OF LEARNING AND SUPPORT SPACES

- The counseling and career services do not have enough space.
- One of the art rooms is very small.
- There are not enough places to sit in the cafeteria.
- There is a lack of storage space.
- There is not enough space for group/collaboration learning.
  - Media Center could be renovated into collaboration space.

#### ATHLETICS IMPROVEMENTS

- The training room is not easily accessible as students and staff have to go through a custodial closet to get there.
- Locker rooms in the pool are not being used.
- Pool is not being used.

#### **TOP PRIORITIES**

- 1. Safety and Security
- 2. Pool/Locker Room Areas
- 3. Library/Media Center Remodel

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Red River High School Grand Forks, ND 11/2/2022



Eacility Accocement Estimate									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	synergistic with other needs	Total Cost
ADA and Building Code Compliance				-					
Upgrade door hardware with ADA hardware	1	50 Ea.	\$983.61 / Ea.	ı. \$49,180					\$49,180
Replace wire glass throughout the building that is no longer up to code (frame to remain)	2	9,600 SF	\$33.65 / SF	; \$323,040					\$323,040
Replace casework (20lf of base, top, and upper) per classroom and office and sinks in classrooms are not acressible	е	75 Ea.	\$26,939.88 / Ea.	ı. \$2,020,491				×	\$2,020,491
Remodel locker rooms to make them accessible	4	6,351 SF	\$359.77 / SF	\$2,284,892				×	\$2,284,892
Add accessible hand dryers in all men's and women's locker rooms.	5		/						\$0
Remove and replace all shower concrete and add one drain per shower head in all showers in the locker rooms	9		0 /	0\$					\$0
Make all locker room clearances accessible.	7		0/	ŞC					0\$
Make restrooms clearances in men's and women's physical education staff offices	∞		0 /	0\$					\$0
accessiole. Add lowered urinal with grab bars in all three men's locker rooms.	6		0 /	\$0					0\$
Remodel public Restrooms adjacent to the family and consumer science classroom	10	2 Ea.	\$74,892.86 / Ea.	\$149,7	10			×	\$149,786
Add accessible lower water fountains throughout the building	11	10 Ea.	\$21,944.54 / Ea.	ı. \$219,445					\$219,445
Remodel restroom in the main office to make it accessible.	12	1 Ea.	\$37,497.11 / Ea.	ı. \$37,497				×	\$37,497
Remodel public restrooms to make them accessible	13	4 Ea.	\$74,892.86 / Ea.	ı. \$299,571				×	\$299,571
Add sheetrock, tape and paint to the exposed wood walls in the physical education office for fire cafety	14	1 Ea.	\$2,685.12 / Ea.	ı. \$2,685					\$2,685
Remodel the lounge restroom to make them meet accessibility standards	15	1 Ea.	\$37,497.11 / Ea.	a. \$37,497				×	\$37,497
Remodel the restroom in the technological education office (Rm. 610) to make it accessible and add grab bars	16	1 Ea.	\$37,497.11 / Ea.	a. \$37,497				×	\$37,497
Replace kitchen ceiling tile with a scrubbable surface.	17	3,282 SF	\$14.75 / SF	: \$48,410					\$48,410
Add a corridor since the history classroom on the second floor has divergent path and distance issues because occupants in the room have to pass through multiple rooms before	18	960 SF	\$65.74 / SF	: \$63,110					\$63,110
reaching a corridor exit. Change the swing of the doors into the I.D. classrooms (Rooms 102, 104 and 106) since they	19	3 Ea.	\$3.615.44 / Ea.	3. \$10.846					\$10.846
do not have sufficient push pull clearances									
Replace the glass in the display cases throughout the school with the required tempered glass	20	10 Ea.	\$4,515.86 / Ea.	ı. \$45,159	-				\$45,159
Add handrail extensions on the stairs from the original auditorium backstage to the commons	21	8 LF	\$131.89 / LF	: \$1,055					\$1,055
Add a lift to the make original auditorium accessible.	22	1 Ea.	\$100,329.00 / Ea.	ı. \$100,329					\$100,329
Add handrail to stairs in the stage scene shop.	23	10 LF	\$131.89 / LF						\$1,319
Add missing handrails in the Rider Room on the ramps	24	50 LF	\$131.89 / LF	; \$6,594	-				\$6,594
Add accessible water fountain In the technical education area of the building.	25	1 Ea.	\$21,944.54 / Ea.	0,					\$21,945
Add accessible eyewash stations in the automotive and manufacturing/production classrooms.	26	2 Ea.	\$2,541.65 / Ea.	ı. \$5,083					\$5,083
Modify science labs to create an Add accessible workstation	27	10 Ea.	\$14,462.54 / Ea.	ı. \$144,625					\$144,625
Add a ramp to the platforms in science classrooms to make them accessible	28	60 SF	/						\$3,715
Replace glass in the science storage area with tempered glass.	29	204 SF	\$74.33 / SF	0,					\$15,163
Add handrail in stairwell into basement	30	40 LF	\$199.43 / LF	_					\$7,977
Total Code Compliance		348,899 SF	\$17.02 / SF	F \$5,936,914	t \$0	\$0	\$0		\$5,936,914

Assessment Estimate Assessment Estimate It on office and secure entry remodel Unity Remodel (Educational Adequacy) It on	ltem									
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ration office and secure entry remodel acurity n/Remodel (Educational Adequacy) ation Education Education	Number Tak	Takeoff Otv	Total Cost /I Init	it Critical		5 yrs Deferred 1 Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other	Total Cost
ation office and secure entry remodel activity n/Remodel (Educational Adequacy) ation m Education								famme barnet e	lieeds	1000 000
ccurity n/Remodel (Educational Adequacy) ation m Education	31	7,012 SF	\$178.94 /	/ SF				\$1,254,727		\$1,254,727
n/Remodel (Educational Adequacy) ation ation m Education	7	7,012 SF	\$178.94 <i> </i>	/ SF	\$0	\$0	\$0	\$1,254,727		\$1,254,727
ation ation m Education										
m Education	32	SF	\$339.20 /	/ SF				\$0		\$0
m Education	33	110 SF	\$351.74 /	SF				\$38,691		\$38,691
	34	SF	1	/ SF				\$0 *2		¢\$
	35		5485.35 / 2020 20	SF				\$0 7 201		\$0 \$
			\$376.82 /	SF				\$75,364		\$75,364
	_	14,808 SF	\$376.83 /	SF				\$5,580,142 		\$5,580,142
	38	SF	\$376.82 /	SF				\$0		\$0
non Spaces	39	SF :	\$393.12 /	SF				\$0		\$0
			\$393.12 /	SF				\$0 7111 20		\$0 \$1,11,201
a		1,181 SF	5458.33 /	SF 2-				5541,285		5541,285
			\$395.63 /	SF				\$0		os :
Mechanical/Electrical	43 1	15,/48 SF cr	/ 33./053	7				\$4,848,076 \$0		\$4,848,076 ¢0
			/ 06.104¢	JT CL				UÇ CC1 121 CŞ		UÇ CC1 333 C3
			\$404.01 / \$431.99 /	SF				501,000,2¢		221'coc'z¢
Education	47	431 SF	\$340.28 /	SF				\$146,659		\$146,659
uc.	48		\$381.83 /	SF				¢\$		0\$
Technology Education	49	\$35 SF	\$394.37 /	SF				\$13,803		\$13,803
Total Adequacy	38	38,034 SF	\$363.07 /	SF	\$0	\$0	\$0	\$13,809,142		\$13,809,142
Capital Maintenance										
Repurpose the swimming pool by infilling the pool, and fitting it into classroom space	50 1	11,000 SF	\$376.82 /	SF		\$4,145,009				\$4,145,009
:r)	51	900 LF	\$389.57 /	LF		\$350,616			×	\$350,616
	52	1 Ea.	\$18,541.25 /	Ea.		\$18,541				\$18,541
	53	1,421 SF	\$70.45 /	SF		\$100,109			×	\$100,109
Remove the metal partitions near the main gym should be to ensure the stairwell always	54	1 Ea.	\$834.14 /	Ea.	\$834					\$834
untertops in the art classrooms that show wear and tear damage.	55	73 LF	\$241.14 /	/ LF	\$17,603				×	\$17,603
	56	200 Ea.						\$92,882		\$92,882
Replace the weather stripping in the openings in the automotive and	57	4 Ea.	\$547.98 /	Ea.	\$2,192					\$2,192
e automotive classroom	58	1 Ea.	\$652.41 /	Ea.	\$652					\$652
(%		104,670 SF	1			\$956,698			×	\$956,698
Repair the ceiling that are damaged and falling off in the locker rooms and the original auditorium	60 1	12,338 SF	\$16.54 /	SF	\$204,071				×	\$204,071
soffits on the exterior portion of the main entrance that are deteriorating and	61	1,000 SF	\$19.34 /	/ SF	\$19,340					\$19,340
repair the gypsum board in the vestibule is also compromised	_	-	-	_	_	-			_	

COST ANALYSIS CONTINUED

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# Red River High School Grand Forks, ND 11/2/2022



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Facility Assessment Estimate										
	ltem					5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	nit	Critical	Maint	Maint	Adequacy	needs	Total Cost
Remove and infill the skylight in the gymnasium is recommended because it is difficult and evocative to maintain	62	500 SF	\$379.55	/ SF		\$189,777				\$189,777
expensive community. Repair the vinyl wall coverings through out the school	63	348,899 SF	\$0.24	/ SF		\$83,736				\$83,736
Add corner guards and patch walls in the women's physical education locker room other	64	1 Ea.	\$15,327.85	/ Еа.	\$15,328					\$15,328
Fill hole in the custodial closet in the 500 hall to stop water from entering the wall assembly	65	1 Ea.	\$14,314.12	/ Еа.	\$14,314					\$14,314
Patch damaged to the CMU walls where the piping and fire sprinklers in the basement walls have deteriorated the CMU walls	66	1 Ea.	\$34,128.74	/ Ea.	\$34,129					\$34,129
Patch and paint the walls in the individual music practice rooms and outside the renovated auditorium	67	1 Ea.	\$14,274.25	/ Еа.		\$14,274				\$14,274
Replace the caulking in the CMU near the music room	68	1 Ea.	\$5,414.24	/ Ea.	\$5,414					\$5,414
Repair the cracking in the CMU wall in the locker rooms that can be seen from both sides	69	1 Ea.	\$10,412.40	/ Еа.	\$10,412					\$10,412
Replace dated carpet in the corridors	70	10,000 SF	\$10.89	/ SF			\$108,900			\$108,900
Replace all of the brown ceramic and vinyl composition tile in the building	71	5,000 SF	\$24.14	/ SF			\$120,700			\$120,700
Replace the tile in the vestibule at door 7	72	250 SF	\$24.14	/ SF	\$6,035					\$6,035
Replace the main gym floor since it is nearing its life expectancy	73	15,950 SF		/ SF			\$353,643			\$353,643
Add new tile in the numerous art and technological education classrooms because there was a chemical iscue	74	8,749 SF	\$23.65	/ SF	\$206,914					\$206,914
e crienting in the basement Replace the running track in the basement	75	9,877 SF	\$19.94	/ SF			\$196,971			\$196,971
Interior Upgrades Subtotal		348,899 SF	\$20.83	/ SF						\$7,269,095
Exterior Upgrades										
Replace the damaged sidewalk outside of the school	76	5,600 SF	\$17.56	/ SF	\$98,322					\$98,322
Repair the concrete drives and the damaged curbs	77	1 Ea.	\$24,148.04	/ Ea.	\$24,148					\$24,148
Replace damaged stoops at doors 9, 10, and 16 that are sinking	78	3 Ea.	\$19,841.24	/ Еа.		\$59,524				\$59,524
Add sidewalk that connects doors 7 and 17 to the public walkways in case of an evacuation.	62	2,000 LF	\$17.56	/ LF		\$35,120				\$35,120
Replace the roof when it nears the end of its useable lifetime	80	286,964 SF	\$30.58	/ SF		\$8,775,359				\$8,775,359
Repaint the green roof and siding near the north entrance of the school	81	348,899 SF	\$0.17	/ SF			\$59,313			\$59,313
Exterior Upgrades Subtotal		348,899 SF	\$25.94	/ SF						\$9,051,786
Electrical Unerades										
Several branch panels were noted to have been upgraded or added after the flood of 1997.	82	348.899 SF	\$3.45	/ SF	\$1.203.702					\$1.203.702
In most cases, panels that were not replaced were noted to be original to building and past their useful life.										
The addition of building mounted exterior emergency egress lighting at each and every exit door is subsected	83	348,899 SF	\$0.65	/ SF	\$226,784					\$226,784
Upgrade of all lighting controls throughout to digital lighting management is suggested	84	348,899 SF	\$2.51	/ SF		\$875,736				\$875,736
All exterior lighting control is suggested to be tied into digital lighting management, as outline in interior lighting above	85	348,899 SF	\$0.25	/ SF		\$87,225				\$87,225
It is suggested that the existing intercom system be updated to new IP system throughout entire school	86	348,899 SF	\$3.76	/ SF		\$1,311,860				\$1,311,860
It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring	87	53 Ea.	\$1,246.24	/ Ea.	\$66,051					\$66,051
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# COST ANALYSIS CONTINUED

# Red River High School Grand Forks, ND 11/2/2022



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Facility Assessment Estimate											
Description	ltem Number	Takeoff Qty	́ т	Total Cost/Unit	it	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code	88	348,899 S	SF	\$0.69 /	' SF		\$240,740				\$240,740
Electrical Upgrades Subtotal		348,899 5	SF	\$11.50 /	' SF						\$4,012,098
Mechanical Upgrades											
Add sprinklers to the building including a new water service line except the auditorium addition	68	312,452 5	SF	\$13.05 /	' SF	\$4,077,499					\$4,077,499
The auto shop did not appear to have any oil/inflammable waste traps.	90	1	Ea. \$	\$36,179.45 /	/ Ea.	\$36,179					\$36,179
Thermostatic mixing valves meeting ASSE 1070 requirements should be added to public lavatories for scald protection.	91	348,899	SF	\$0.32 /	/ SF		\$111,648				\$111,648
Existing wood shop has a dust collection system located outside the building that is original and at the end of its useful life.	92	1	Ea. \$	\$26,743.14 /	ί Ea.	\$26,743					\$26,743
Automotive shop does not appear to have CO/NO2 detection with required emergency exhaust.	93	1	SF \$	\$19,342.74 /	/ SF	\$19,343					\$19,343
Two (2) gym air handling units, and two (2) auto/wood shop air handling units do not have air conditioning. Recommend that DX cooling coils and condensing units or water source heat pumps be provided for spaces that do not currently have air conditioning to meet the requirements of ASHRAE 62.1 for ventilation rates, and ASHREA Standard 55 for cooling and hohumidifications.	94	348,899	SF	\$0.84 /	SF		\$293,075				\$293,075
Controls throughout the building are a Direct Digital Controls (DDC) system provided by Johnson Controls Inc. (JCI), installed between 2020 and 2022 during the heat pump replacement project. Some pneumatic controls remain where original air handling units or supplemental heating devices are still in operation. It is recommended that all existing pneumatic controls be replaced with DDC systems.	95	348,899	SF	\$0.50 /	<pre> SF</pre>		\$174,450				\$174,450
Mechanical Upgrades Subtotal		348,899 SF	SF .	\$13.58 /	/ SF						\$4,738,936
Total Capital Maintenance		348,899 SF	SF	\$71.86 <i> </i>	/ SF	\$6,316,009	\$17,823,498	\$839,527	\$92,882		\$25,071,916
Total Construction Cost		393,945 SF	SF SF	\$116.95 /	/ SF	\$12,252,923	\$17,823,498	\$839,527	\$15,156,751		\$46,072,699
*** All above estimated costs are total construction costs. These include general condit	itions, CM f	ions, CM fees, permits, insurances, bonds, taxes	nsurance	es, bonds, ta	səx						
Contingencies & Soft Costs											
Design Contingency	96	5.0%				\$612,646.16	\$891,174.90	\$41,976.33	\$757,837.57		\$2,303,635
Construction Contingency	97	5.0%				\$612,646.16	\$891,174.90	\$41,976.33	\$757,837.57		\$2,303,635
Escalation	98	0.0%				\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	66	7.0%				\$857,704.63	\$1,247,644.87	\$58,766.86	\$1,060,972.60		\$3,225,089
FF & E	100	2.0%				\$245,058.47	\$356,469.96	\$16,790.53	\$303,135.03		\$921,454
Owner Contingency	101	1.5%				\$183,793.85	\$267,352.47	\$12,592.90	\$227,351.27		\$691,090
Total Contingencies & Soft Costs						\$2,511,849	\$3,653,817	\$172,103	\$3,107,134		\$9,444,903
Total Facility Assessment Cost Estimate		393,945 SF	Ъ.	\$140.93 /	/ SF	\$14,764,773	\$21,477,315	\$1,011,630	\$18,263,885		\$55,517,603
Total Critical & Educational Adequacy		393,945 SF	۲,	\$83.84 /	/ SF						\$33,028,658

A. EXISTING BUILDING INVENTORY	93
B. ARCHITECTURAL FINISHES	94
C. MECHANICAL/ELECTRICAL ASSESSMENT	95
D. EXISTING DEFICIENCIES	99
E. COST ANALYSIS	110



ELROY H SCHROEDER MIDDLE SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **FACILITY ASSESSMENT**

# **A. EXISTING BUILDING INVENTORY**

Schroeder Middle School is located at 800 32nd Avenue S in Grand Forks. The original building's construction was completed in 1963. In 1964, a classroom wing was added, extending the school north from the existing northwest corner of the building. In 1976, another addition was completed. This addition included classrooms to the west of the first addition, a new library off the southwest corner of the building, and a music room, gym room, and classrooms to the east side of the original building. Another addition and renovation took place in 1998 when two new classroom wings were added onto the north side of the building.

Schroeder Middle School is accessible by Cherry Street to the east, 32nd Avenue S to the south, and S 10th Street to the west. There is a large parking lot on the west side of the building and a smaller parking lot on the east side.



#### FLOOR PLANS

#### OVERALL FLOOR PLAN

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Schroeder Middle School first opened in 1963. The school has received three additions since then in 1964, 1976, and 1998. Overall, the building is in good condition. There are accessibility issues throughout the school with dated amenities. Some exterior portions of the building are in poor condition and should be addressed.

#### SITE

The exterior sidewalks, curbs, and pavement are in poor condition in certain areas (001). The parking lot should be refinished. Standing water is present near entrances (002).

#### MASONRY

The exterior brick is in overall good condition, but caulking is deteriorating. The caulking deterioration is most prevalent on the south side of the building (003).

#### ADDITIONAL EXTERIOR MATERIALS

The exterior insulation and finish system (EIFS) is in poor condition with multiple holes seen around the building (004). A canopy repair is needed outside Door 1 (005, 006).

#### ROOF

There are ongoing issues with the roof structure in certain areas. There has been a temporary fix provided, and at this time permanent repairs are being addressed.

#### **OPENINGS**

Door openings and windows within the school are in good condition. Window gaskets and caulking are deteriorating and should be replaced (007, 008).

#### CEILINGS

The ceilings within the school mostly consist of acoustical ceiling tile (ACT) and are in good condition.

#### WALLS

The interior walls are either painted masonry, painted gypsum board, have vinyl wall coverings, tiling, or field stone. There is some cosmetic cracking of the concrete masonry unit (CMU) brick throughout the school (009). Portions of exterior walls are covered with vinyl covering on the interior side. It is recommended the vinyl wall covering be removed from the interior surface of exterior walls, as this could potentially create a double vapor barrier and trap moisture within the walls. Current code does not permit the use of vinyl wall covering on outside walls for this reason.

#### FLOORING

The floors in Schroeder Middle School are either carpeting or various types of tiling. New carpet was put in classrooms in 2020. Spaces with older carpeting have warping and the carpet is bubbling (010). Flooring is uneven at some spots (011).

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



# C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

Fire sprinkler systems are absent throughout the majority of the building. A fire suppression system riser and fire department connection were found for the 1998 addition of the school. Other than these areas, no other fire sprinkler piping was found in the school. Any renovation in this school would require sprinkler systems to be installed throughout the areas of the school not currently covered by the existing 1998 system.

#### PLUMBING

The sewer piping in the 1998 addition is in fair condition but other than this portion of the school, the remainder of sewer piping throughout the building is in poor condition and is deteriorated. Facilities staff have reported several issues with sewer leaks and backups. Existing piping is located below floor slabs making replacement difficult but likely necessary in the near future.

The domestic water piping in the 1998 addition is in fair condition but other than this portion of the school, the remainder of the water piping is original to the year the building or addition was constructed. This places a large fraction of the water piping at 47 years old or older. This school does not currently have any type of water treatment system (e.g. a water softener) which makes it likely a majority of the water piping is scaled and in poor condition. It is likely most, if not all, existing water piping outside of the 1998 addition should be replaced in the near future.

The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures. Flush valves and lavatory faucets are manually operated. It appears as though the district has been changing fixtures, flush valves, and faucets as required to address failures. Fixtures, in general, are in a reasonable condition. Fixtures should be replaced in conjunction with architectural upgrades to current codes and standards.

Domestic hot water is produced by natural gas water heaters which are fairly new and in fair condition. The water heaters are not in need of any immediate upgrades.

Plumbing in the boys and girls locker rooms is in poor condition. Showers and all other fixtures should be replaced but only in conjunction with architectural upgrades to current codes and standards.

Plumbing for the kitchen is in fair condition. No immediate upgrades other than the installation of new grease interceptor(s) are needed in the near future.

#### HEATING

Heating for the building comes from three high-efficiency condensing hot water boilers. Boilers and their associated heating equipment were installed in 2018 and are in good condition

Hot water is delivered to heating coils in air handling units, unit ventilators, radiation, and other terminal heating devices. Hot water piping is largely located in crawl tunnels below the first floor. The hot water piping is original to the year the building or addition was constructed. This places a large fraction of the water piping at 47 years old or older. Aside from

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



the 1998 addition, the condition of the hot water piping for the school is not well known, though it is assumed it is in poor condition due to the age of the piping and the numerous times the tunnels have had ground/stormwater in them. Further investigation is needed to understand whether the piping before 1998 should be replaced however, it is likely that it should be.

#### **VENTILATION AND EXHAUST**

The school has 15 different indoor air handling units, over 29 different exhaust fans, and many different unit ventilators. All equipment is hot water heated. The HVAC equipment is largely original to the year the building or addition was constructed. Most all of the HVAC equipment in the entire building is at or past the end of its useful life. In many instances, tunnels are used as ductwork. This presents challenges to indoor air quality in many ways.

Other than the 1998 addition, ductwork or the use of tunnels as ductwork throughout the building does not effectively distribute air.

Overall, all HVAC equipment in this building should be replaced with new systems which do not include unit ventilators. Where tunnels are used as ductwork, new sheet metal ductwork should be installed. In areas where ductwork exists (outside of the 1998 addition) ductwork should be replaced. Ductwork for the 1998 addition should be able to remain and be reused in the future. These improvements are necessary to properly distribute air, allow for air conditioning to be installed, and improve indoor air quality.

#### **AIR CONDITIONING**

Except for the 1998 addition, the library, and a few small split systems, the majority of the school is not air-conditioned. It is highly recommended the school have an air conditioning system installed that is integrated into the school's HVAC systems.

#### AUTOMATIC TEMPERATURE CONTROLS

Controls throughout a majority of the building are pneumatic and original to the building. Controls in the 1998 addition are electronic but are past the end of their useful life. All controls currently function poorly, if at all. Also, the existing controls offer limited control capability and limited or no ability for monitoring and alarm. With the controls as they are today, there is no way to properly control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. It is recommended that all existing controls be replaced with DDC systems. The DDC system should be tied together to a single BAS front end. The system would be integrated across the district to allow for single stop monitoring and controls of all buildings in the district.

CILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 500KVA 480/277V padmount transformer located at center courtyard of building.
- Power is routed underground from the transformer to a padmount CT cabinet adjacent to the transformer. Power is then routed underground to an MDP located at the interior of the building to the southwest.
- Peak load on this transformer in the past 12 months was 239kW (287A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is adequate.

#### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

#### **POWER DISTRIBUTION**

- The service entrance distribution panel was updated in 1998 and is a 480/277V 1200A Siemens Type S5. The panel does not utilize a main disconnect and all breakers operate as a service entrance disconnect. The panel is currently utilizing six breakers as service entrance disconnects, which is the maximum allowed, per Code.
- Power is distributed from the distribution panel to various branch panels, as well as a step down transformer that delivers 208/120V power to a large 400A General Electric switchboard that appears to be original to the building. This switchboard is still functioning, but is very old and past its useful life. It is suggested that this switchboard be replaced with a new 400A distribution panel that utilizes breaker-type overcurrent protection. This panel would be much safer and take up 20% of the space that the current switchboard takes.
- 208V power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- Branch panels throughout the original building were noted to be very old and in need of replacement. It is suggested that additional circuits are not added to existing panels and that panels are replaced over time as new circuits are required.
- Panels within the 7th and 8th grade wings are in fair shape.

#### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the 6th grade wing and other smaller areas have been updated to LED lighting.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- There are no suggestions for improvements to the exterior lighting.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas utilize dimming operation.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via photocell and/or timeclock.
- All exterior lighting control is suggested to be tied into new digital lighting management, as outlined in interior lighting portion above.

#### **COMMUNICATIONS SYSTEMS**

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Recessed speakers were noted to be located all throughout circulation areas and classrooms.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done via wireless communication.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- A bell system was noted throughout hallways. Function of the bells was unknown at the time of walkthrough.
- Classroom technology varied between classrooms. Technology observed consisted of short-throw projectors and classroom sound reinforcement.

#### **SAFETY & SECURITY SYSTEMS**

- A select few exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras. A buzz-in system consisting of a 2-way speaker and camera is located at the main entrance.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm system was recently updated to building-wide voice communication and utilizes a Simplex 4100ES fire alarm control panel. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and speaker/strobe devices. Locations of notification devices was noted to be adequate.
- No upgrades to the fire alarm system are suggested, at this time.

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **D. EXISTING DEFICIENCIES**

The analysis of the existing Schroeder Middle School has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Sinks in various classrooms are not accessible.
- Restrooms within classrooms are not accessible (012).
- Science labs do not have an accessible sink (013).
- Restrooms throughout the school are not accessible (014).
- Sinks in restrooms are not accessible (015).
- Entries into restrooms do not have adequate clearances for accessibility (016).
- Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code (017).
- Staff restroom is not accessible (018).
- Hallways near the gym are not sprinklered.
- Door hardware throughout the building is not accessible (019).
- Entry into locker rooms do not have adequate clearances for accessibility (020).
- Locker room restrooms are not accessible (021).
- Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers. (022).
- Pipes are exposed throughout the school and should be protected (023).
- The weight room is not accessible (024).
- The music room is not accessible (025).
- Not all entry doors in the building are protected with an enclosed vestibule, as required by energy code (026).
- Door 24 does not meet the clear opening width required by code (027).
- FACS classroom is not accessible (028).
- Doors 18 and 19 do not have a direct access to a public way (029).
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains (030, 031).

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The exterior sidewalks, curbs, and pavement are in poor condition in certain areas.



Standing water is present near entrances.



The caulking deterioration is most prevalent on the south side of the building.



The EIFS is in poor condition with multiple holes seen around the building.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



A canopy repair is needed outside door 1.



A canopy repair is needed outside door 1.



Window gaskets are deteriorating and need to be replaced.



Caulking is worn and should be replaced as well.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



There is some cosmetic cracking of the CMU brick throughout the school.



Spaces with older carpeting have warping and the carpet is bubbling.

Flooring is uneven at some spots.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Restrooms within classrooms are not accessible



Science labs do not have an accessible sink



Restrooms throughout the school are not accessible



Sinks in restrooms are not accessible

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Entries into restrooms do not have adequate clearances for accessibility



Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code

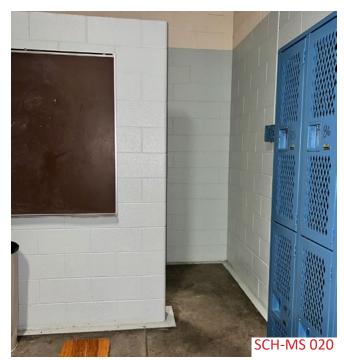


Staff restroom is not accessible



Door hardware throughout the building is not accessible

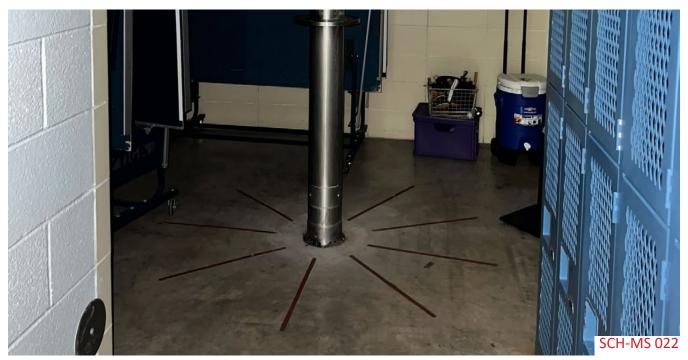
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Entry into locker rooms do not have adequate clearances for accessibility



Locker room restrooms are not accessible



Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Pipes are exposed throughout the school and should be protected



The weight room is not accessible



The music room is not accessible



Door 24 does not meet the clear opening width required by code

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Not all entry doors in the building are protected with an enclosed vestibule, as required by energy code



FACS classroom is not accessible



Doors 18 and 19 do not have a direct access to a public way.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	5,024 SF	4,640 SF	384
Art	1,915 SF	2,400 SF	-485
Athletics	17,320 SF	14,600 SF	2,720
Circulation	23,963 SF	32,539 SF	-8,576
Classrooms	22,619 SF	18,900 SF	3,719
FACS	1,706 SF	1,200 SF	506
Food Service/Cafeteria	3,917 SF	9,078 SF	-5,161
Library/Media Center	5,561 SF	1,875 SF	3,686
Mechanical/Electrical	1,809 SF	8,135 SF	-6,326
Music	4,663 SF	4,860 SF	-197
Restrooms	1,646 SF	2,712 SF	-1,066
Science	7,831 SF	7,200 SF	631
Special Education	3,844 SF	3,300 SF	544
Technical Education	2,880 SF	3,850 SF	-970
Technology Education	1,128 SF	2,000 SF	-872

Total Missing Square Footage -11,463

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### AIR QUALITY/CONTROL

- There are classrooms that do not have any windows and there is no airflow.
- There is no air conditioning in the several areas of the school.

SAFETY/SECURITY

• There is no secure entrance into the school.

INADEQUATE GYMNASIUM AND LOCKER ROOMS STUDENT PICK-UP AND DROP-OFF IS NOT IDEAL ADA ACCESSIBILITY ISSUES

#### **TOP PRIORITIES**

- 1. HVAC/Air Control/Structure
- 2. Security
- 3. ADA Accessibility/Medically Fragile Students

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Schroeder Middle School Grand Forks, ND 11/2/2022



Result Systement Estimate           Result Systement Estimate           Monto           <									ENGINEEKS	\$
true humbertrain humberhumberhumberhumber11	Facility Assessment Estimate									
Number         Takenf Qy         Total Cost/Unit         Critical         Maint         Mai		ltem				5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with	
that are not.         1         20         6 $527,541.64$ /         6 $5550.833$ /           If of base cabinets,         2         4         E $544.462.54$ /         Ea $550.833$ /         E           ce that do not meet         3         6         Ea $50.000$ /         Ea $594.9357$ e that do not meet         3         6         E $57.932.66$ /         Ea $540.9357$ E $549.357$ E $599.500$ $599.500$ $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.500$ E $599.503$ E $599.500$ E $599.503.50$ E $599.503.50$ <th>Description</th> <th>Number</th> <th>Takeoff Qty</th> <th>Total Cost/Unit</th> <th>Critical</th> <th>Maint</th> <th>Maint</th> <th>Adequacy</th> <th>other needs</th> <th>Total Cost</th>	Description	Number	Takeoff Qty	Total Cost/Unit	Critical	Maint	Maint	Adequacy	other needs	Total Cost
If of base rabinets,         1         20         Ea         \$275,44.16         /         Ea         \$55,633         P           If of base rabinets,         2         4         5         5443.57         7         55         557,850         P           e that do not meet         3         6         6         5449.357         F         557,850         P           e that do not meet         3         6         8         514.60.54         /         56.93         P         P           e that do not meet         3         6         8         513.00.7         /         5         50.03         P         P         S <td>Code Compliance</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Code Compliance									
If of base cabinets,         2         4         Ea         S14,462.54         / Ea         S57,850         /         S57,850         /<	Replace casework (20 If of base, top and upper) per classroom and sinks that are not accessible	1		\$27,541.64 / E		3				\$550,833
ce that do not mete         3         6         Ea $5443357$ Fa $5443357$ Fa           e that do not met         5         6         8 $5000$ / Ea $5000$ /         8 $5000$ / $5000$ / $1000$ 10	Create and accessible workstation and sink in science labs by replacing 20 If of base cabinets,	2	-	/		0				\$57,850
e         6         6         50.00         7         50<	red and sink per lag Remodel public restrooms (4) throughout the school within existing space that do not meet	з		\$74,892.86 / E		.7			×	\$449,357
e         5         6         6         50.00         / Ea         50.00         / Ea         59.500            ting a double vapor         7         2         Ea         539.91.37         / Ea         539.500         >	accessionity requirements Replace sinks (14). in public restrooms (6) that are not accessible	4	_	_		0			×	
ting a double vapor         6         12,500         5         5,116         (5         589,500         (5         589,500         (5         589,500         (5         (5         (5         (5         (5         (5         (5         (5         (5         (5         (5         (5         (5)	Modify entry into public restrooms that do not have enough clearance	2				0			×	
7         2         Ea         539,921.37         / Ea         579,843            8         30         Ea         \$1,203.10         / Ea         \$39,94.621            10         3         Ea         \$1,31,540.47         / Ea         \$36,093             11         3         Ea         \$51,03.10         / Ea         \$536,093             12         11         3         Ea         \$50.00         / Ea         \$536,073          \$536,073             13         1         Ea         \$500,329.00         / Ea         \$510,329              \$5471           \$5234,07           \$500,329          \$500,329         \$524,07         \$50,329         \$50,329         \$50,329         \$50,329         \$50,329         \$524,07         \$50,329         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313         \$514,313	Remove vinyl wall coverings from the inside of exterior walls that is creating a double vapor	9	12,500 SF			0				\$89,500
8         30         Ea         51.203.10         /         Ea         53.94.621         Col           ents by moving the         9         3         Ea         \$1.203.10         /         Ea         \$5.2005         /         Ea         \$53.4.621         Col         Col         Col         Col         Col         S0         Col         S0         S0         Col         S0         S0         Col         S0         S0         Col         S0	Remodel staff restrooms that do not meet accessibility requirements	7		-		ņ			×	\$79,843
ents by moving the         9         3         Ea         \$115,40.47         Fa         \$339,621         S339,621           10         3         Ea         \$5000         /         Ea         \$50,270.56         /         S0         /         S0           11         12         12         12         \$52,770.56         /         Ea         \$50,270.56         /         S00,270         S0         S0 <td>Upgrade door hardware with ADA hardware</td> <td>8</td> <td>30 Ea</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td></td> <td>\$36,093</td>	Upgrade door hardware with ADA hardware	8	30 Ea			3				\$36,093
10         3         Ea         50.00         / Ea         50 $  < < < < < < < < < < < < < < < << << << <<<<<<>< <<<<<<>< <<<<<<>< <<<<<<<>< <<<<<<<>< <<<<<<<<>< <<<<<<<<>< <<<<<<<<>< <<<<<<<<><< <<<<<<<<>< <<<<<<<<>< <<<<<<<<<<><<<<<>< <<<<<<<<<<><<<<<><<<<>< <<<<<<<<<<<><<<<<<<><<<<><<<<><<<><<<$	Remodel locker room restrooms that do not meet accessibility requirements by moving the	6				1			×	\$394,621
dual showerhead         11         3         Ea         50.00         / Ea         56.271         50           12         1         Ea         56.270.56         / Ea         56.271             13         1         Ea         510,320.00         / Ea         56.271              14         1         Ea         510,320.00         / Ea         513,735             13         1         Ea         513,734.83         / Ea         513,735             14         1         Ea         513,734.83         / Ea         513,735              15         1         Ea         513,734.83         / Ea         513,735              38         11         Ea         57,481.3         / Ea         513,735	plumbing Tixtures in the existing space Modify entry into locker rooms that do not have enough clearance	10				0			×	
12         1         E         S6,270.56 $ $ Ea         S6,270.56 $ $ Ea         S6,271 $ $ Ea         S6,271 $ $ Ea         S10,329.00 $ $ Ea         S10,329.00 $ $ Ea         S10,329.00 $ $ Ea         S10,329.00 $ $ Ea         S10,329.00 $ $ Ea         S10,329.00 $ $ Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,733         Ea         S13,637         Ea         S14,845         Ea         S14,845         Ea         S14,845         Ea         S14,845         Ea         S14,845         S1         S1         S1         S2         S24,607         S1         S1         S24,607         S1         S1         S2         S24,607         S1         S1         S2         S24,607         S1	Remove and replace concrete in locker rooms showers so each individual showerhead	11		· · ·		0			×	
13         1	can have its own drain per code Protect nines that are evoced throughout the school	12				5			>	¢6 771
14         1         c $\sqrt{1000}$	Add a lift to the weight room	12		_		1 0			<	¢100 370
tibules at door 1, $15$ $6$ $7$ <	Add for the music room to make it accessible	14		<u> </u>						\$134.735
answerse action is in the interval of	Add exterior vectibules and structure at door 21 and 16. Add interior vestibules at door 1	÷ ť								57A3 3AD
Ibrary stacks)16 $37,481.13$ $\left  Ea57,481.13\left  Ea57,481.13\left  Ea57,481.67\left  Ea57,4607\left  Ea524,607\left  Ea523,21,027\left  Ea524,607\left  Ea523,21,027\left  Ea524,607\left  Ea523,21,027\left  Ea524,607\left  Ea523,21,027\left  Ea524,607\left  Ea523,21,027\left  Ea524,607\left  Ea524,607\left  Ea524,607\left  Ea524,607\left  Ea524,607\left  Ea524,607\left  Ea524,607\left  Ea524,607\left  Ea<$	Add exterior vestibutes and structure at door 21 and 15. Add interior vestibutes at door 1, 2, 5, and 17	CI				ò				<b>Ş</b> 243,34U
asse cabinets and         17         1         Ea         \$24,607.07         /         Ea         \$24,607         /         Ea         \$24,607         /         Ea         \$24,607         /         Ea         \$24,607         /         Ea         \$24,607.07         /         Ea         \$24,607         /         Ea         \$24,607         /         Ea         \$24,607         /         Ea         \$21,946.97         /         Ea         \$313,682         P	Widen door 24 to make room for entry clearance (excluding modifying library stacks)	16				1				\$7,481
18         825         5 $517.56$ 5 $514.485$ 5 $514.485$ 5 $514.485$ 5 $514.652$ 5 $514.652$ 5 $514.652$ 5 $514.652$ 5 $514.652$ 5 $514.652$ 5 $514.652$ $50$ $50$ 20         4,435         5 $526.64$ $7$ $52,321,02,65$ $50$ $50$ 20         4,435         5 $5266.94$ $7$ $52,321,02,65$ $50$ $50$ 21         20         4,435         5 $5266.94$ $7$ $52,521,62,75$ $50$ $50$ 21         21         5 $5266.94$ $7$ $50$ $50$ $50$ 22         485         5 $5266.94$ $7$ $50$ $50$ $50$ $50$ 23         5 $5356.52$ $75$ $55$ $535.25$ $75$ $52$ $52$ $52$ $52$ $52$ $52$ $52$ $52$ $52$ $52$	Add an assessable workstation the FACS classroom by replacing 20 If of base cabinets and	17		/		17				\$24,607
19 $6$ $521,946.97$ $7$ $5131,682$ $5131,682$ $50$ 20 $4,435$ $57$ $520.07$ $7$ $52,321,027$ $50$ 20 $4,435$ $57$ $5266.94$ $7$ $52,321,027$ $50$ 20 $4,435$ $57$ $5266.94$ $7$ $52$ $50$ 21 $4,435$ $57$ $526.94$ $7$ $5$ $50$ 21 $4,435$ $57$ $526.94$ $7$ $50$ $50$ 22 $4,435$ $57$ $526.94$ $7$ $50$ $50$ 22 $485$ $57$ $535.20$ $7$ $50$ $50$ 23 $57$ $57$ $535.20$ $7$ $57$ $57$ $57$ 23 $57$ $57$ $535.23$ $7$ $57$ $57$ 24 $57$ $535.23$ $7$ $57$ $57$ $57$ 25 $853.53$	dd a sidewalk that connects door 18 and 19 to the sidewalk at door 17	18	825 SF	$\sim$		5				\$14,485
al Code Compliance         115,664         F         \$20.07         N         \$2,321,027         \$0           unity         unity         20         4,435         5F         \$266.94         / 5F         \$231,027         \$0           initiation Office Relocation and New Art Room (Remodel)         20         4,435         5F         \$256.94         / 5F         \$0         \$0           al Security         21         4,435         5F         \$256.94         / 5F         \$0         \$0           inistration         21         4,435         5F         \$256.94         / 5F         \$0         \$0           inistration         21         4,435         5F         \$233.20         / 5F         \$0         \$0           inistration         22         485         5F         \$350.21         / 5F         \$0         \$0           inistration         23         7F         75F         16         16         16         16           inistration         23         7F         5F         \$335.20         / 5F         17         16         16           inistration         23         7F         5F         \$335.20         7F         16         16         16	Add handicap accessible water fountains throughout the building	19		/		12				\$131,682
urity         solution         solution <t< td=""><td>Total Code Compliance</td><td></td><td></td><td></td><td></td><td></td><td>0\$</td><td>0\$</td><td></td><td>\$2,321,027</td></t<>	Total Code Compliance						0\$	0\$		\$2,321,027
initiation Office Relocation and New Art Room (Remodel)20 $4,335$ 5F $526.6.94$ / 5F $50$ $50$ call Securitycall Security $21$ $4,335$ 5F $526.6.94$ / 5F $50$ $50$ dition/Remodel (Educational Adequacy)call Security $21$ $7,435$ $5F$ $526.6.94$ / 5F $50$ $50$ dition/Remodel (Educational Adequacy)call Security $21$ $5F$ $5333.20$ / 5F $505.22$ / 5F	Security									
Ial Security     I	Administration Office Relocation and New Art Room (Remodel)	20	4,435 SF	\$266.94 / SI				\$1,183,888		\$1,183,888
dition/Remodel (Educational Adequacy)       21       55       \$339.20       /         ninistration       21       55       \$339.20       /       /       /       55       \$339.21       /       /       /       /       339.20       /       /       /       339.20       /       /       /       339.20       /       /       339.20       /       /       339.20       /       /       339.20       /       /       339.20       /       /       339.20       /       /       339.20       /       /       339.20       /       /       339.20       /       /       339.20       /       /        339.20       /       /        339.20       /       /        339.20       /       /       /       349.20       /       /        349.20       /       /        349.20       /       /        346.05       /       345.30       /       345.30       /        345.30       /        346.23       /        345.30       /       346.33       /        346.33       /       346.33       /       346.33       /       346.33 <td>Total Security</td> <td></td> <td>4,435 SF</td> <td></td> <td></td> <td></td> <td>\$0</td> <td>\$1,183,888</td> <td></td> <td>\$1,183,888</td>	Total Security		4,435 SF				\$0	\$1,183,888		\$1,183,888
ninistration     21     5F     \$339.20       ninistration     22     485     5F     \$351.74       letics     23     24     5F     \$351.74       litorium     24     5F     \$360.52     1       litorium     25     57     57     \$485.35     1       litorium     26     8,576     5F     \$376.82     1       ulation     26     8,576     5F     \$376.82     1       strooms     26     8,576     5F     \$376.82     1       mon Spaces     27     26     8,576     5F     \$376.82       mon Spaces     28     29     27     5F     \$3376.82       d Service/Cafeteria     30     5,161     5F     \$438.33	Addition/Remodel (Educational Adequacy)									
ketters     22     485     55     \$351.74       ketters     23     485     55     \$350.52       kittorium     23     57     57     586.52       kittorium     24     57     5485.35     5485.35       iness Education     25     57     54     545.35       valation     25     8,576     57     576.82       valation     26     8,576     57     5376.82       ksrooms     27     26     57     576.82       mon Spaces     28     5376.82     76.82     76.82       Softerstore     28     27     57     576.82       d Service/Cafeteria     20     57     576.82     76.82	Administration	21	SF	\$339.20 / SI				\$0		\$0
23     23     55     5360.52       24     54     545.35     545.35       25     54     545.35     545.35       26     55     545.35     545.35       27     26     8,576     57       28     27     57     5376.82       29     27     57     5376.82       20     28     5376.82     5376.82       21     29     57     5337.12       23     29     29     57       24     5376.82     5337.12       25     5397.12     5393.12       26     5397.12     5393.12       27     59     548.33	Art	22		`				\$170,594		\$170,594
24     54     \$48.33     348.33     548.33     548.33     548.33     548.33     548.33     5316.82 </td <td>Athletics</td> <td>23</td> <td>SF</td> <td>1</td> <td></td> <td></td> <td></td> <td>\$0</td> <td></td> <td>\$0</td>	Athletics	23	SF	1				\$0		\$0
25     25     \$376.82     376.82     \$376.82     \$376.82     \$376.83     \$376.83     \$376.83     \$376.83     \$376.83     \$376.83     \$376.83     \$376.83     \$376.83     \$376.83     \$3376.82     \$3376.82     \$3376.82     \$3376.82     \$3393.12     \$3376.82     \$3393.12     \$3376.83 </td <td>Auditorium</td> <td>24</td> <td>SF</td> <td>1</td> <td></td> <td></td> <td></td> <td>\$0</td> <td></td> <td>\$0</td>	Auditorium	24	SF	1				\$0		\$0
26     8,576     5     \$376.83       27     27     5     \$376.82       28     5376.82     5       29     5     \$331.12       30     5,161     5	Business Education	25	SF	1				\$0		\$0
27     5F     \$376.82       28     5F     \$393.12       29     5F     \$393.12       30     5,161     \$458.33	Circulation	26		~				\$3,231,719		\$3,231,719
28     5F     \$333.12     /       29     5F     \$393.12     /       30     5,161     \$458.33     /	Classrooms	27	SF					\$0	_	\$0
29         5F         \$393.12         /           30         5,161         \$458.33         /	Common Spaces	28	SF	/				\$0		\$0
30 5,161 SF \$458.33	FACS	29	SF					\$0	_	\$0
	Food Service/Cafeteria	30	5,161 SF	\$458.33 / SI				\$2,365,427		\$2,365,427

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## Schroeder Middle School Grand Forks, ND 11/2/2022





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Facility Assessment Estimate									
	ltem				5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with	
Description	Number	Takeoff Qty	μ	Critical	Maint	Maint	Adequacy	other needs	Total Cost
Library/Media Center	31	SF	/				\$0		\$0
Mechanical/Electrical	32	6,326 SF	\$307.85 / SF				\$1,947,481		\$1,947,481
Music	33	197 SF	\$401.90 / SF				\$79,174		\$79,174
Restrooms	34	1,066 SF	\$464.61 / SF				\$495,276		\$495,276
Science	35	SF	\$431.99 / SF				0\$		\$0
Special Education	36	SF	\$340.28 / SF				0\$		\$0
Technical Education	37	970 SF	\$381.83 / SF				\$370,380		\$370,380
Technology Education	38	872 SF	\$394.37 / SF				\$343,895		\$343,895
Total Adequacy		23,653 SF	\$380.67 / SF	\$0	\$0	\$0	\$9,003,946		\$9,003,946
Capital Maintenance									
Interior Upgrades									
Caulk the cosmetic cracking of the CMU brick throughout the school	39	1 Ea	\$6,270.56 / Ea		\$6,271				\$6,271
Replace dated and damaged carpet	40	5,000 SF	\$11.81 / SF		\$59,071				\$59,071
Interior Upgrades Subtotal		115,664 SF	\$0.56 / SF						\$65,342
Exterior Upgrades									
Replace damaged exterior sidewalks, curbs, and pavement that are in rough conditions	41	2,000 SF	\$18.30 / SF		\$36,609				\$36,609
Mil and overlay parking lot asphalt including pavement stripping	42	36,582 SF	\$5.08 / SF		\$185,954				\$185,954
Replace masonry caulking at exterior brick where it is deteriorating	43	10,000 SF	\$13.80 / SF		\$137,952				\$137,952
Patch EIFS where it is in rough condition	44	1 Ea	\$31,352.81 / Ea	\$31,353					\$31,353
Repair the canopy over door 1	45	1 Ea	\$12,541.12 / Ea	\$12,541					\$12,541
Replace gasketing around windows	46	110 Ea	\$752.47 / Ea		\$82,771				\$82,771
Replace caulking around the windows	47	110 Ea	\$501.65 / Ea		\$55,181				\$55,181
Add 15 additional parking stalls to the parking lot since it is not large enough	48	3,750 SF	\$14.84 / SF				\$55,650		\$55,650
Replace the roof when it nears the end of its useable lifetime	49	115,664 SF	\$33.97 / SF		\$3,929,106				\$3,929,106
Exterior Upgrades Subtotal		115,664 SF	\$39.14 / SF						\$4,527,117
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Electrical Opgiates Donings suittshhoored that is sooredid and most its successful life with a more 4000 distribution	Ċ	11E CC 1 CL	¢r 00 / 6r	¢ 600 01 4					¢600.01.4
replace switchboard that is very old and past its useful file with a new 400A distribution panel that utilizes breaker-type overcurrent protection	DC DC	1004 JL		4TU,2005,014					410,200¢
Replace branch panels throughout the original building that are noted to be very old and in	51	115,664 SF	\$3.45 / SF	\$398,903					\$398,903
Heed of replacement Add egress lighting to doors to exterior as is required by Building Code	52	115,664 SF	\$0.81 / SF		\$94,058				\$94,058
Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, diaming controls in majority of spaces, and digital monitoring of all controls via	53	115,664 SF	\$1.88 / SF		\$217,584				\$217,584
manutacturer provided software. Upgrade of all interior lighting controls throughout to digital lighting management	54	115,664 SF	\$0.19 / SF		\$21,758				\$21,758
Upgrade of all exterior lighting controls throughout to digital lighting management	55	115,664 SF	\$3.76 / SF		\$435,167				\$435,167
		_				_			

# COST ANALYSIS CONTINUED

## Schroeder Middle School Grand Forks, ND 11/2/2022



Facility Assessment Estimate										
Description	ltem Number	Takeoff Qty	Total Cost/Unit	st/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Add additional door security all exterior doors with access control and monitoring	56	115,664 S	Ŀ	\$0.98 / SF	\$112,870					\$112,870
Electrical Upgrades Subtotal		115,664 S	SF \$17	\$17.03 / SF						\$1,969,355
Mechanical Upgrades										
Add sprinklers to the building (except the 1998 addition) including a new water service line	57	80,440 S	SF \$12	\$12.50 / SF	\$1,005,490	06t			х	\$1,005,490
Replace all sewer piping that is in poor condition and is deteriorating in the building (besides the 1998 addition that is in fair condition). Costs include removal and replacement of the concrete and includent domarcod finither	58	80,440 S	SF \$24	\$24.38 / SF	\$1,961,044	344			×	\$1,961,044
or the concrete and interaction contracted minimizes. Replace all domestic water piping throughout the building, except in the 1998 addition, there is next it restiful if the Cost includes a water treatment system.	59	80,440 S	SF \$5	\$9.48 / SF	\$762,639	539			×	\$762,639
Replace plumbing fixtures that are not included in items above. The restroom plumbing	60	115,664 S	SF \$C	\$0.63 / SF	\$72,528	528				\$72,528
replace puring itsues that are not internationed in term easier puring fixtures throughout the building are currently white vitreous China fixtures. Flush valves and lavatory faucets are manually operated. It appears as though the district has been changing fixtures, flush valves, and faucets as required to address failures. Fixtures, in general, are in a reasonable condition. Fixtures should be replaced in conjunction with architectural upgrades to current codes and standards.	3				\$ \$	9			×	07 0 1 7
Plumbing in the boys and girls locker rooms is in poor condition. Showers and all other fixtures should be replaced but only in conjunction with architectural upgrades to current codes and standards.	61	115,664 S		-						
Add a grease interceptor system in the kitchen	62	115,664 SF		\$0.33 / SF	\$37,623	523				\$37,623
Overall, all HVAC equipment in this building should be replaced with new systems which do not include unit ventilators. Where tunnels are used as ductwork, new sheet metal ductwork should be installed. In areas where ductwork exists (outside of the 1998 addition) ductwork should be replaced. Ductwork for the 1998 addition should be able to remain and be reused in the future. These improvements are necessary to properly distribute air, allow for air conditioning to be installed, and improve indoor air quality.	63	115,664 SF		\$64.67 / SF	\$7,479,607	207			×	\$7,479,607
The hot water piping is original to the year the building or addition was constructed. This places a large fraction of the water piping at 47 years old or older. Aside from the 1998 addition, the condition of the hot water piping for the school is not well known, though it is assumed it is in poor condition due to the age of the piping and the numerous times the tunnels have had ground/stormwater in them. Further investigation is needed to understand whether the piping before 1998 should be replaced however, it is likely that it should be.	64	80,440 S	SF \$	\$0.00 //SF						
The school has 15 different indoor air handling units, over 29 different exhaust fans, and many different unit ventilators. All equipment is hot water heated. The HVAC equipment is largely original to the year the building or addition was constructed. Most all of the HVAC equipment in the entire building is at or past the end of its useful life. In many HVAC equipments then used as ductwork. This presents challenges to indoor air quality in maxy ways.	65	115,664 S	SF SC	\$0.00 / SF						

Schroeder Middle School Grand Forks. ND									الله عداد	
11/2/2022								EO	CONSTRUCTION ENGINEERS	zv
Facility Assessment Estimate										
	ltem					5 vrs Deferred	10 yrs Deferred	Educational	Svnergistic with	
Description	Number	Takeoff Qty		Total Cost/Unit	Critical	Maint	Maint	Adequacy	other needs	Total Cost
Other than the 1998 addition, ductwork or the use of tunnels as ductwork throughout the building does not effectively distribute air.	99	80,440 SF		\$0.00 / SF						
Except for the 1998 addition, the library, and a few small split systems, the majority of the school is not air-conditioned. It is highly recommended the school have an air conditioning system installed that is integrated into the school's HVAC systems.	67	80,440 SF		\$0.00 / SF						
Replace all existing pneumatic controls with a direct digital control system	68	115,664 SF		\$11.99 / SF	\$1,386,732					\$1,386,732
Mechanical Upgrades Subtotal		115,664 SF		\$109.85 / SF						\$12,705,663
Total Capital Maintenance		115,664 S	SF \$166.58	58 / SF	\$13,950,345	\$5,261,482	\$0	\$52 <b>,</b> 650		\$19,267,477
Total Construction Cost		143,752 SF		\$221.05 / SF	\$16,271,372	\$5,261,482	0\$	\$10,243,484		\$31,776,338
*** All above estimated costs are total construction costs. These include general condi	litions, CM j	ees, permits,	itions, CM fees, permits, insurances, bonds, taxes	nds, taxes						
Contingencies & Soft Costs										
Design Contingency	69	5.0%			\$813,568.58	\$263,074.12	\$0.00	\$512,174.20		\$1,588,817
Construction Contingency	70	5.0%			\$813,568.58	\$263,074.12	\$0.00	\$512,174.20		\$1,588,817
Escalation	71	%0.0			\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	72	7.0%			\$1,138,996.02	\$368,303.77	\$0.00	\$717,043.88		\$2,224,344
FF & E	73	2.0%			\$325,427.43	\$105,229.65	\$0.00	\$204,869.68		\$635,527
Owner Contingency	74	1.5%			\$244,070.57	\$78,922.24	\$0.00	\$153,652.26		\$476,645
Total Contingencies & Soft Costs					\$3,335,631	\$1,078,604	\$0	\$2,099,914		\$6,514,149
Total Facility Assessment Cost Estimate		143,752 S	SF \$266.36	36 / SF	\$19,607,003	\$6,340,086	\$0	\$12,343,398		\$38,290,487
Total Critical & Educational Adequacy	•	143,752 SF		\$222.26 / SF						\$31,950,401

COST ANALYSIS CONTINUED

115
116
118
122
136





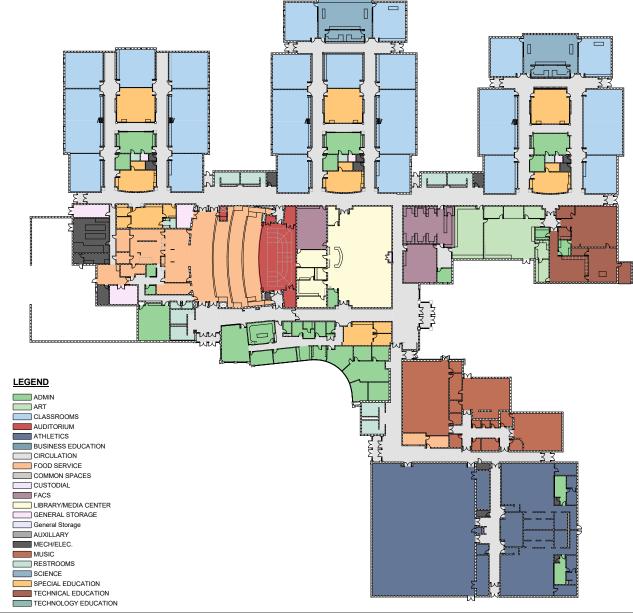
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **FACILITY ASSESSMENT**

## **A. EXISTING BUILDING INVENTORY**

South Middle School is located at 1999 47th Avenue S in Grand Forks and is one of three middle schools in Grand Forks. The building was completed in 1997, with no major renovations or additions to make note of. The school has numerous soccer fields to the south and east and Ulland Park Softball Complex directly to the west.

South Middle School is accessible by 47th Avenue S to the north and S 20th Street to the west. There are parking lots at the northwest corner and south of the school for faculty and staff. Parent drop-off takes place at the north and south entrances of the school within the parking lots.





**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **B. ARCHITECTURAL FINISHES**

#### SUMMARY

South Middle School's construction was completed in 1997. There are issues with the skin of the building not being completely sealed which allows air to escape through many areas of the school. There are issues with certain materials in the school as they become more aged. The programming of the school is suitable for its needs, but reworking is needed for the resource room near the main office to better suit its function. The bathroom layouts are not ideal as much of the pipework runs along the exterior walls, causing them to freeze frequently in the winter. The lockers are aging and often experience issues with sticking and difficulty opening. The risers in Room 606 are not portable and should be replaced with ones that better serve the music department (001). The laminate trim on much of the casework throughout the school is peeling off and needs new adhesion (002, 003).

#### SITE

A general patch and repair can be done for the sidewalk and asphalt on the site of the school (004). There is poor drainage near the north main entryway, which causes safety issues during as it freezes over and creates large ice patches.

#### MASONRY

The exterior brick of the building is in overall good shape but could use cleaning for aesthetic purposes. The joints for the limestone cap need to be cleaned out and resealed to prevent future water damage from happening on the brick underneath (005). There are exterior drains near Doors 5 and 13 that need to be cleaned so that water can properly drain out, as it is currently going onto the brick and creating water spots (006). There is insulation of the brick wall exposed near Door 30 adjacent to the garage that needs a plate to be put on it to prevent future damage (007). There is unpainted, exterior concrete masonry unit (CMU) brick near the receiving doors that should be painted to stop moisture from entering the bricks (008).

#### ADDITIONAL EXTERIOR MATERIALS

There is EIFS on the upper portions of the exterior walls that is cracking and peeling in many areas (009, 010). The EIFS on the building will keep needing repair and patching and replacement of the material should be considered.

#### ROOF

There are no notable issues with the roof. It is still original to the school and has had patches repaired throughout the years.

#### **OPENINGS**

The caulking around all windows of the school need resealing to secure the building membrane and to allow better temperature regulation inside. The curved, curtain wall window in the main office does not have the proper drainage in the flashing and is poorly sealed underneath, allowing cold air and moisture to enter the wall system (011). All the metal lintels in the school need new paint, as they are currently peeling and chipping (012). The weather stripping on numerous doors to the exterior is in poor shape and should be replaced.

#### CEILINGS

The acoustical ceiling tile (ACT) is in good shape, but there is water damage in the cafeteria and replacement is advised (013). Another area of concern with ceiling is in the library where there is paint flaking from the steel deck paneling (014).

**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### ARCHITECTURAL FINISHES CONTINUED

#### WALLS

The interior walls are mostly comprised of painted CMU and gypsum wall board with vinyl wall covering. Large portions of exterior walls are covered with vinyl covering on the interior side. It is recommended the vinyl wall covering be removed from the interior surface of exterior walls, as this could potentially create a double vapor barrier and trap moisture within the walls. Current code does not permit the use of vinyl wall covering on outside walls for this reason. There are several areas where the vinyl wall covering is releasing from the gypsum substrate (015, 016). There is horizontal cracking on the dry wall between many of the interior doors (017, 018).

#### FLOORING

There is carpeting and various types of tiles for the flooring of the school. Most of the hallways have new carpeting, but many of the classrooms still have original carpeting which is getting older and isn't in great shape (019, 020). There are vinyl composite tiles (VCT) in most of the hallways which are showing signs of wear and tear and bubbling up in quite a few areas. The terrazzo tile in the hallways is beginning to crack (021, 022). The quarry and ceramic tiles in the kitchen and locker rooms could use general repair for problem spots, but do not have major issues (023, 024). The gym floor is in good condition, but there is paint peeling in a couple of spots. The volleyball pole holes are not flush with the surrounding floor, which creates a tripping hazard (025).

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.



CILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



## C. MECHANICAL/ELECTRICAL ASSESSMENT

#### **FIRE PROTECTION**

Fire sprinkler systems are installed throughout the building. Depending on the level of work performed in the building, sprinkler systems may need to be modified.

#### PLUMBING

Plumbing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in exposed spaces appear to be in good condition. School maintenance staff reported that there have not been issues with the plumbing piping leaking or the piping deteriorating to the point of causing blockage.

The restroom plumbing fixtures throughout the building are white vitreous china fixtures for urinals and water closets with having sensor activated flush valves. Typical classroom wing restrooms have wash stations in the public space for hand washing with sensor activated faucets. Lavatories for locker rooms and common spaces are wall mounted china fixtures with metering faucets. The sinks in the classrooms and break rooms are stainless steel with manually operated faucets. Classroom sinks also have bubblers for drinking water.

Domestic hot water is produced by two (2) 285 MBH gas fired water heaters with integral storage tanks. Water heaters were installed in 2020 and are in good condition.

Science rooms have CPVC piping for acid waste/vent system. Neutralization tank for the system is located in the basement. The kitchen three compartment sink has a above grade grease interceptor installed to protect the waste piping system. The auto shop did not appear to have any oil/inflammable waste traps. The art rooms sinks are provided with solids interceptor/ traps to protect the waste piping system.

Thermostatic mixing valves meeting ASSE 1070 requirements should be added to public lavatories for scald protection.

#### HEATING

Heating for the building is provided by three (3) condensing Thermal Solutions 3000 MBH boilers. Boilers, boiler pumps, and building circulating pumps were installed in 2020. A heating system bypass was added in the system at the time of the boiler and pump replacement to alleviate some existing system issues.

Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in relatively good condition. Victaulic grooved piping is used throughout the building and according to maintenance staff the joints are starting to leak.

Variable air volume (VAV) boxes with hot water reheat coils are used throughout the building for zoning. Hot water cabinet unit heater and suspended unit heaters provide heat for vestibules, stairwells, mechanical rooms, and other similar spaces. There is no perimeter finned tube radiation or other supplemental heat in the building. Staff reported issues of inadequate heat in some exterior spaces and offices due to this.

CILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### VENTILATION AND EXHAUST

The ventilation and exhaust systems in the school include various indoor air handling units, and various exhaust fans. Air handling units have hot water heating coils and chilled water cooling coils but hot water coils are upstream of the cooling coils for all units. This coil configuration limits the potential for dehumidification at the unit. For units with reheat coils in the ductwork, dehumidification can still be achieved by overcooling at the unit and reheating as required at the zone level. These units are original to the building and we recommend that unit replacements be considered as part of long term planning. Excessive air leakage was found around the access door for AHU-5 supply fan. This door/seals should be replaced to eliminate air loss and inefficiencies. Indoor Air Quality should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates.

Air handling units are installed in mechanical penthouses throughout the building. The penthouses are accessed through alternating tread ladders which make moving parts and equipment in or out difficult. The mechanical penthouses have a lot of space and allow for a good duct layout and minimal sharp duct transitions.

Existing wood shop has a dust collection system located outside the building. The system does not appear to flame suppression or blast relief components. The distribution ductwork layout is efficient and in good condition. School district to determine if CTE spaces are still required in the school building and modify/update as needed. Art space kiln room has an exhaust hood over the kiln for heat and moisture removal. Food labs do not have exhaust hoods installed over the ranges. Ceiling exhaust operated through a wall switch is provided for general room exhaust. School kitchen has exhaust hoods installed for cooking equipment and dishwasher.

#### **AIR CONDITIONING**

Air conditioning systems in the building is provided by an air-cooled chiller and chilled water distribution system. Chiller and associated circulating pumps were installed in 2020 and are in good condition. Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in relatively good condition. Victaulic grooved piping is used throughout the building and according to maintenance staff the joints are starting to leak.

Air handling units serving the gymnasium and locker rooms do not have cooling coils installed. Recommend that chilled water piping ran to the air handling units and cooling coils be installed in the units to meet the requirements of ASHRAE 62.1 for ventilation rates, and ASHREA Standard 55 for cooling and dehumidification.

#### AUTOMATIC TEMPERATURE CONTROLS

Variable frequency drives (VFDs) for all air handling units are original to the building and past their useful life. Recommend that the VFDs be replaced with new to properly control the unit fans.

Controls throughout the building are electronic and Direct Digital Controls (DDC), original to the building. Some actuators, valves, and control components have been replaced as devices fail. There do not appear to be proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. Some units do not seem to be properly controlled with issues of fan surging and temperature swings being noted. An 2022/2023 project is currently underway to retro-commission controls throughout the building to verify proper operation and increase efficiency.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Power is delivered to facility via electrical service provided by Nodak Electric Coop.
- The electrical service is provided via 750kVA 480/277V 3-phase padmount transformer located at exterior of the building. Power is routed from the transformer through a CT cabinet that is sitting adjacent to the transformer, and then underground to the main service entrance switchboard located directly to the south.
- Electrical service appears to be acceptable, as is. Capacity is more than adequate.

#### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

#### **POWER DISTRIBUTION**

- The building's main electrical service is delivered underground into a 480/277V 3-phase 2500A Siemens Type SB3 switchboard. Power to all areas of the building is supplied from this main switchboard. This includes various distribution panels, branch panels, and mechanical equipment.
- All electrical panels and distribution equipment were observed to be in adequate condition. No updates are suggested.
- It was noted that the interior of a branch panel within the wood shop area was filled with sawdust, creating a fire hazard. It is suggested that this panel is properly sealed to prevent the entrance of any dust.

#### LIGHTING

- While some areas have been upgraded to LED light fixtures with renovations, the large majority of the building interior consists of fluorescent and incandescent lighting.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

#### LIGHTING CONTROL SYSTEMS

- Lighting within large majority school was noted to be controlled via manual toggle switch. Various areas such as the locker room bathrooms were observed to have automatic lighting controls. Very few areas capable of dimming control.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via centrally-located photocell.
- All exterior lighting control is suggested to be tied into digital lighting management, as outlined in interior lighting portion above.

#### COMMUNICATIONS SYSTEMS

- Communication from data closet to data closet done via OM4 fiber. Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. System has the capability of paging specific zones, as desired. Recessed speakers were noted to be located all throughout circulation areas, in all class-rooms, and in almost all "normally-occupied" spaces.
- IP phones are located in all classrooms for room-to-room communication.

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



- Centrally-controlled clock system has been upgrade within past few years and is manufactured by American Time with clocks located all throughout school. All communication between clocks and central system is done via hardwiring. Large majority are analog clocks.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of projectors and classroom sound reinforcement.

#### **SAFETY & SECURITY SYSTEMS**

- With the exception of a few select doors at the interior and exterior entrance doors, it was noted that electronic door security is present on very few doors within building. A buzz-in system consisting of a 2-way speaker and camera are located at the front entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera system has been updated throughout building over time to IP system.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- An intrusion detection system consisting of motion detection throughout hallways was installed several years back, but has since been disconnected entirely because of false alarms.
- Fire alarm control panel is Simplex 4020. Pull stations noted to be located at each exit of building. Fire detection was observed throughout all corridors and was noted to be adequate throughout entire building. Notification consists of strobes and horn/strobe devices. Various areas that are required to have audio/visual notification, per International Building Code, were noted to not have any devices.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **D. EXISTING DEFICIENCIES**

The analysis of the existing South Middle School has been broken down into three categories: code compliance/Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass. (026)
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains. (027)
- Door 25 is not protected with an enclosed vestibule, as required by energy code.
- Door hardware on doors to the stage is not accessible. (028)
- Handrails on the stairs up to the stage do not provide the code required extensions at the top and bottom of the stairs. (029)
- Guardrails for ramps in the cafeteria do not meet height requirements and are lacking a separate handrail. (030)
- The lower sink in the science lab is not accessible, as it exceeds reach range requirements and has no knee and toe clearance. (031)
- Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers.
- The shower in the PE staff locker room does not have sufficient clearances for accessibility. (032)
- Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code. (033)

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The risers in Room 606 are not portable and should be replaced with ones that better serve the music department.



The laminate trim on much of the casework throughout the school is peeling off and needs new adhesion.

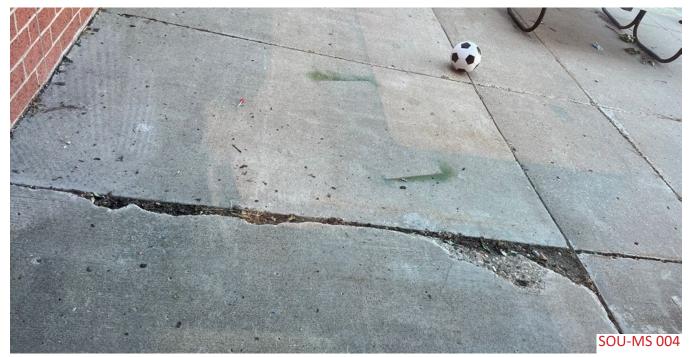
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The laminate trim on much of the casework throughout the school is peeling off and needs new adhesion.



There are exterior drains near Doors 5 and 13 that need to be cleaned so that water can properly drain out as it is currently going onto the brick and creating water spots.



A general patch and repair can be done for the sidewalk and asphalt on the site of the school.



FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The joints for the limestone cap need to be cleaned out and resealed to prevent future water damage from happening on the brick underneath



There is insulation of the brick wall exposed near Door 30 adjacent to the garage that needs a plate to be put on it to prevent future damage.

## **SOUTH MIDDLE SCHOOL** FACILITY ASSESSMENT EXISTING BUILDIN

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

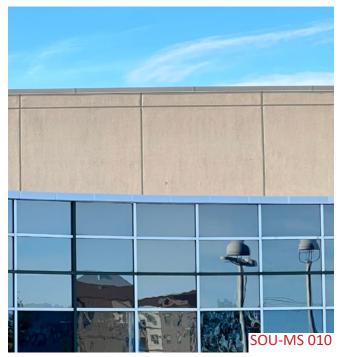
#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



There is unpainted, exterior CMU brick near the receiving doors that should be painted to stop moisture from entering the bricks.



There is EIFS on the upper portions of the exterior walls that is cracking and peeling in many areas.



There is EIFS on the upper portions of the exterior walls that is cracking and peeling in many areas.



The Acoustical Ceiling Tile (ACT) is in good shape, but there is water damage in the cafeteria and replacement is advised.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The curved, curtain wall window in the main office does not have the proper drainage in the flashing and is poorly sealed underneath, allow cold air to enter in the winter.



All the metal lintels in the school need new paint as they are currently peeling and chipping.



FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Another area of concern with ceiling is in the library where there is paint flaking from the steel deck paneling.



There are several areas where the vinyl wall covering is releasing from the gypsum substrate.



There is horizontal cracking on the dry wall between many of the interior doors.



FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



There are several areas where the vinyl wall covering is releasing from the gypsum substrate.



There is horizontal cracking on the dry wall between many of the interior doors.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Most of the hallways have new carpeting, but many of the classrooms still have original carpeting which is getting older and isn't in great shape



The terrazzo tile in the hallways is beginning to crack



Most of the hallways have new carpeting, but many of the classrooms still have original carpeting which is getting older and isn't in great shape



The terrazzo tile in the hallways is beginning to crack

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The quarry and ceramic tiles in the kitchen and locker rooms could use general repair for problem spots, but do not have major issues.



The quarry and ceramic tiles in the kitchen and locker rooms could use general repair for problem spots, but do not have major issues



The volleyball pole holes are not flush with the floor surrounding, which creates a tripping hazard.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.



Door 25 is not protected with an enclosed vestibule, as required by energy code. Door hardware on doors to the stage is not accessible.



Handrails on the stairs up to the stage do not provide the code required extensions at the top and bottom of the stairs.

## **SOUTH MIDDLE SCHOOL** FACILITY ASSESSMENT EXISTING BUILDI

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Guardrails for ramps in the cafeteria do not meet height requirements and are lacking a separate handrail.



The shower in the PE staff locker room does not have sufficient clearances for accessibility.



The lower sink in the science lab is not accessible, as it exceeds reach range requirements and has no knee and toe clearance.



Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code.



FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	8,029 SF	5,920 SF	2,109
Art	3,394 SF	3,520 SF	-126
Athletics	16,428 SF	12,460 SF	3,968
Auditorium	2,107 SF	4,140 SF	-2,033
Circulation	26,523 SF	36,205 SF	-9,682
Classrooms	24,557 SF	23,800 SF	757
FACS	3,074 SF	2,900 SF	174
Food Service/Cafeteria	7,824 SF	12,550 SF	-4,726
Library/Media Center	5,373 SF	3,010 SF	2,363
Mechanical/Electrical	1,921 SF	9,051 SF	-7,130
Music	5,902 SF	6,575 SF	-673
Restrooms	1,897 SF	3,017 SF	-1,120
Science	3,084 SF	3,000 SF	84
Special Education	6,144 SF	6,500 SF	-356
Technical Education	3,360 SF	9,300 SF	-5,940

Total Missing Square Footage -22,331

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### LACK OF LEARNING/COLLABORATION/SUPPORT SPACES

- There is a need for more individual instruction and emotional support spaces.
- Specialists such as therapists do not have enough space.
- The gymnasium needs more space.
- There are areas throughout the school that are not used and could be repurposed into other spaces.
- There is a need for gender neutral restrooms.

#### SECURITY/SAFETY

- There are not enough places for shelter in place/lockdown.
- The alert system needs to be updated.
- Secure entrances could be improved.

#### PARKING/STUDENT DROP-OFF AND PICK-UP

• There are issues during student drop-off and pick-up.

#### **TOP PRIORITIES**

- 1. Secure Entrance
- 2. Common Space/Collaboration Area and Social/Emotional Spaces
- 3. Outdoor Spaces

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South Middle School Grand Forks, ND 11/2/2022



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Facility Assessment Estimate									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Suilding Code Compliance								-	
Replace wire glass throughout the building that is no longer up to code (frame to remain)	1	2,000 SF	\$33.65 / SF	\$67,300	0				\$67,300
Add accessible lower water fountains throughout the building	2	2 Ea.	\$21,944.54 / Ea.	\$43,889					\$43,889
Add interior vestibule at Door 25 as required by energy code	с								\$29,683
Upgrade door hardware with ADA hardware at the stage	4	6 Ea.	\$983.61 / Ea.	\$5,902					\$5,902
Replace the handrail on the stairs up to the stage so they will extend 12" past the end of the	5	24 LF	\$131.89 / LF	\$3,165	10				\$3,165
stens. Replace the guardrails for ramps in the cafeteria that are not tall enough and are lacking the	9	72 LF	\$348.24 / LF	\$25,073	-				\$25,073
separate handrall Create an accessible sink and workstation in the science lab	7	1 Ea.	\$7,654.74 / Ea.	\$7,655					\$7,655
Remove and replace concrete in locker rooms showers so each individual showerhead can have its own drain ner rode	∞	2 Ea.		\$	~			×	\$147,423
Remove vinyl wall coverings from the inside of exterior walls that is creating a double vapor barrier, skim cost existing sheetrock and paint	6	12,060 SF	\$7.16 / SF	\$86,350					\$86,350
Remodel the shower in the PE staff locker room to meet clearances for accessibility	10	1 Ea.	\$43,951.64 / Ea.	\$43,952					\$43,952
Total Code Compliance		130,780 SF	\$3.52 / SF	\$460,392	\$0	\$0	\$0		\$460,392
Security									
Administration Office Entry Remodel	11	952 SF	\$101.40 / SF				\$96,529		\$96,529
Total Security		952 SF	\$101.40 / SF	0\$	0\$ (	0\$	\$96,529		\$96,529
Addition/Remodel (Educational Adequacy)									
Administration	12	SF	\$339.20 / SF				\$0		\$0
Art	13	126 SF	\$351.74 / SF				\$44,319		\$44,319
Athletics	14	SF	\$360.52 / SF				0\$		¢
Auditorium	15	2,033 SF	\$485.35 / SF				\$986,717		\$986,717
Business Education	16	SF	\$376.82 / SF				0\$		\$0
Circulation	17	9,682 SF	`				\$3,648,497		\$3,648,497
Classrooms	18	SF	\$376.82 / SF				\$0		\$0
Common Spaces	19	SF	\$393.12 / SF				0\$		\$0
FACS	20	SF	\$393.12 / SF				\$0		\$0
Food Service/Cafeteria	21	4,726 SF	\$458.33 / SF				\$2,166,055		\$2,166,055
Library/Media Center	22	SF	\$395.63 / SF				0\$		\$0
Mechanical/Electrical	23	7,130 SF	\$307.85 / SF				\$2,194,995		\$2,194,995
Music	24	673 SF	\$401.90 / SF				\$270,478		\$270,478
Restrooms	25	1,120 SF	\$464.61 / SF				\$520,365		\$520,365
Science	26	SF	\$431.99 / SF				\$0		\$0
Special Education	27	356 SF	\$340.28 / SF				\$121,138		\$121,138
Technical Education	28	5,940 SF	/				\$2,268,100		\$2,268,100
Technology Education	29	SF	\$394.37 / SF				\$0		\$0
Total Adequacy		31,786 SF	\$384.47 / SF	\$0	) \$0	\$0	\$12,220,663		\$12,220,663

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Facility Assessment Estimate									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Capital Maintenance									
Interior Upgrades									
Replace the lockers since are getting older and often experience issues with sticking and not opening up (788 student lockers in corridor, and 348 lockers in both boys and girls locker room)	30	1,136 Ea.	\$840.00 / Ea.			\$954,240			\$954,240
Repair the laminate trim on much of the casework throughout the school that peeling off and neets new adhesion	31	130,780 SF	\$0.34 / SF		\$44,465				\$44,465
Replace damaged ACT celling in the cafeteria and replacement	32	5,647 SF	\$9.54 / SF	\$53,845					\$53,845
Scrape off existing paint in the library and repaint	33	4,374 SF	\$8.83 / SF	\$38,622					\$38,622
Replace the weather stripping on numerous doors to the exterior that are in poor shape	34	48 Ea.	\$653.67 / Ea.	. \$31,376					\$31,376
General sheetrock repair throughout the building	35	130,780 SF	\$0.24 / SF		\$31,387				\$31,387
Replace original carpet in the classrooms	36	30,466 SF	\$11.81 / SF		\$359,934				\$359,934
Replaced damaged and dated VCT throughout the building	37	5,000 SF	/		\$45,600				\$45,600
Repair or replace the terrazzo tile in the hallways where it is beginning to crack	38		/		\$120,700				\$120,700
General repair of the quarry and ceramic tiles in the kitchen and locker rooms	39	8,641 SF	\$2.65 / SF		\$22,899				\$22,899
Repair the painting on the gym floor where the paint peeling in a couple of spots	40	1 Ea.	\$12,657.20 / Ea.		\$12,657				\$12,657
Repair the volleyball pole holes that are not flush with the floor surrounding, which creates a trinning hazard	41	1 Ea.	\$6,931.98 / Ea.	. \$6,932					\$6,932
Interior Upgrades Subtotal		130,780 SF	\$13.17 / SF						\$1,722,658
Exterior Upgrades									
Seal existing exterior brick to keep air from escaping through many areas of the school	42	130,780 SF	\$1.02 / SF	\$133,396					\$133,396
Replaced damaged paving	43	500 SF	\$17.56 / SF	\$8,780					\$8,780
Fix the bad drainage areas near the north main entryway, which causes safety issues during spring thaw as it freezes over and creates a large ice patch by regrading and landscaping	44	1 Ea.	\$21,494.12 / Ea.						\$21,494
Clean exterior brick of the building for aesthetic purposes	45	130,780 SF	\$0.37 / SF		\$48,389				\$48,389
Clean the joints for the limestone cap and resealed to prevent future water damage from happening on the brick underneath	46	130,780 SF	\$0.34 / SF	\$44,465					\$44,465
Clean out exterior drains near doors 5 and 13 that so that water can properly drain out as it is currently exine onto the brick and creating water soots	47	1 Ea.	\$7,431.14 / Ea.	. \$7,431					\$7,431
Repair the area where there is insulation of the brick wall exposed near door 30 adjacent to the zarage	48	1 Ea.	\$2,341.85 / Ea.	. \$2,342					\$2,342
Paint the exposed exterior CMU brick near the receiving doors to stop moisture from	49	1 Ea.	\$7,614.14 / Ea.	; \$7,614					\$7,614
General EIFS repair	50	130,780 SF	\$0.57 / SF		\$74,545				\$74,545
Recaulk around all windows of the school	51	60 Ea.			\$30,074				\$30,074
Fix the curved, curtain wall window in the main office does where there is not the proper drainage in the flashing and is poorly sealed underneath that allow cold air to enter in the winter	52	1 Ea.	\$25,632.17 / Ea.		\$25,632				\$25,632
Replace the roof when it nears the end of its useable lifetime	53	130,780 SF	\$32.76 / SF		\$4,284,353				\$4,284,353
Paint all the metal lintels in the school since they are currently peeling and chipping	54	1 Ea.	\$11,274.99 / Ea.		\$11,275				\$11,275
Exterior Upgrades Subtotal		130,780 SF	\$35.94 / SF						\$4,699,790

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## South Middle School Grand Forks, ND



Facility Assessment Estimate         Item         Takenf (ty)         Takenf (ty)         Systement 10           Description         two mode of the analysis of		ENGINEERS	0
thumber         Takeoff (Arrive)         Total Cost/Init         Critical         Syrs Deferred           Number         Takeoff (Arrive)         Total Cost/Init         Critical         Syrs Deferred           55         130,780         5f $$4,124.85$ / Ea         \$4,125           56         130,780         5f $$4,124.85$ / Ea         \$4,125           57         130,780         5f $$52,51$ / 5f         \$53,695           58         130,780         5f         \$52,51         / 5f         \$53,695           59         130,780         5f         \$52,51         / 5f         \$53,695           59         130,780         5f         \$52,51         / 5f         \$53,695           59         130,780         5f         \$52,51         / 5f         \$53,695           60         130,780         5f         \$53,76         \$53,695           61         130,780         5f         \$52,505         \$53,695           61         130,780         5f         \$52,695         \$53,695           61         130,780         5f         \$52,695         \$53,695           61         130,780         5f			
Number         Takeoff Qty         Total Cost/Unit         Critical         M           55         1         Ea.         \$4,124.85         /         Ea.         \$4,125         M         M           56         130,780         5F         \$1.21         /         5F         \$4,124.85         /         Ea.         \$4,125         M         M           57         130,780         5F         \$2.51         /         5F         \$130,780         5F         \$2.51         /         5F         \$4,126         M	5 yrs Deferred 10 yrs Deferred	d Educational with other	
55     1     Ea.     \$4,124.85     /     Ea.     \$4,124.85       56     130,780     5F     \$1.21     /     5F     \$1.25       57     130,780     5F     \$2.51     /     5F     \$136,244       58     130,780     5F     \$2.51     /     5F     \$136,244       58     130,780     5F     \$2.51     /     5F     \$11,163       59     130,780     5F     \$50.25     /     5F     \$11,163       60     130,780     5F     \$50.85     /     5F     \$50,208       61     130,780     5F     \$50.85     /     5F     \$50,208       61     130,780     5F     \$50.30     /     5F     \$51,1,163       62     130,780     5F     \$50.30     /     5F     \$54,290       63     130,780     5F     \$53,3,48     /     5F     \$41,850       65     130,780     5F     \$33,48     /     5F     \$41,850       65     130,780     5F     \$3,034     /     5F     \$41,850		Adequacy needs	Total Cost
55       1       Ea.       \$4,124.85       /       Ea.       \$4,124.85       /       \$4,125         56       130,780       5F       \$12.1       /       5F       \$130,780       5F       \$5.515,1       /       \$5       \$5158,244         57       130,780       5F       \$2.51       /       5F       \$5154,24       \$51         58       130,780       5F       \$50.25       /       5F       \$50.26       /       5F       \$511,163         60       130,780       5F       \$50.26       /       5F       \$50,208        \$511,163       \$51         60       130,780       5F       \$50.35       /       5F       \$50,208       \$511,163       \$51       \$50,208       \$511,163       \$51       \$50,208       \$51       \$50,208       \$51,300       \$51       \$50,300       \$51       \$50,208       \$51,300       \$51       \$50,300       \$51       \$50,300       \$51       \$50,208       \$51,300       \$51       \$50,300       \$51       \$50,300       \$51       \$50,300       \$51       \$50,300       \$51       \$51,300       \$51       \$51,300       \$51       \$51,300       \$51       \$51,300       \$51			
56       130,780       5F       51.21       / 5F       5158,244         57       130,780       5F       52.51       / 5F       5158,244         58       130,780       5F       50.25       / 5F       511,163         60       130,780       5F       53.76       / 5F       511,163         he       61       130,780       5F       50.25       / 5F       511,163         he       61       130,780       5F       50.26       / 5F       50,208         he       61       130,780       5F       50.69       / 5F       50,208         60       130,780       5F       50.69       / 5F       50,208         61       130,780       5F       50.69       / 5F       541,850         62       130,780       5F       50.32       / 5F       541,850         etait       63       130,780       5F       51.34       / 5F       541,850         units,       65       130,780       5F       51.34       / 5F       541,850         etait       66       130,780       5F       51.34       / 5F       541,850         etait       65       130,780			\$4,125
57       130,780       5F       \$2.51       / 5F       59         58       130,780       5F       \$0.25       / 5F       \$111,163         60       130,780       5F       \$3.76       / 5F       \$111,163         he       61       130,780       5F       \$50.59       / 5F       \$50,208         he       61       130,780       5F       \$50.69       / 5F       \$50,208         he       61       130,780       5F       \$50.69       / 5F       \$50,208         ne       61       130,780       5F       \$50.69       / 5F       \$50,208         e       62       1       130,780       5F       \$50.32       / 5F       \$41,850         wits,       65       130,780       5F       \$51.34       / 5F       \$41,850         woter       63       130,780       5F       \$51.34       / 5F       \$41,850         woter       65       130,780       5F       \$51.34       / 5F       \$41,850         e       woter       1       53.48       / 5F       \$41,850       \$53.48       / 5F       \$41,850         e       woter       1       130,780 <t< td=""><td></td><td></td><td>\$158,244</td></t<>			\$158,244
58     130,780     5F     \$0.25     / 5F     \$11,163       59     130,780     5F     \$3.76     / 5F     \$111,163       60     130,780     5F     \$0.85     / 5F     \$111,163       61     130,780     5F     \$0.85     / 5F     \$111,163       60     130,780     5F     \$0.69     / 5F     \$11,163       61     130,780     5F     \$0.69     / 5F     \$90,208       62     130,780     5F     \$9.30     / 5F     \$90,208       63     130,780     5F     \$0.32     / 5F     \$24,290       63     130,780     5F     \$3.48     / 5F     \$24,290       63     130,780     5F     \$3.48     / 5F     \$24,350       water     63     130,780     5F     \$3.48     / 5F     \$24,290       6     130,780     5F     \$3.48     / 5F     \$24,350       at coils     130,780     5F     \$3.48     / 5F     \$41,850       at coils     5     130,780     5F     \$3.48     / 5F     \$53,4290       at coils     5     130,780     5F     \$3.48     / 5F     \$54,290       at coils     5     130,780     5F			\$328,258
59       130,780       5F       \$3.76       /       5F       \$111,163         60       130,780       5F       \$0.69       /       5F       \$90,208         ne       61       130,780       5F       \$0.69       /       5F       \$90,208         ne       61       130,780       5F       \$0.69       /       5F       \$90,208         ne       61       130,780       5F       \$0.69       /       5F       \$90,208         ne       62       1       130,780       5F       \$90,208       5       \$90,208         estaff       63       130,780       5F       \$90,32       /       5F       \$41,850         water       63       130,780       5F       \$3.48       /       5F       \$41,850         units,       65       130,780       5F       \$51.34       /       5F       \$41,850         eat colls       65       130,780       5F       \$51.34       /       5F       \$41,850         eat colls       65       130,780       5F       \$51.34       /       5F       \$41,850         eat colls       65       130,780       5F       \$51.34			\$32,695
60     130,780     5F     \$0.85     / 5F     \$111,163       v the     61     130,780     5F     \$0.69     / 5F     \$90,208       v     130,780     5F     \$9.30     / 5F     \$90,208       ind     62     130,780     5F     \$9.30     / 5F     \$90,208       ing: Staff     62     130,780     5F     \$9.30     / 5F     \$24,290       ing: Staff     63     130,780     5F     \$5.34     / 5F     \$41,850       ing: staff     64     130,780     5F     \$3.38     / 5F     \$41,850       ing units,     65     130,780     5F     \$3.348     / 5F     \$41,850       ing units,     65     130,780     5F     \$3.348     / 5F     \$41,850       ing units,     65     130,780     5F     \$3.348     / 5F     \$41,850       ing units,     65     130,780     5F     \$3.48     / 5F     \$41,850       ing units,     65     130,780     5F     \$3.48     / 5F     \$41,850       ing units,     65     130,780     5F     \$5.348     / 5F     \$41,850       ing units,     65     130,780     5F     \$5.10.34     / 5F     \$41,850 <td></td> <td></td> <td>\$491,733</td>			\$491,733
61     130,780     5F     \$0.69     / 5F     \$90,208       130,780     5F     \$9.30     / 5F     \$90,208       130,780     5F     \$9.30     / 5F     \$91,200       62     1     1     Ea.     \$24,290.02     /       63     130,780     5F     \$0.32     /     5F     \$41,850       63     130,780     5F     \$3.348     /     5F     \$41,850       65     130,780     5F     \$3.348     /     5F     \$41,850			\$111,163
130,780     5F     59.30     5F     59.30       62     1     Ea.     \$24,290.02     \$24,290       63     130,780     5F     \$3.48     \$5F     \$41,850       64     130,780     5F     \$3.48     \$5F     \$41,850       65     130,780     5F     \$5.348     \$5F     \$41,850       65     130,780     5F     \$51.48     \$5F     \$50.32			\$90,208
62     1     Ea.     \$24,290.02     5     \$24,290       63     130,780     5     \$24,290.02     \$6     \$41,850       63     130,780     5     \$3.48     \$5     \$41,850       65     130,780     5     \$5.348     \$5     \$41,850       65     130,780     5     \$3.48     \$5     \$41,850       65     130,780     5     \$5.348     \$5     \$5.35			\$1,216,425
62         1         Ea.         \$24,290.02         /         Ea.         \$24,290           63         130,780         SF         \$0.32         /         SF         \$41,850           64         130,780         SF         \$3.48         /         SF         \$41,850           65         130,780         SF         \$3.48         /         SF         \$41,850			
62     1     Ea.     524,290.02     54.4,290       63     130,780     5F     \$41,850       64     130,780     5F     \$3.48     / 5F       65     130,780     5F     \$3.48     / 5F			
63 130,780 SF \$0.32 / SF \$41,850 64 130,780 SF \$3.48 / SF 65 130,780 SF \$10.34 / SF 65 130,780 SF \$10.34 / SF			\$24,290
F 64 130,780 SF \$3.48 / SF 53.48 / SF 53.48 / SF 55 130,780 SF 510.34 / SF 5100.34 / SF 510.34 / SF 51			\$41,850
65 130,780 SF \$10.34 /			\$455,114
	\$1,352,265	v.	\$1,352,265
Existing wood shop has a dust collection system located outside the building. The system 66 1 Ea. \$15,624.15 / Ea. \$15,624.15 does not appear to flame suppression or blast relief components			\$15,624
Air handling units serving the gymnasium and locker rooms do not have cooling coils 67 130,780 SF \$2.35 / SF \$307,333 installed. Recommend that chilled water piping ran to the air handling units and cooling coils be installed in the units to meet the requirements of ASHRAE 62.1 for ventilation rates, and ASHREA Standard 55 for cooling and dehumidification.			\$307,333
Variable frequency drives (VFDs) for all air handling units are original to the building and 68 1.30,780 SF \$2.30 / SF \$3.00,794 past their useful life. Recommend that the VFDs be replaced with new to properly control the unit fans.			\$300,794
Mechanical Upgrades Subtotal 130,780 SF \$19.10 / SF			\$2,497,270

South Middle School Grand Forks, ND 11/2/2022								CONS	CONSTRUCTION	Z
								ENG	ENGINEERS	2
Facility Assessment Estimate										
	ltem					5 yrs Deferred 10 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	Unit	Critical	Maint	Maint	Adequacy	needs	Total Cost
Total Capital Maintenance		130,780 SF	F \$77.51 / SF	/ SF	\$801,801	\$7,027,836	\$2,306,505	\$0		\$10,136,143
Total Construction Cost		163,518 SF	F \$140.13 / SF	/ SF	\$1,262,193	\$7,027,836	\$2,306,505	\$12,317,192		\$22,913,726
*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	tions, CM	fees, permits, ir	nsurances, bonds,	taxes						
Contingencies & Soft Costs										
Design Contingency	69	5.0%			\$63,109.63	\$351,391.82	\$115,325.26	\$615,859.60		\$1,145,686
Construction Contingency	70	5.0%			\$63,109.63	\$351,391.82	\$115,325.26	\$615,859.60		\$1,145,686
Escalation	71	0.0%			\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	72	7.0%			\$88,353.48	\$491,948.55	\$161,455.36	\$862,203.45		\$1,603,961
FF & E	73	2.0%			\$25,243.85	\$140,556.73	\$46,130.10	\$246,343.84		\$458,275
Owner Contingency	74	1.5%			\$18,932.89	\$105,417.55	\$34,597.58	\$184,757.88		\$343,706
Total Contingencies & Soft Costs					\$258,749	\$1,440,706	\$472,834	\$2,525,024		\$4,697,314
Total Facility Assessment Cost Estimate		163,518 SF	F \$168.86	/ SF	\$1,520,942	\$8,468,543	\$2,779,339	\$14,842,216		\$27,611,040
Total Critical & Educational Adequacy		163,518 SF	F \$100.07 / SF	/ SF						\$16,363,158

# COST ANALYSIS CONTINUED

A. EXISTING BUILDING INVENTORY	141
B. ARCHITECTURAL FINISHES	143
C. MECHANICAL/ELECTRICAL ASSESSMENT	145
D. EXISTING DEFICIENCIES	149
E. COST ANALYSIS	167

Middle

Valley



SCHOOL

VALLEY MIDDLE SCHOOL

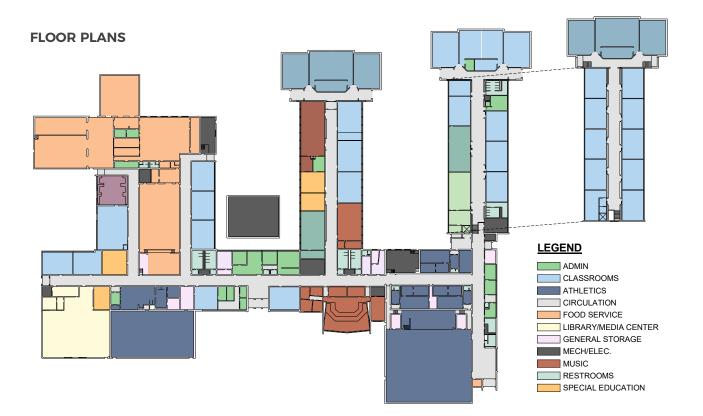
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

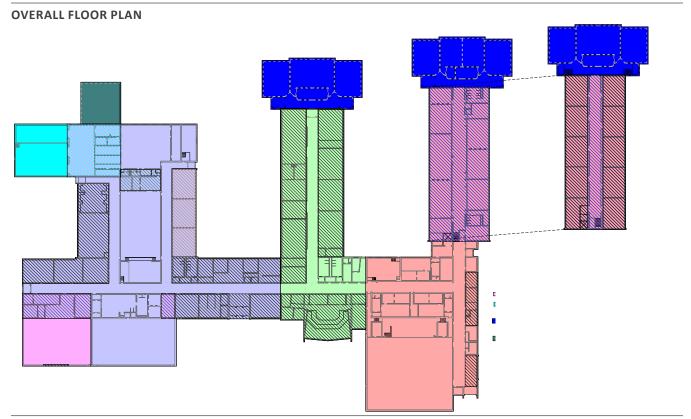
## **A. EXISTING BUILDING INVENTORY**

Valley Middle School is located at 2100 5th Avenue N in Grand Forks. The school opened in 1955 as a junior high school. In 1956, an addition was made to the west of the original school. This addition included a library, classrooms, band and chorus rooms, practice rooms, and arts and crafts rooms. In 1961, the school was expanded further west with the addition of a gym, locker room, new library, office, teacher's lounge, stage, classrooms, and a new kitchen. In 1975, a portion of the 1961 addition was remodeled, turning previous recitation rooms into a reading/research room, storage room, and an office work room. In 1978, a library addition was added onto the southwest corner of the school and the adjacent classrooms were remodeled to create library storage, a work room, audio/visual storage, informal reading room, and a conference/ studio room. The existing gym work room and apparatus room were also remodeled during this time to create a new gym entry/storage room. In 1982, several roof beams were repaired. In 1993, another addition and remodel took place to the northwest corner of the school where a child nutrition program was added. A renovation took place in 1995 to remove the crafts room, storage, office, and drafting room. Two industrial technology classrooms, a manufacturing room, and an audio/visual room were built. In 1998, the original wing of the school received a renovation and additions were added to the north end of both the original 1954 wing and the 1956 wing. These additions consisted of new science classrooms and laboratories. In 1999, remodeling took place in which various upgrades were done throughout the school. In 2001, the food service area was remodeled. Most of the windows in the school were replaced in 2010.

Valley Middle School is accessible from 6th Avenue N to the north, N 20th Street to the east, and 5th Avenue N to the south. There are two parking lots to the north of the building and one small parking lot to the south of the building.







ADDITION/RENO & CONSTRUCTION TYPE

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Valley Middle School opened in 1955. Since then, the school has received additions in 1961, 1978, 1993, and 1998. Remodel projects were done in 1975, 1993, 1995, 1998, and 1999. Signs of wear and tear are prevalent in both the interior and exterior of the school. The school does not have air conditioning and temperature regulation throughout is difficult. Classrooms are small and there aren't any spaces for student collaboration where breakout sessions can take place. There is a general lack of technology in the building. Classrooms do not have enough outlets, the sound system does not reach all rooms, and clocks are not synchronized so the time shown varies from room to room. There are no science labs in the building and no water at all on the second floor. There are not enough restrooms in the building and there are privacy concerns in several of the existing restrooms. Parking is sparse and there is no designated spot for student drop off and pick up. The school has been well maintained throughout the years but is no longer able to meet the educational needs of the students or faculty.

#### SITE

There is not enough parking on site and student drop off/pick up is not efficient. There are accessibility issues at most exterior doors as a step up is required to enter the building (001, 002, 003, 004). The stoop at the exterior door in the corridor outside the library is sinking and pulling away from the door sill causing gaps at the threshold (005, 006). The same issue is apparent at other doors where there isn't a proper stoop tied in (007). The stoop outside the southeast door of the small gymnasium is in very bad shape and needs to be replaced (008). Louvres around the exterior of the building should be repainted (009, 010).

#### MASONRY

The brick is in good condition overall, but caulking is wearing and needs attention (011, 012, 013). The first few courses of brick around the building are dirty and should be cleaned (014). A mowing strip should be installed to prevent this issue in the future.

#### ADDITIONAL EXTERIOR MATERIALS

Although the exterior of the building is mainly brick, there are also accents of exterior insulation and finish systems (EIFS) and wood paneling. Caulking is wearing and should be redone on EIFS walls (015) and where the EIFS meets the brick (016). The flashing around the bottom of the EIFS is not sufficiently running away from the wall (017). The EIFS band beneath the windows in the north parking lot is damaged and should be refinished (018). The exposed trim board around the top of the brick walls should be repainted (019). Wood paneling above the brick at the south exterior wall of the gymnasium is pulling away and needs attention (020). Painted plywood around the exterior of the building is damaged and deteriorating (021) and shows signs of water damage above the exterior door between classroom D2 and the food service building (022).

**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### ARCHITECTURAL FINISHES CONTINUED

#### ROOF

There are gaps in the soffit that need to be addressed (023).

#### **OPENINGS**

Overall, the windows appear to be in good condition but the sealant and gasketing within the windows are in poor shape and need to be redone (024). The doors throughout the building are in poor shape. Due to the age of the doors, visible wear and tear is shown on multiple doors (025, 026).

#### CEILINGS

Most of the ceilings are acoustical ceiling tiles (ACT) with acoustical panels located in some rooms. There are some water stains throughout the building (027). The acoustical panels are dated and showing wear (028).

#### WALLS

The interior walls are either painted masonry, painted gypsum board, have vinyl wall covering, tiling, or acoustical panels. There are notes of shifting and large cracks in multiple concrete masonry units (CMU) walls throughout the building (029, 030).

#### FLOORING

The flooring is mostly compromised of carpet and tiling. Some classrooms have new carpet but most of the school consists of dated carpet. Certain areas of the carpet in the school are experiencing warping. Old tile located throughout the school should be tested for asbestos (031).

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

CILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

Fire sprinkler systems are absent throughout the majority of the building. A fire suppression system riser and fire department connection were found for the 1998 addition and adjacent two-story portion of the school. Other than these areas, no other fire sprinkler piping was found in the school. Any renovation in this school would require sprinkler systems to be installed throughout the areas of the school not currently covered by the existing 1998 system.

#### PLUMBING

The sewer piping throughout the building is in poor condition and is deteriorated. Facilities staff have reported a number of issues with sewer leaks and backups. Existing piping is located below floor slabs or in small crawl tunnels around the school making replacement difficult but necessary. There is little, if any, existing sewer waste and vent piping that should be relied upon for use in the future.

Storm and groundwater drainage have traditionally been a large issue at this school. There has been water in the tunnels and in the lower level of the school on many occasions. The existing storm and groundwater system, or lack thereof, should be replaced with a new system throughout the entire school.

Domestic water piping is original to the year the building or addition was constructed. This places a large fraction of the water piping at 44 years old or older. This school does not currently have any type of water treatment system (e.g., a water softener) which makes it likely a majority of the water piping is scaled and in poor condition. It is likely most, if not all, existing water piping should be replaced.

The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures. Flush valves and lavatory faucets are manually operated. It appears as though the district has been changing fixtures, flush valves, and faucets as required to address failures. Fixtures, in general, are in a reasonable condition however, there are not enough fixtures to serve the occupant load of the building. Also, fixtures should be equipped with automatic sensors for improved health and safety. It is likely that all restrooms in the school need a complete renovation in order to meet the code-required fixtures for the number of occupants and bring the facilities to a modern standard.

Domestic hot water is largely produced by natural gas water heaters. It appears the water heaters have been replaced on an as-required basis as they have failed. The existing water heaters are functional but should be replaced with new high-efficiency, sealed combustion, natural gas water heaters.

Kitchen plumbing fixtures and piping are in poor condition and are in need of being replaced.

Boys and girls locker rooms have showers that are in poor condition and a very low number of restroom fixtures. The showers should be replaced, and additional restroom fixtures should be added but only if architectural changes are made to the locker rooms to address code issues.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### HEATING

Heating for the building comes from four (4) non-condensing low-pressure steam boilers. Boilers are at least 20 years old and are past the end of their useful life. There are a number of condensate pumps throughout the building which return back to the boiler room. There is one existing boiler feed tank in the boiler room that is also past the end of its useful life. The steam system piping is original to the year the building or addition was constructed. This places a large fraction of the piping at 44 years old or older. Facilities staff have reported a number of piping leaks in the building. Steam is delivered to heating coils in air handling units, unit ventilators, steam fin-tube radiation, and other terminal heating devices. The steam fin-tube radiation throughout the school has been noted to leak as well as make noise that disturbs the learning environment. Steam coils subject to outside air, such as in air handling units and unit ventilators, have been noted to freeze and crack. This leads to the coils being repaired or replaced or no longer having a heating coil for use in this equipment.

Overall, the entire steam heating system for this building is well past its useful life, of antiquated design, and needs to be replaced with a new more efficient, easier-to-maintain system.

#### **VENTILATION AND EXHAUST**

The school has 18 different indoor air handling units, over 30 different exhaust fans, and many different unit ventilators. All air handling units and unit ventilators are steam heated and have no air conditioning. The HVAC equipment is largely original to the year the building or addition was constructed. This places a large fraction of the equipment at 44 years old or older which is well past its useful life. Many of the units are not fully functional, if functional at all, which results in poor air movement and indoor air quality.

Ductwork throughout the building does not effectively distribute air. The ductwork itself is at the end of its useful life and will have excessive leakage.

Overall, the entire HVAC system (equipment and ductwork) in this building should be replaced with new systems which do not include unit ventilators. These improvements are necessary to properly distribute air, allow for air conditioning to be installed, and improve indoor air quality.

#### **AIR CONDITIONING**

With the exception of a few, small, standalone, air conditioning units the school has no air conditioning. It is highly recommended the school have an air conditioning system installed that is integrated into the school's HVAC systems.

#### AUTOMATIC TEMPERATURE CONTROLS

Controls throughout the building are pneumatic and original to the building. These controls currently function poorly, if at all. Also, pneumatic controls offer limited control capability and no ability for monitoring and alarm. With the controls as they are today, there is no way to properly control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. It is recommended that all existing pneumatic controls be replaced with new Direct Digital Controls (DDC) systems. The DDC system should be integrated with the existing Grand Forks Public School's Building Automation System (BAS). The system would be integrated across the district to allow for single stop monitoring and controls of all buildings in the district.

**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 300KVA 208/120V padmount transformer located on north side of building.
- Power is routed underground from the transformer to a wall-mounted CT cabinet just to the south. Power is then routed through the exterior wall and into the service entrance switchboard within a mechanical room.
- Peak loads on this transformer in the past 12 months was 191kW (530A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is adequate.

#### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

#### POWER DISTRIBUTION

- The service entrance switchboard is a 208/120V 1200A Siemens Series 6. Power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- Branch panels throughout building were noted to be very old, in some cases. While some are newer and have been added/updated over time, some appear to be nearing the end of their useful life. All panels are currently in working order, but it is recommended that the older panels be replaced with any renovation project.
- It was noted that very few receptacles were located within each classroom. Outlet expanders and plugmold devices were utilized in several locations. Above a unit heater in one instance. Often times this creates a situation in which there are more outlets on a single circuit than is allowed by Code, and can create a fire hazard.
- Areas such as the weight room were noted to have electrical distribution equipment and disconnects out in the open for anyone to operate. This presents a safety concern. These devices should be located in back of house areas where only faculty can access them.

#### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the cafeteria and front office have been updated to LED lighting. Various areas, such as the locker rooms, were noted to have inadequate lighting levels, as recommended by the Illuminating Engineering Society.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

#### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas utilize dimming operation.
- Gym lighting is currently controlled via breaker within electrical panel that is accessible to anyone in gym area causing a potential safety concern.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



- All exterior lighting is controlled via photocell and/or timeclock.
- All exterior lighting control is suggested to be tied into new digital lighting management, as outlined in interior lighting portion above.

#### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Dedicated wireless access points were observed in several classrooms. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Recessed speakers were noted to be located all throughout circulation areas. Intercom speakers were observed in some classrooms, but not all.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done via hardwiring. Clocks consist of primarily analog devices. It was stated by faculty that when a Simplex clock goes out, it is replaced with a simple battery-powered clock.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of smart boards, shorth-throw projectors, and classroom sound reinforcement.

#### SAFETY & SECURITY SYSTEMS

- A select few exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel was recently updated to Simplex 4100ES. Panel is capable of voice evacuation, but currently utilized horns throughout school. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices. Locations of notification devices was noted to be inadequate in some instances where devices were spaced too far apart.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### **D. EXISTING DEFICIENCIES**

The analysis of the existing Valley Middle School has been broken down into three categories: code compliance/Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

#### 1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Door hardware on various doors throughout the building is not accessible (032, 033).
- Most of the building is non-sprinklered with the exception of several of the additions (034).
- The staff lounge restroom is not accessible (035).
- The counseling room restroom is not accessible (036).
- Many interior doors are not fire rated (037).
- Hallways in the music room do not meet minimum width requirements for accessibility (038).
- All public restrooms in the building are not accessible (039).
- The custodial office restroom is not accessible (040).
- The stairwell in the mechanical room is missing a handrail (041).
- All locker rooms are not accessible (042, 043).
- Showers in locker rooms do not have sufficient drains as required by code to prevent wastewater from one bather passing over areas occupied by other bathers.
- The weight room is not accessible from the gym (044).
- The door into the weight room fails to meet required maneuvering clearance for accessibility and the door does not swing in the proper direction (045).
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains (046).
- Most entrances to the school do not have the required safety glass (047).
- Combustible material is found in corridors that are non-sprinklered (048).
- Exit doors do not have the required safety glass (049).
- Several rooms in the school do not have proper signage with brail.
- Guardrails in all stairwells do not meet height requirements.
- Handrails on stairs do not provide the code required extensions at the top and bottom of the stairs.
- The stairwell in the middle of the school is lacking a separate handrail from the guardrail and spaces between the railings exceed the maximum size of 4" (050).
- The door to the electrical meter room does not swing in the proper direction.
- Wire glass is seen throughout the building (051).
- Pipes throughout the building are exposed and should be protected (052).
- Sinks in classrooms are not accessible (053, 054).
- Computer room 3 needs an additional exit.
- The art room needs an additional exit.
- Room B-5 needs an additional exit (055).
- The desk in the main office is not accessible.
- FACS classroom is not accessible (056).
- The staff supply room is not accessible and needs a handrail on the stairwell.





There are accessibility issues at most exterior doors as a step up is required to enter the building.



There are accessibility issues at most exterior doors as a step up is required to enter the building.



There are accessibility issues at most exterior doors as a step up is required to enter the building.



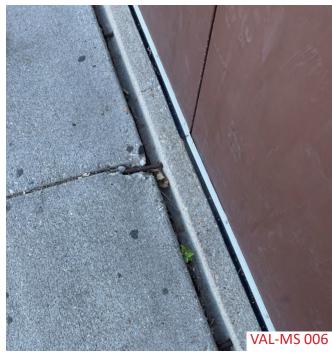
There are accessibility issues at most exterior doors as a step up is required to enter the building.



#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The stoop at the exterior door in the corridor outside the library is sinking and pulling away from the door sill causing gaps at the threshold.



The stoop at the exterior door in the corridor outside the library is sinking and pulling away from the door sill causing gaps at the threshold.



The same issue is apparent at other doors where there isn't a proper stoop tied in.



The stoop outside the southeast door of the small gymnasium is in very bad shape and needs to be replaced.





Louvres around the exterior of the building should be repainted.



Louvres around the exterior of the building should be repainted.



The brick is in good condition overall, but caulking is wearing and needs attention.



The brick is in good condition overall, but caulking is wearing and needs attention.





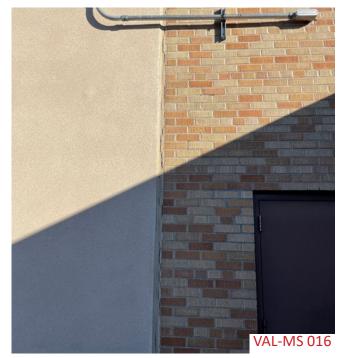
The brick is in good condition overall, but caulking is wearing and needs attention.



The first few courses of brick around the building are dirty and should be cleaned.



Caulking is wearing and should be redone on EIFS walls.



Caulking is wearing and should be redone on EIFS walls and where the EIFS meets the brick.





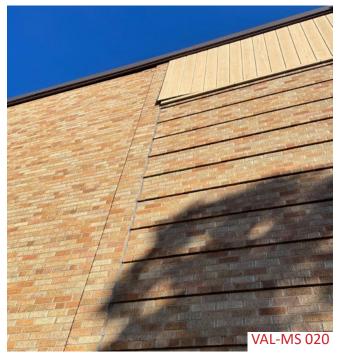
The flashing around the bottom of the EIFS is not sufficiently running away from the wall.



The EIFS band beneath the windows in the north parking lot is damaged and should be refinished.

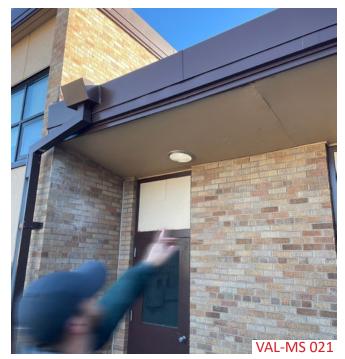


The exposed trim board around the top of the brick walls should be repainted.



Wood paneling above the brick at the south exterior wall of the gymnasium is pulling away and needs attention.





Painted plywood around the exterior of the building is damaged and deteriorating.



Painted plywood around the exterior of the building is damaged and deteriorating and shows signs of water damage above the exterior door between classroom D2 and the food service building.



There are gaps in the soffit that need to be addressed.



Overall, the windows appear to be in good condition but the sealant and gasketing within the windows are in poor shape and need to be redone.





Due to the age of the doors, visible wear and tear is shown on multiple doors.



Due to the age of the doors, visible wear and tear is shown on multiple doors.



There are some water stains throughout the building.



The acoustical panels are dated and showing wear.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX





There are notes of shifting and large cracks in multiple CMU walls throughout the building.

There are notes of shifting and large cracks in multiple CMU walls throughout the building.



Old tile located throughout the school should be tested for asbestos.



Door hardware on various doors throughout the building is not accessible.

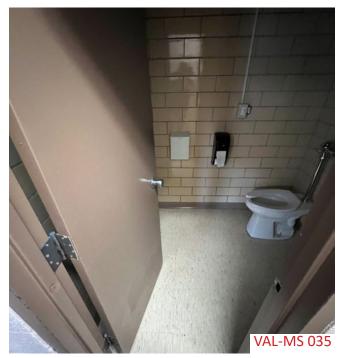




Door hardware on various doors throughout the building is not accessible.



Most of the building is non-sprinklered with the exception of several of the additions.

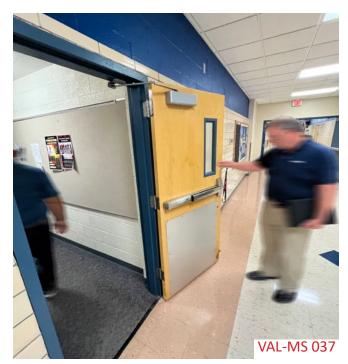


The staff lounge restroom is not accessible.



The counseling room restroom is not accessible.





Many interior doors are not fire rated.



Hallways in the music room do not meet minimum width requirements for accessibility.



All public restrooms in the building are not accessible.



The custodial office restroom is not accessible.



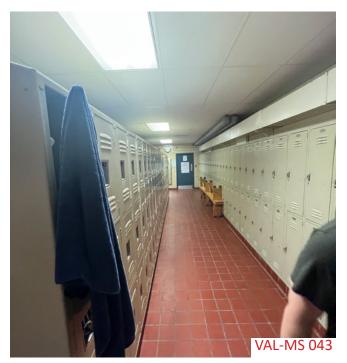
#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The stairwell in the mechanical room is missing a handrail.



All locker rooms are not accessible.



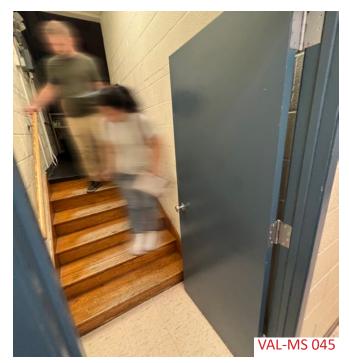
All locker rooms are not accessible.



The weight room is not accessible from the gym.



#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The door into the weight room fails to meet required maneuvering clearance for accessibility and the door does not swing in the proper direction.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.



Most entrances to the school do not have the required safety glass.

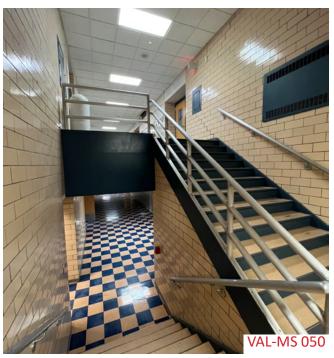


Combustible material is found in corridors that are non-sprinklered.





Exit doors do not have the required safety glass.



The stairwell in the middle of the school is lacking a separate handrail from the guardrail and spaces between the railings exceed the maximum size of 4".



Wire glass is seen throughout the building.



Pipes throughout the building are exposed and should be protected.





Sinks in classrooms are not accessible.



Sinks in classrooms are not accessible.



Room B-5 needs an additional exit.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



FACS classroom is not accessible.



#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	1,996 SF	4,180 SF	-2,184
Art	902 SF	1,900 SF	-998
Athletics	10,325 SF	20,280 SF	-9,955
Circulation	14,029 SF	19,680 SF	-5,651
Classrooms	14,609 SF	26,450 SF	-11,841
FACS	608 SF	1,200 SF	-592
Food Service/Cafeteria	2,862 SF	8,886 SF	-6,024
Library/Media Center	2,969 SF	2,367 SF	602
Mechanical/Electrical	1,509 SF	4,920 SF	-3,411
Music	2,591 SF	4,900 SF	-2,309
Restrooms	1,220 SF	1,640 SF	-420
Science	4,889 SF	7,800 SF	-2,911
Special Education	898 SF	1,350 SF	-452
Technical Education	1,031 SF	1,950 SF	-919
Technology Education	1,464 SF	2,540 SF	-1,076

Total Missing Square Footage -48,141

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### AIR QUALITY/CONTROL

• There is no air conditioning in the entire school, except for the main office.

#### LACK OF COLLABORATION/SUPPORT/LEARNING SPACES

- The school is not functional for collaborative learning with small groups.
- The gymnasium is not big enough for school events.
- There are not enough bathrooms throughout the school.

# CURRENT TECHNOLOGY DOES NOT SUPPORT 21ST CENTURY LEARNING SPACES THAT ARE NEEDED IN NEW SCHOOL:

- Autism Room
- High-Need Behavioral Rooms
- Day Treatment Program Rooms
- STEM Program Rooms
- Teacher Planning Areas
- Additional Music Rooms/Spaces
- Green Spaces/Natural Light
- Stage
- Space to Have School Events for all Students and Staff
- Restrooms

#### PARKING/STUDENT DROP-OFF AND PICK-UP ISSUES

#### **TOP PRIORITIES**

- 1. Air Quality/Control
- 2. Additional Collaborative/Support/Learning Spaces
- 3. Improved Traffic Flow

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<b>Middle School</b>	Forks ND
Valley	Grand





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Facility Assessment Estimate									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
ADA and Building Code Compliance									
Upgrade door hardware with ADA hardware	1	100 Ea	\$983.61 / Ea						\$98,361
Remodel all staff single user restrooms by expanding into neighboring spaces as needed to meet accessibility requirements	2	5 Ea	\$44,455.90 / Ea	a \$222,280	_			Х	\$222,280
Remodel the counseling room restroom within existing space to meet accessibility reminements.	m	1 Ea	\$39,916.98 / Ea	a \$39,917				×	\$39,917
Replace some interior doors with fire rated doors and frame in rated walls	4	50 Ea	\$3,779.83 / Ea	a \$188,992				×	\$188,992
Remodel the hallways in the music room by shrinking the two storage rooms and one practice room to create a wider hallway (assume 30 if 14ft tall new CMU walls)	ъ	150 SF	\$329.71 / SF	\$49,456	-				\$49,456
Remodel all public restrooms in the building within existing space to meet accessibility requirements	9	8 Ea	\$74,350.90 / Ea	a \$594,807				×	\$594,807
Remodel the custodial office restroom within the existing space to meet accessibility requirements	7	1 Ea	\$39,917.00 / Ea	a \$39,917				×	\$39,917
Replace guardrail and add handrail to the stairwell in three mechanical rooms	∞	60 LF	\$212.58 / LF	: \$12,755					\$12,755
Remodel all locker rooms do to accessibility requirements, including the related rooms; corridors storand offices showers bathrooms weights and fitness	6	4,330 SF	\$359.77 / SF	¢1,557,799	_			×	\$1,557,799
Representation of the second s	10		<u>\</u>						
Remodel will make the weight room is accessible from the gym	11		/						
Change the swing of the door into the weight room that lacks sufficient push/pull	12		<u>\</u>						
Add handicap accessible water fountains throughout the building	13	16 Ea	\$21,944.54 / Ea	a \$351,113					\$351,113
Replace exterior and interior entrance with tempered glass at the main south entrance, the east entrance by the evm. and the west entrance by the library.	14	3 Ea	\$42,899.62 / Ea	a \$128,699					\$128,699
Remove combustible material from ceilings and walls in the music area, replace with accustical wall coverings and ACT	15	1,500 SF	\$53.84 / SF	÷ \$80,764					\$80,764
Replace room signage that is missing brail with ADA compliant signs	16	185 Ea	\$128.26 / Ea	a \$23,729					\$23,729
Replace all guardraits and handrails in public stairwells that do currently meet code (60 lf euardrail and 240 lf handrails)	17	300 LF	\$199.43 / LF						\$59,829
Add handrails extensions to the to and bottom of the stairs	18		/						
Add a separate handrail to the guardrail as required in the stairwell in the middle of the school	19		/						
Replace guardrail where the spaces between railings exceed the maximum size of 4"	20		<u> </u>						
Change the swing of the door to the electrical meter room	21	1 Ea	\$3,561.29 / Ea	a \$3,561					\$3,561
Replace wire glass throughout the building that is no longer up to code (frame to remain)	22	3,200 SF	\$33.65 / SF	: \$107,683				×	\$107,683
Protect sink plumbing in restrooms throughout the building that are exposed	23	18 Ea	\$940.48 / Ea					×	\$16,929
Replace casework (20If of base, top, and upper per classroom) and sinks in 40 classrooms that are not accessible	24	40 Ea	\$26,939.88 / Ea	a \$1,077,595					\$1,077,595
Create a second exit in computer room 3	25	1 Ea	\$3,508.52 / Ea						\$3,509
Create a second exit in the art room	26	1 Ea							\$3,509
Create a second exit in room B-5	27	1 Ea	\$3,508.52 / Ea	a \$3,509					\$3,509
Create an ADA workstation at the desk in the main office	28	1 Ea	\$7,855.41 / Ea						\$7,855

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# Valley Middle School Grand Forks, ND

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Grand Forks, ND 11/2/2022								CONS	CONSTRUCTION ENGINEERS	Z
Facility Assessment Estimate										
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Ŀ,	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Create an ADA workstation in the FACS classroom by replacing 20 If of base, top, and	29	1 Ea	\$19,417.13	Ea	\$19,417					\$19,417
deminets Add a handrail to the staff supply room however it is not accessible	30	40 LF	\$212.58 /	/ LF	\$8,503					\$8,503
Total Code Compliance		77,911 SF	/	SF	\$4,700,487	\$0	0\$	\$0		\$4,700,487
Security										
Administration Office Entry (Addition and Remodel)	31	4,460 SF	\$317.73 /	/ SF				\$1,417,072		\$1,417,072
Total Security		4,460 SF	\$317.73 /	/ SF	\$0\$	\$0	0\$	\$1,417,072		\$1,417,072
Addition/Remodel (Educational Adequacy)										
Administration	32	2,184 SF	\$339.20 /	/ SF				\$740,812		\$740,812
Art	33	998 SF	\$351.74 /	SF				\$351,036		\$351,036
Athletics	34	9,955 SF	\$360.52 /	SF				\$3,588,951		\$3,588,951
Auditorium	35	SF	\$485.35 /	SF				0\$		\$0
Business Education	36	SF	\$376.82 /	/ SF				0\$		\$0
Circulation	37	5,651 SF	\$376.83 /	SF				\$2,129,483		\$2,129,483
Classrooms	38	11,841 SF	\$376.82 /	SF				\$4,461,914		\$4,461,914
Common Spaces	39	SF	/	SF				0\$		\$0
FACS	40	592 SF	/	SF				\$232,727		\$232,727
Food Service/Cafeteria	41	6,024 SF	\$458.33 /	' SF				\$2,760,964		\$2,760,964
Library/Media Center	42	SF	\$395.63 /	SF				0\$		\$0
Mechanical/Electrical	43	3,411 SF	\$307.85 /	SF				\$1,050,088		\$1,050,088
Music	44	2,309 SF	\$401.90 /	SF				\$927,984		\$927,984
Restrooms	45	420 SF	/	SF				\$195,137		\$195,137
Science	46	2,911 SF	\$431.99 <i> </i>	SF				\$1,257,534		\$1,257,534
Special Education	47	452 SF	\$340.28 /	SF				\$153,805		\$153,805
Technical Education	48	919 SF	\$381.83 /	SF				\$350,906		\$350,906
Technology Education	49	1,076 SF	\$394.37 /	/ SF				\$424,347		\$424,347
Total Adequacy		48,743 SF	\$382.12 /	SF	0\$	¢0	0\$	\$18,625,689		\$18,625,689
Capital Maintenance										
Interior Upgrades										
Replace doors throughout the building that are in rough shape due to the age of the doors	50	50 Ea	\$3,780.24 /	/ Ea		\$189,012			×	\$189,012
Replace dated ACT	51	20,000 SF	\$9.14 /	SF		\$182,803			×	\$182,803
Further investigation is warranted to determine the cause of the shifting and large cracks in multicide CM11 wolls the multicide	52		/							
Replace dated carpet throughout the school	53	25,000 SF	\$10.51 /	SF		\$262,719				\$262,719
Replace old VCT, assumed to be contaminated with asbestos, replace with new flooring including sharement costs	54	5,000 SF	\$24.78 /	/ SF		\$123,898				\$123,898
Interior Upgrades Subtotal		77,911 SF	\$9.73 /	/ SF						\$758,433
Exterior Upgrades										
Add 62 additional parking stalls to the parking lot since it is not large enough	55	15,500 SF	\$14.84 / SF	З				\$230,020		\$230,020

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# Valley Middle School Grand Forks, ND 11/2/2022

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	ltem				5 yrs Deferred		TO YFS Deferred Ec	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	Critical	al Maint		Maint /	Adequacy	needs	Total Cost
Replace the roof when it nears the end of its useable lifetime	56	67,944 SF	\$53.21 / 5	SF	\$3,6;	\$3,615,300				\$3,615,300
Replace caulking where need on brick and EIFS exterior walls	57	77,911 SF	\$0.85 / <u>5</u>	SF \$	\$66,224					\$66,224
Replace damaged stoops to exterior doors where they are missing	58	9 Ea.	\$18,808.94 / E	/ Ea. \$1	\$169,280					\$169,280
Replace sidewalk at stoops that are causing there to be a step up to the get access to the building	59	2,400 SF	\$18.30 / SF		\$43,931					\$43,931
Paint metal louvers	60	2 Ea.	\$784.74 / E	/ Еа.	\$1,569					\$1,569
Clean the bottom of the exterior brick that is dirty	61	1 Ea.	\$12,341.57 / E	/ Ea. \$	\$12,342					\$12,342
Add a mow strip around the school to prevent damaged to the lower courses of the exterior brick	62	1 Ea.	\$28,744.96 / Ea.	ia.	Ş	\$28,745				\$28,745
Replace the flashing around the bottom of the EIFS that is not sufficiently running away	63	1 Ea.	\$76,379.74 / Ea.	a.	ŝ	\$76,380				\$76,380
Patch and refinish the damaged EIFS band beneath the windows in the north parking lot	64	1 Ea.	\$9,843.64 / Ea.	ia.		\$9,844				\$9,844
Paint the exposed trim boards around the top of the brick walls	65	1 Ea.	\$6,417.64 / Ea.	a.		\$6,418				\$6,418
Fill the gaps in the exterior soffit	99	1 Ea.	`	/ Ea.	Ş	\$16,744				\$16,744
Remove and replace hardboard siding with metal wall panel	67	1 Ea.	\$54,328.23 / E	/ Ea.	1\$	\$54,328				\$54,328
Exterior Upgrades Subtotal		77,911 SF	\$55.59 / SF	H.						\$4,331,125
Electrical Upgrades										
Replace branch panels throughout building that are noted to be very old that are nearing the end of their useful life	68	77,911 SF	\$3.45 / 5	SF \$2	\$268,702					\$268,702
Add additional outlets throughout the school and upgrade related circuits as needed	69	77,911 SF	\$11.91 / S	SF \$9	\$928,244					\$928,244
Relocate exposed electrical distribution equipment and disconnects that out in the open for anyona to menate to the hark of the house areas	70	77,911 SF	\$1.21 / 5	SF \$	\$94,059					\$94,059
Upgrade of all interior lighting to energy-efficient LED lighting	71	77,911 SF	\$4.39 / SF	14	\$3	\$341,985				\$341,985
Add egress lighting to doors to exterior as is required by Building Code	72	77,911 SF		E E	ŝ	\$94,059				\$94,059
Upgrade of all interior lighting controls throughout to digital lighting management	73	77,911 SF	\$2.51 / SF	ц.	\$10	\$195,420				\$195,420
Upgrade of all exterior lighting controls throughout to digital lighting management	74	77,911 SF	\$0.25 / S	SF	ŝ	\$19,542				\$19,542
Update the existing intercom system with a new IP system throughout entire school.	75	77,911 SF	\$3.76 / 5	SF	\$20	\$293,130				\$293,130
Add additional door security all exterior doors with access control and monitoring	76	77,911 SF	\$1.21 / <u>5</u>	SF \$	\$94,059					\$94,059
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Building Code	77	77,911 SF	\$0.69 / SF		\$53,740					\$53,740
Electrical Upgrades Subtotal		77,911 SF	\$30.59 / 5	SF						\$2,382,941
Mechanical Upgrades										
Add sprinklers to the building (except the 2001 and 1998 additions) including a new water service line	78	66,381 SF	\$13.05 / 5	SF \$8	\$866,408				×	\$866,408
Replace all sever piping throughout the building that is in poor condition and is deteriorated. Costs include removal and replacement of the concrete and incidental damaged finishes	79	77,911 SF	\$24.38 / SF		\$1,899,404				×	\$1,899,404

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# Valley Middle School Grand Forks, ND 11/2/2022



Facility Assessment Estimate	ľ			ł			10,000			
Description	ltem Number	Takeoff Qty	Total Cost/Unit		Critical	5 yrs Deferred Maint	Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Add and replace the storm and groundwater drainage system that traditionally has been a large issue at this school	80	77,911 SF	\$2.51 /	SF	\$195,420				×	\$195,420
Replace domestic water piping throughout the school. Add a water treatment system (e.g., a water softener).	81	77,911 SF	\$9.48 /	SF	\$738,668				×	\$738,668
Fixtures, in general, are in a reasonable condition however, there are not enough fixtures to serve the occupant load of the building. Also, fixtures should be equipped with automatic sensors for improved health and safety. It is likely that all restrooms in the school need a complete renovation in order to meet the code-required fixtures for the number of occupants and bring the facilities to a modern standard	82	77,911 SF	\$0.00 /	SF					×	
Replace existing water heaters are with new high-efficiency, sealed combustion, natural gas water heaters	83	77,911 SF	\$1.19 /	SF	\$92,824					\$92,824
Replace kitchen plumbing fixtures and piping that are in poor condition	84	77,911 SF	\$1.10 <i>/</i>	SF	\$85,895					\$85,895
Boys and girls locker rooms and showers that are in poor condition are including in code compliance items above. The showers should be replaced, and additional restroom fixtures should be added but only if architectural changes are made to the locker rooms to address code issues.	85	77,911 SF	/ 00.0\$	SF					×	
Replace the entire HVAC system (equipment and ductwork) in this building that allows for air conditioning to be installed, and improve indoor air quality. Costs include replacement of incidental damaged finishes caused by this work and related electrical work	86	77,911 SF	\$67.72 <i> </i>	ъ	\$5,276,336				×	\$5,276,336
Heating for the building comes from four (4) non-condensing low-pressure steam boilers. Boilers are at least 20 years old and are past the end of their useful life. There are a number of condensate pumps throughout the building which return back to the boiler room. There is one existing boiler feed tank in the boiler room that is also past the end of its useful life. The steam system piping is original to the year the building or addition was constructed. This places a large fraction of the piping at 44 years old or older. Facilities staff have reported a number of piping leaks in the building.	87	77,911 SF	\$0.00	Ъ						
Steam is delivered to heating coils in air handling units, unit ventilators, steam fin-tube radiation, and other terminal heating devices. The steam fin-tube radiation throughout the school has been noted to leak as well as make noise that disturbs the learning environment. Steam coils subject to outside air, such as in air handling units and unit ventilators, have been noted to freeze and crack. This leads to the coils being repaired or replaced or no longer having a heating coil for use in this equipment.	88	77,911 SF	\$0.00	Ъ						
Overall, the entire steam heating system for this building is well past its useful life, of antiquated design, and needs to be replaced with a new more efficient, easier-to- maintain system.	68	77,911 SF	\$0.00 <i>/</i>	SF						
The school has 18 different indoor air handling units, over 30 different exhaust fans, and many different unit ventilators. All air handling units and unit ventilators are steam heated and have no air conditioning. The HVAC equipment is largely original to the year the building or addition was constructed. This places a large fraction of the equipment at 44 years old or older which is well past its useful life. Many of the units are not fully functional, if functional at all, which results in poor air movement and indoor air quality.	06	77,911 SF	\$0.00	Ъ						
Ductwork throughout the building does not effectively distribute air. The ductwork itself is at the end of its useful life and will have excessive leakage.	91	77,911 SF	\$0.00 /	SF						

Valley Middle School Grand Forks, ND 11/2/2022								CONS	CONSTRUCTION ENGINEERS	Z
Facility Assessment Estimate										
	ltem					5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	Jnit	Critical	Maint	Maint	Adequacy	needs	Total Cost
With the exception of a few, small, standalone, air conditioning units the school has no air conditioning. It is highly recommended the school have an air conditioning system installed that is integrated into the school's HVAC systems	92	77,911 SF	\$0.00 / SF	/ SF						
Replace all existing pneumatic controls with a direct digital control system	93	77,911 SF	\$11.99	/ SF	\$934,098					\$934,098
Mechanical Upgrades Subtotal		77,911 SF	\$129.49	/ SF						\$10,089,053
Total Capital Maintenance		77,911 SF	; \$225.41	/ SF	\$11,821,204	\$5,510,327	\$0	\$230,020		\$17,561,551
Total Construction Cost		131,114 SF	: \$322.66 / SF	/ SF	\$16,521,691	\$5,510,327	0\$	\$20,272,781		\$42,304,799
*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	itions, CM	fees, permits, in	nsurances, bond	ls, taxe	Sc					
Contingencies & Soft Costs										
Design Contingency	94	5.0%			\$826,084.55	\$275,516.33	\$0.00	\$1,013,639.04		\$2,115,240
Construction Contingency	95	5.0%			\$826,084.55	\$275,516.33	\$0.00	\$1,013,639.04		\$2,115,240
Escalation	96	0.0%			\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	97	7.0%			\$1,156,518.37	\$385,722.86	\$0.00	\$1,419,094.66		\$2,961,336
FF & E	98	2.0%			\$330,433.82	\$110,206.53	\$0.00	\$405,455.62		\$846,096
Owner Contingency	66	1.5%			\$247,825.37	\$82,654.90	\$0.00	\$304,091.71		\$634,572
Total Contingencies & Soft Costs					\$3,386,947	\$1,129,617	\$0	\$4,155,920		\$8,672,484
Total Facility Assessment Cost Estimate		131,114 SF	; \$388.80	/ SF	\$19,908,638	\$6,639,944	\$0	\$24,428,701		\$50,977,282
Total Critical & Educational Adequacy		131,114 SF	; \$338.16	/ SF						\$44,337,339

COST ANALYSIS CONTINUED

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# BEN FRANKLIN ELEMENTARY SCHOOL

SCHOOL

# V BEN FRANKLIN ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **A. EXISTING BUILDING INVENTORY**

Ben Franklin Elementary School opened in 1961 and is located at 1016 S 20th Street in Grand Forks. In 1963, the first addition to the school was built. This addition was located on the south side of the original school and included classrooms, a multipurpose room, and a library. In 1969, a west wing was added. This addition primarily consisted of a central multipurpose room and open resource center area with open classroom areas around the perimeter. In 1987, renovations were completed to add walls and partitions to separate the open classroom areas into individual classrooms. A computer room and additional classroom were also constructed, taking the place of the former resource center area. In 1997, an environmental abatement was done due to flooding in the boiler room, tunnels, and crawl space. In 2002, remodeling and renovations took place throughout the school. An office and storage room were added to the existing multipurpose room, the janitor's closet was removed from the kitchen allowing for a longer serving counter, the restroom in the dishwashing room was removed, the main office was made larger and adjacent interior vestibule wall was removed, the athletic office was made larger, and the faculty room, several classrooms and restrooms were renovated. Windows in the kindergarten, 1st grade, and 2nd grade areas have been recently updated, while windows in the library/media center have yet to be replaced.

Ben Franklin is accessible to the south by 11th Avenue S and to the east by S 20th Street. The staff parking lot is located on the north end of the school. There is a blacktop playing area on the south end along with the student drop-off/pick-up area.

# Y BEN FRANKLIN ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### **FLOOR PLAN**



MAIN LEVEL

# Y BEN FRANKLIN ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Ben Franklin Elementary School opened in January of 1961 and has received several additions and several significant remodels since. The school is anticipating HVAC updates in 2023. Major areas of concern within the school include the lack of fire suppression, lack of air conditioning/air quality, no stoops at exterior doors, and water issues near the media center. Due to the absence of air conditioning, the cafeteria gets very hot and the use of fans adds to the already high noise level, causing distractions for classrooms nearby. Another concern is the lack of an exhaust/relief in the server room (001). Casework is dated and damaged (002) and replacement should be considered. Blinds on the doors and windows are dated and damaged and could use replacement.

#### SITE

The lack of stoops at exterior doors is causing significant problems. The asphalt heaves when the ground is frozen in the winter, preventing Door 6 and 12 from opening (003). Several doors have floating slabs that have made noticeable movements from their original positions (004, 005). There is also a large crack in the cement outside Door 6 (006). Another noticeable site issue is the asphalt in the parking lot. It is in poor shape and could use replacement. Several emergency exits do not have a connection to a public way (007). There are water issues happening on the south side of the building outside the library/media center (008, 009). Water pools in these areas and has leaked into the building on multiple occasions. There are also issues with the courtyard ground. The pavers have shifted, making the ground very uneven (010).

#### MASONRY

ICON could not recognize the presence of any weeps in most exterior brick walls. It is possible that they could be below grade (below the asphalt). The brick is cracked and pulling away at the corner near Door 11 (011). Tuckpointing is wearing at exterior corners (012).

#### ADDITIONAL EXTERIOR MATERIALS

The exterior of the school consists primarily of brick. Some areas have CMU (Concrete Masonry Unit) block around the top (013) and near entry vestibules (014). There is residential siding above the brick on exterior walls of the courtyard.

#### ROOF

There were no notable roof issues with the school. The roof has been patched over time, as needed.

#### **OPENINGS**

Windows in the media center are original to the building and are due for replacement (015). Several doors are damaged including exterior Door 5 and Classroom 22, and door frames should be repainted. The window in the boiler room is cracked.

# Y BEN FRANKLIN ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### ARCHITECTURAL FINISHES CONTINUED

#### CEILINGS

Ceiling tiles in the cafeteria continue to fall off and several are missing (016). The ceiling is damaged in the girls' restroom next to Room 25.

#### WALLS

The interior wall materials are mainly painted CMU, painted gypsum board, or gypsum board with vinyl wall covering. There is some wood paneling throughout, both painted and stained. Various walls throughout the school should be repainted (017) and vinyl wall covering should be repaired or replaced (018). There are several areas where the CMU walls are cracking (019) and caulking at the top of CMU walls should be redone (020).

#### FLOORING

The common type of flooring at Ben Franklin Elementary School is either carpet or various types of tiles. The carpet throughout is old and could use replacing (021, 022). The wood flooring on the stage is old and damaged.

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

# V BEN FRANKLIN ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



# C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

• The building is not currently sprinkled and will need to be sprinkled under the next major project which is planned to be the 2022/2023 project. The building is planning to bring in a new 6" water line into the mechanical room and have a vertical sprinkler riser. All sprinkler work will need to be in accordance with NFPA 13.

#### PLUMBING

- The toilet group outside of the main office in the East half of the original 1960 building was replaced in 2002. The faculty toilet group in the West wing of the 1963 building was replaced in 2002. The toilet fixtures should continue to be maintained and faucets, traps, etc. replaced as needed. During any remodel associated with the plumbing fixtures, the piping should be investigated and replaced where needed.
- The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures with the water closets being a combination of tank type and flush valve floor mounted toilets. The lavatory faucets are mostly manually operated. The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail all of the other Grand Forks Public Schools. The sink faucets in the classrooms and break rooms are manually operated.
- Domestic hot water is produced by one (1) AO Smith Cycleone gas fired water heater with an integral storage tanks in the boiler room for the entire building. The domestic hot water heater will be replaced with the 2022/2023 project.
- Kitchen plumbing fixtures and piping were replaced in 2002 and in appear to be good condition. The piping will need to be replaced during the next kitchen remodel to ensure there is no building up of grease. There is no grease interceptor currently installed on the waste line for the three-compartment sink and other grease producing fixtures. It is recommended and a city requirement that a grease interceptor be installed to protect the waste piping system.
- ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.

#### HEATING

- Heating for the entire building comes from two (2) steam boilers. The steam currently serves the 1960 building with a steam to hot water heat exchanger serving heating water to the 1963 building The boiler plant is being designed to be replaced as part of a 2022/2023 project and will have new hot water boilers.
- Existing steam and condensate piping throughout the original 1963 building is concealed in the tunnels, walls, and above the ceilings in public areas. The existing steam and condensate piping in the tunnels needs to be replaced in order to convert to a hot water heating system.
- The 1960 building is currently served by classroom unit ventilators and steam radiation. The unit ventilators and radiation will be replaced as part of the 2022/2023 project to be hydronic. The 1963 building is currently served by multizone rooftop units and will be replaced with new rooftop units utilizing VAV boxes with discharge reheat coils. The 1963 building will also have the perimeter finned tube control valves replaced with new hydronic control valves. A new rooftop will be installed to replace the existing indoor air handling unit that services the gym/stage area of the original 1960 building.
- Perimeter hot water and electric finned tube radiation is installed in some exterior offices, restrooms, and corridors for supplemental heat. Hot water and electric cabinet unit heaters and suspended unit heaters provide heat for vestibules, mechanical rooms, and other similar spaces. These are all original steam units to the building and need to be replaced for the conversion to a hot water system.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **VENTILATION AND EXHAUST**

- The ventilation and exhaust systems in the school include various air handling units, unit ventilators, and various exhaust fans. The indoor air handling units and exhaust fans throughout the building is original and past their useful life. Indoor Air Quality should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates. Existing indoor air handling units and unit ventilators have inline starters for fan control and pneumatic controls. Indoor air handling unit for the remodeled gymnasium is currently suspended in the mezzanine. This space is limited and, due to serviceability and clearance requirements, will require new unit to be installed on the roof. Unit ventilators are designed to be replaced with induction displacement units with chilled water coils, hot water coils, and perimeter finned tube radiation to condition the classrooms and cafeteria as part of a 2022/2023 project. The induction displacement units will be paired with a rooftop dedicated outdoor air unit with VFDs for fan speed modulation, energy recovery wheel, chilled water coils, hot water coils, and DDC controls for the ventilation air.
- Any areas of the building where cooling is proposed will need to have all supply ductwork insulated to meet energy code and limit condensation formation.

#### **AIR CONDITIONING**

- Split system air conditioning systems existing in the administration area. These units are similar to a "Sanyo" with the indoor portion mounted high on a wall and the condensing units are located on the roof. The systems will be in place to supplement the new 2022/2023 HVAC replacement project where chilled beams will be installed within the space to meet ASHRAE 62.1 for ventilation rates, and ASHRAE Standard 55 for cooling and dehumidification.
- The new 2022/2023 project will installed an air cooled chiller with necessary piping components, chilled beams, induction displacement beams and replacement AHU's with chilled water coils.

#### AUTOMATIC TEMPERATURE CONTROLS

• All controls throughout the building are pneumatic controls and original to the building. These pneumatic controls offer limited control capability and no ability for monitoring and alarm. There are not proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. All of the controls within the school are planned to be replaced with Direct Digital Controls (DDC) systems as part of a 2022/2023 project. The DDC systems will be integrated into the existing Grand Forks Public School's Building Automation System for central monitoring and control.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 300KVA 208/120V padmount transformer located at north end of building.
- Power is routed from the transformer through a wall-mount CT cabinet mounted just to the south of the transformer. Power is then routed through the wall and into the main service entrance switchboard. Peak load on this transformer in the past 12 months was 105kW (292A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is more than adequate.

#### STANDBY POWER

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

#### POWER DISTRIBUTION

- The building's electrical service is routed from the CT cabinet through the north exterior wall into a large wall-mounted junction box with the main electrical room. Service is then routed from the junction box to the main service entrance switchboard. The service entrance switchboard is a 208/120V 1200A Siemens Series 5. Power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- No upgrades are suggested for the service entrance switchboard.
- Branch panels throughout building were noted to be in fair condition. All have been replaced within the past several years. No upgrades are suggested for the existing branch panels.

#### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the gym have been updated to LED lighting.
- School is currently scheduled to undergo a lighting upgrade project that will replace all non-LED lighting within school with energy-efficient LED lighting. This should cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery pack lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

#### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas capable of dimming control.
- School is currently scheduled to undergo a lighting controls upgrade project that will replace large majority of manual control with automatic control. This will improve energy savings.
- All exterior lighting is controlled via three separate timeclocks that have been installed over time.
- All exterior lighting control will be part of controls upgrade as mentioned above.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Speakers were noted to be located all throughout circulation areas and classrooms.
- IP phones are located in all classrooms for room-to-room communication.
- Large majority of clocks in school are simple independent battery clocks with no communication from clock-to-clock.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would
  provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system
  would also include an upgraded wireless clock system. The intercom system and clock system would communicate with
  manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of digital displays, short-throw projectors, smartboards, and classroom sound reinforcement.

#### **SAFETY & SECURITY SYSTEMS**

- A select few exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4010. Pull stations noted to be located at each exit of building. Very minimal fire detection was noted throughout entire school. Notification consists of strobes and horn/strobe devices and locations appeared to be adequate.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **D. EXISTING DEFICIENCIES**

The analysis of the existing Ben Franklin Elementary has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass. (023)
- Glass in display cases and doors is not the required safety glass. (024)
- The courtyard is not accessible due to the presence of a step at each door. (025)
- Residential siding in the courtyard is not to code. (010)
- The slanted corridors in the west wing of the building do not have an adequate turn radius and the doors fail to meet required maneuvering clearances for accessibility. (026, 027)
- Boys' and girls' restrooms near the gym are not accessible. Grab bars and toilet paper dispensers exceed height limitations (028), pipes under the sinks are not protected (029), and the turning radius size is questionable.
- Boys' and girls' restrooms near the band/orchestra room are not accessible.
- The sink in the library office is not accessible.
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains. (030, 031)
- The restroom in the Early Childhood Development Room (Room 1) is not accessible.
- Several doors throughout the school have hardware that is not accessible. (032)
- Classroom sinks are not accessible. (033)
- Classroom restrooms are not accessible. (034, 035, 036)
- Several doors throughout the school fail to meet required maneuvering clearances for accessibility.
- The stage is not accessible. (037)
- The old teacher's lounge, which is transitioning into a special education room, does not have an accessible sink.
- There is a section of very low ceiling in the office due to the location of the cold air return. (038)
- The vestibule at Door 13 does not meet code as the number of doors is reduced from 3 at the interior vestibule wall to 2 doors at the exterior wall. (039)

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Another concern is the lack of an exhaust/relief in the server room.



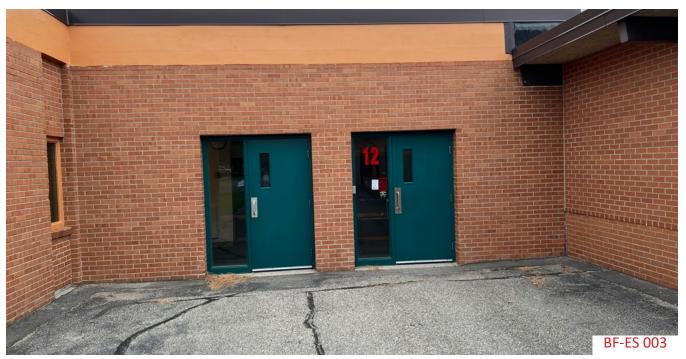
Several doors have floating slabs that have made noticeable movements from their original positions.



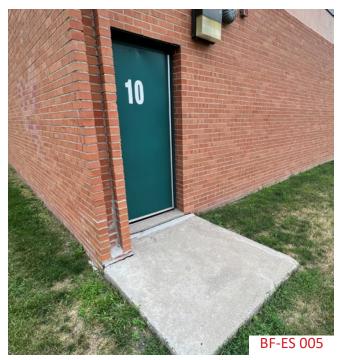
Casework is dated and damaged.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The asphalt heaves when the ground is frozen in the winter, preventing doors 6 and 12 from opening.

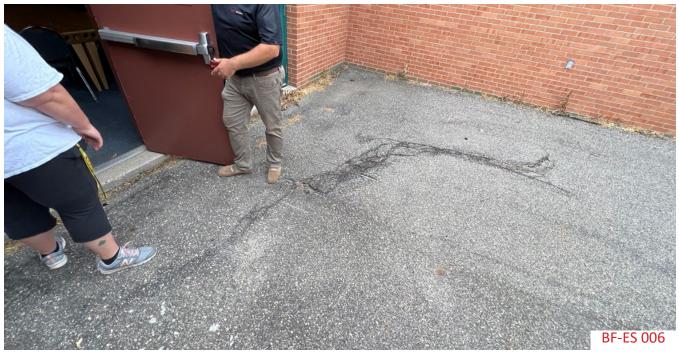


Several doors have floating slabs that have made noticeable movements from their original positions.



Several emergency exits do not have a connection to a public way.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



There is also a large new crack in the cement outside door 6.



There are water issues happening on the south side of the building outside the library/media center.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



There are water issues happening on the south side of the building outside the library/media center.



The brick is cracked and pulling away at the corner near door 11.



Residential siding in the courtyard is not to code.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Tuckpointing is wearing at exterior corners.



The exterior of the school consists primarily of brick. Some areas have CMU block around the top.



The exterior of the school consists primarily of brick. Some areas have CMU block around the top and near entry vestibules.



Windows in the media center are original to the building and are due for replacement.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Ceiling tiles in the cafeteria continue to fall off and several are missing.



Various walls throughout the school should be repainted.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Various walls throughout the school should be repainted and vinyl wall covering repaired or replaced.



Caulking at the top of CMU walls should be redone.



There are several areas where the CMU walls are cracking.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The carpet throughout is old and could use replacing.



The carpet throughout is old and could use replacing.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass.



Glass in display cases and doors is not the required safety glass.



The courtyard is not accessible due to the presence of a step at each door.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The slanted corridors in the west wing of the building do not have an adequate turn radius and the doors fail to meet required maneuvering clearances for accessibility.



The slanted corridors in the west wing of the building do not have an adequate turn radius and the doors fail to meet required maneuvering clearances for accessibility.



Boys' and girls' restrooms near the gym are not accessible. Grab bars and toilet paper dispensers exceed height limitations



Pipes under the sinks are not protected (029), and the turning radius size is questionable.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.



Several doors throughout the school have hardware that is not accessible.



Classroom sinks are not accessible.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



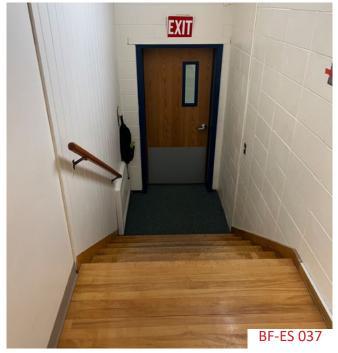
Classroom restrooms are not accessible.



Classroom restrooms are not accessible.



Classroom restrooms are not accessible.



The stage is not accessible.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



There is a section of very low ceiling in the office due to the location of the cold air return.



The vestibule at Door 13 does not meet code as the number of doors is reduced from 3 at the interior vestibule wall to 2 doors at the exterior wall.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	2,343 SF	2,200 SF	123
Athletics	3,028 SF	3,700 SF	-672
Auditorium	940 SF	2,200 SF	-1,260
Circulation	8,370	14,722 SF	-6,402
Classrooms	17,822 SF	17,000 SF	822
Common Space	1,117 SF	1,200 SF	-83
Food Service/Cafeteria	3,004 SF	4,734 SF	-1,730
Library/Media Center	2,188 SF	1,259 SF	929
Mechanical/Electrical	1,580 SF	3,680 SF	-2,100
Music	1,810 SF	2,500 SF	-690
Restrooms	1,239 SF	1,226 SF	13
Special Education	5,464 SF	6,600 SF	-1,136

Total Missing Square Footage -12,186

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### SECURITY

- There are no vestibules throughout the building.
- Lack of FOB doors throughout the building.
- Lack of windows near the doors.

#### LACK OF AIR CONTROL/AIR QUALITY

- Heat is not consistent in the winter months.
- Cafeteria gets hot.
- When it does get warm, windows in the new addition do not open.

#### WATER DAMAGE

#### LACK OF SPACE

- There are no breakout spaces.
- Gymnasium and library are small.
- There isn't space to set up for special activities.
- There is not enough space for special education.
- The staff lounge is small.
- There are not enough offices for staff.
- There are only two staff restrooms in the building.
- There is a lack of storage space.

#### PARKING/STUDENT DROP-OFF AND PICK-UP

- There are not enough parking spaces for staff members.
- The school has a good drop-off/pick-up system, but it can get very congested.

#### **TOP PRIORITIES**

- 1. Improved Security
- 2. Increased Learning and Support Spaces
- 3. Improved Air Quality/Control

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Ben Franklin Elementary School Grand Forks, ND 11/2/2022

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Image: colspan="2">A section of the propertion of the propertical of the properic	77077/7/11								ENGINEERS	ERS	
Item         Item         System         Water, originational         System	Facility Assessment Estimate										
main         1         1.600         53.3.60         53.3.60           eved         2         4         8         53.3.66         / 56         53.3.60           ord         3         1.100         5         53.3.66         / 56         53.3.60           ord         3         1.10         5         54.3.5.56         / 56         53.3.64         / 56         53.3.64           ord         3         1.00         5         53.3.2.76         / 56         53.3.24         / 56         53.3.24           ord         2         5         53.3.2.76         / 56         51.3.3.25         / 56         53.3.24         / 56         / 57.3.24           ord         2         2         2.3.3.2.6         / 56         51.3.3.25         / 56         51.3.3.25         / 56         / 57.3.25           ord         2         2         2.3.3.2.6         / 56         51.3.2.5         / 56         51.3.2.5         / 56         / 57.3.2           ord         2         2         2         53.3.2.2.5         / 56         53.3.2.2.5         / 56         53.3.2.5         / 56         / 57.3.2           ord         1         2         1         2 <th>Description</th> <th>l tem Number</th> <th>Takeoff Qty</th> <th>Total Cost/Unit</th> <th></th> <th>5 yrs Deferred Maint</th> <th>10 yrs Deferred Maint</th> <th>Educational Adequacy</th> <th>Synergistic with other needs</th> <th>Total Cost</th>	Description	l tem Number	Takeoff Qty	Total Cost/Unit		5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost	
memil         1         1,600         5         33.3.6         ///         //         ///         //         //         ///         //         ///         ///         ///         ///         ///         ////         ////         ////         ////         ////         ////         ////         /////	ADA and Building Code Compliance										
preed         2         4         6.a.         54,51.5.6         /         5.3         7.5         5.3.6.63         7         5.3         7.5         7	Replace wire glass throughout the building that is no longer up to code (frame to remain)	1	1,600 SF	/		0				\$53,840	
and         3         100         5         334.6         5         334.6         5         334.6         5         334.6         5         334.6         5         334.6         5         334.6         5         334.6         5         334.6         5         333.7         1         5         333.7         1         5         333.7         1         5         333.7         1         5         333.7         1	Replace the glass in the display cases throughout the school with the required tempered	2		/		m				\$18,063	
4         1.344         5         532.3.70         1/5         543.34         513.34	Remose Remose some pavers in the courtyard and add a concrete ramp to make the courtyard accessible	ĸ		/		4				\$3,454	
audiacent         5         330         5         332.9.00         7         5         515.3.31         5 <td>eccessions Remove residential siding in the courtyard and replace it with metal wall panel</td> <td>4</td> <td></td> <td>/</td> <td></td> <td>4</td> <td></td> <td></td> <td></td> <td>\$43,344</td>	eccessions Remove residential siding in the courtyard and replace it with metal wall panel	4		/		4				\$43,344	
ind         6         2 $2$ $3.5,371$ $315,371$ $315,371$ $315,371$ $315,371$ $315,371$ $315,371$ $315,371$ $315,371$ $315,371$ $315,371$ $313,372$ $313,372,365$ $52,33,37,397$ $313,372,365$ $313,372,365$ $313,372,365$ $313,372,365$ $313,37,397$ $313,372,365$ $313,37,397$ $313,372,365$ $313,37,397$ $313,32,392$ $512,323,3292$ $512,323,326,336$ $512,324,326$ $512,324,326$ $513,332,326$ $513,332,326$ $513,332,326$ $513,332,326$ $513,324,326$ $513,324,326$ $513,324,326$ $513,324,326$ $513,324,326$ $513,324,326$ $513,324,326$ $513,324,326$ </td <td>Remodel the slanted corridors in the West wing of the building by moving the wall adjacent to the class room to all for required push/pull clearances and adequate turn radius</td> <td>ъ</td> <td></td> <td>/</td> <td></td> <td>5</td> <td></td> <td></td> <td></td> <td>\$115,395</td>	Remodel the slanted corridors in the West wing of the building by moving the wall adjacent to the class room to all for required push/pull clearances and adequate turn radius	ъ		/		5				\$115,395	
Ity         7         2         6.         574.802.86         /         6.         5149.786         7         ×         ×           1         8         1         16.         513.912.46         /         6.         513.912.46         /         5.         513.912.46         /         ×         1         ×	Make the boys and girls restrooms near gym accessibility by lowering the grab bars and toilet paper dispensers, protect the pipes under the sinks, and shift existing toilet for adomse tunning radius.	9		/		1				\$15,371	
* $8$ $1$ $6.$ $513,912,46$ $7.6.$ $513,912,46$ $7.6.$ $513,7556$ $7.6.6.$ $7.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6$	Removed boys and girls restrooms near the band/orchestra room to meet accessibility standards	7		/		9			×	\$149,786	
9         8         E.         521.944.54         / E.         517.9556 <th< td=""><td>Create an accessible sink in the library office by replacing the sink and 10 If of lower</td><td>∞</td><td></td><td>/</td><td></td><td>2</td><td></td><td></td><td></td><td>\$13,912</td></th<>	Create an accessible sink in the library office by replacing the sink and 10 If of lower	∞		/		2				\$13,912	
10         1         Ea.         \$37,497.11         /         Ea.         \$37,497.11         /         X         X           11         50         Ea.         \$933.61         /         Ea.         \$993.67         P	ddd accessible lower water fountains throughout the building	6		/		6				\$175,556	
11         50         cs         5983.61         / Ea         549.180  <	Remodel the restroom in the Early Childhood Development room (room 1) to meet acressibility standards	10		/		7			×	\$37,497	
msare         12         c         559,393         [ ea         559,2,67         c         593,67         c<	Upgrade door hardware with ADA hardware	11		/		0				\$49,180	
13         6         6.         537,497.11         /         6.         537,497.11         /         6.         537,497.11         /         5.         537,613         7         ×         ×         ×           14         15         1         Ea.         \$35,61.29         /         Ea.         \$35,61.39         /         Ea.         \$35,61.39         /         Ea.         \$35,61.29         Ea.	Replace casework (20lf of base, top, and upper) per classroom and sinks in classrooms are not acressible	12		/		2				\$592,677	
14         10         6.         \$3,5,6,1,2         6.         \$35,6,1,3         7         7         7           15         15         10         6.         \$5,0,0,320,0         7         6.         \$5,0,0,329         7         7         7         7         7           16         15         1         6.         \$5,0,0,329,0         7         \$5,5,0,39,80         7         \$5,0,0,329         7 <td>Remodel classroom restrooms to make them accessible</td> <td>13</td> <td></td> <td>/</td> <td>0,</td> <td>3</td> <td></td> <td></td> <td>Х</td> <td>\$224,983</td>	Remodel classroom restrooms to make them accessible	13		/	0,	3			Х	\$224,983	
15         1         E.         \$100,329.00         / E.         \$100,329.00         / E.         \$20,339.08         / E.         \$25,940         >	Change swing on doors where the door approaches fail to meet required push/pull	14		/		3				\$35,613	
ecial ed         16         1         Ea.         \$26,330.88         1         Ea.         \$216,248.16         1         Ea.         \$216,248.16         1         Ea.         \$216,248.16         1         Ea.         \$24,348.35         1         Ea.         2<24,348.35         1         Ea.         2<24,348         Ea.         2<24,348         Ea.	determines Add a lift to the stage to make it accessible	15		_		6				\$100,329	
ice         17         1         Ea.         \$16,248.16         Fa.         \$16,248.16         Fa.         \$24,348.35         Fa.         Sa         Sa <ths< td=""><td>Add an accessible sink in the old teacher's lounge, which is transitioning into a special ed room, by replacing the sink and 20 If of lower, top, and upper cabinets</td><td>16</td><td></td><td>/</td><td></td><td>0</td><td></td><td></td><td></td><td>\$26,940</td></ths<>	Add an accessible sink in the old teacher's lounge, which is transitioning into a special ed room, by replacing the sink and 20 If of lower, top, and upper cabinets	16		/		0				\$26,940	
or width of         18         1         Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         524,348.35         / Ea.         / Ea. <th ea.<="" th="">         / Ea.         / Ea.</th>	/ Ea.         / Ea.	Modify the cold air return that is causing the section of very low ceiling in the office	17		/		8				\$16,248
Image: S2,331         S32,43         / SF         S1,696,538         S0         S0 <ths0< th=""> <ths0< th=""> <ths< td=""><td>Remove and replace the interior storefront at the door 13 vestibule so the interior width of doors match the exterior doors</td><td>18</td><td></td><td>/</td><td></td><td>8</td><td></td><td></td><td></td><td>\$24,348</td></ths<></ths0<></ths0<>	Remove and replace the interior storefront at the door 13 vestibule so the interior width of doors match the exterior doors	18		/		8				\$24,348	
19         2,800         5         \$266.94         5         5         \$547,432         \$747,432           2,800         5         \$266.94         5         \$5         \$547,432         \$747,432           2,800         5         \$5266.94         5         \$5         \$5747,432         \$5           20         2,800         5         \$5266.94         5         \$5         \$5747,432         \$5           20         2,800         5         \$5         \$535.14         \$5         \$5         \$5747,432         \$5           21         20         5         \$535.14         \$5         \$5         \$5547,632         \$5           22         672         5         \$536.52         \$5         \$5         \$564,756         \$5           23         1,260         5         \$485.35         \$5         \$542,268         \$5         \$5           23         1,260         5         \$485.35         \$5         \$541,741         \$5         \$5           24         25         14,714         5         \$537.683         \$5         \$5         \$5	Total Code Compliance			/				\$0		\$1,696,538	
	Security	ľ	-		-	-			-		
all Security       2,800       SF       \$266.94       / SF       \$0       \$0       \$717,332       S         dition/Remodel (Educational Adequacy)       20       5       5333.20       / SF       \$333.20       / SF       \$335.1.4       / SF       \$335.1.4       / SF       \$5 <td< td=""><td>Secure entrance, administration office and special education relocation remodel</td><td>19</td><td></td><td></td><td></td><td></td><td></td><td>\$747,432</td><td>2</td><td>\$747,432</td></td<>	Secure entrance, administration office and special education relocation remodel	19						\$747,432	2	\$747,432	
dition/Remodel (Educational Adequacy)       20       5F       \$339.20       / 5F       0       0       524.2         inistration       21       5F       \$335.74       / 5F       0       0       524.2         letics       23       1,260       5F       \$356.52       / 5F       0       0       524.2         letics       23       1,260       5F       \$356.52       / 5F       0       0       5611,5         letics       23       1,260       5F       \$356.52       / 5F       0       0       5611,5         intervium       23       1,260       5F       \$356.52       / 5F       0       0       0       5611,5         intest Education       24       5F       \$376.82       / 5F       661       67       5764,7         ulation       25       14,714       5F       \$376.83       / 5F       5544,7	Total Security			/				\$747,432		\$747,432	
ninitration       20       5F       \$339.20 $ $ FP $ $ FP $ $ FP $ $ FP         letics       21       5F $$335.1.7$ $ $ SF $$335.2.7$ $ $ SF $$335.2.7$ $ $ SF $$351.7.7$ $$10.7.7.7$ $$10.7.7.7$ $$10.7.7.7$ $$10.7.7.7$ $$10.7.7.7$ $$10.7.7.7$ $$10.7.7.7.7$ $$10.7.7.7.7.7$ $$10.7.7.7.7.7.7.7$ $$10.7.7.7.7.7.7.7.7.7.7.7.7.7$ $$10.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7$	Addition/Remodel (Educational Adequacy)	-	-		-	-			-		
21     5F     \$351.74     / 5F           letics     22     672     5F     \$360.52     / 5F       \$242,3       ltorium     23     1,260     5F     \$485.35     / 5F       \$611,5       iness Education     24     5F     \$485.35     / 5F       \$611,5       ulation     24     5F     \$376.82     / 5F       \$611,5       ulation     23     14,714     5F     \$376.82     / 5F       \$5,544,7	Administration	20	SF	/	ц			\$0	0	\$0	
22     672     5F     \$360.52     / 5F     \$360.52     / 5F     \$242,3       23     1,260     5F     \$485.35     / 5F     \$486.35     / 5F     \$611,5       24     24     5F     \$376.82     / 5F     \$17,6     56     \$511,5       25     14,714     5F     \$376.83     / 5F     \$376.83     / 5F     \$5544,7	Art	21		/	щ			\$0	0	\$0	
23     1,260     \$48.35     \$48.35     \$4     \$611,5       24     54     \$576.82     \$76.82     \$57     \$61       25     14,714     \$5     \$376.83     \$57     \$57	Athletics	22		/	ц			\$242,268	8	\$242,268	
24     SF     \$376.82     /SF        25     14,714     SF     \$376.83     /SF	Auditorium	23		/	14			\$611,541	1	\$611,541	
25 14,/14 5F 53/6.83 //5F 1	Business Education	24						\$0\$	0	\$0	
	Circulation	25	14,714 Sr	-				Ş5,544,72U	0	\$5,544,720	

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## **Ben Franklin Elementary School** Grand Forks, ND





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\$32,629

\$32,629 \$32,629 \$0 \$792,906

Total Cost

Synergistic with other needs

> Educational Adequacy

10 yrs Deferred Maint \$792,906

\$646,492 \$277,310

\$277,310

\$646,492

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\$386,554

\$386,554

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11/2/2022								
Facility Assessment Estimate								1
Description	Item Number T:	Takeoff Qty		Total Cost/Unit	nit	Critical	5 yrs Deferred Maint	
Classrooms			Я	\$376.82	/ SF			
Common Spaces	27	83	SF	\$393.12	/ SF			
FACS	28		SF	\$393.12	/ SF			
Food Service/Cafeteria	29	1,730	SF	\$458.33	/ SF			
Library/Media Center	30		SF	\$395.63	/ SF			
Mechanical/Electrical	31	2,100	SF	\$307.85	/ SF			
Music	32	069	SF	\$401.90	/ SF			
Restrooms	33		SF	\$464.61	/ SF			
Science	34		SF	\$431.99	/ SF			
Special Education	35	1,136	SF	\$340.28	/ SF			
Technical Education	36		SF	\$381.83	/ SF			
Technology Education	37		SF	\$394.37	/ SF			
Total Adequacy	2	22,385	SF	\$381.26	/ SF	\$0	\$0	
Capital Maintenance								
Interior Upgrades			⊢					
Add an exhaust/relief in the server room	38	1	Ea.	\$17,369.43	/ Еа.	\$17,369		
Replace dated and damaged casework (100 lf of base, top, upper)	39	300	LF	\$389.57	/ LF			
Replace 66 blinds on windows and 50 on doors that are dated and damaged	40	116 Ea.	Ea.	\$763.12	/ Еа.		\$88,522	
Replace ACT in the cafeteria	41	2,000 SF	SF	\$11.54	/ SF	\$23,080		
Patch damaged ceiling in the girl's restroom next to room	42	50	SF	\$11.54	/ SF	\$577		
Paint some walls throughout the school that should be repainted and repair vinyl wall	43	52,311	SF	\$0.85	/ SF		\$44,464	
Could the several cracks in the CMU walls and repair caulking at the top of CMU walls that	44	52,311	SF	\$0.29	/ SF	\$15,170		1
should be redone Reolace dated carpet throughout the school (assuming 70% of building area)	45	36.618	SF	\$13.15	/ SF		\$481.667	
Replace the wood flooring on the stage that is old and damaged	46	940	SF	\$19.69	/ SF		\$18,509	
Interior Upgrades Subtotal		52,311	SF	\$15.4 <b>1</b>	/ SF			1 1
Exterior Upgrades								
Add stoops at exterior doors	47	9	Ea.	\$18,808.94	/ Еа.	\$112,854		
Add stoops to the exterior doors that have floating slabs	48	4	Ea.	\$18,808.94	/ Еа.	\$75,236		
Repair the large new crack in the cement outside door 6		200	SF	\$17.56	/ SF		\$3,512	
Mill and overlay N parking lot that is in rough shape	50	23,050	SF	<b>\$5.08</b>	/ SF		\$117,168	
Add sidewalks that connects the emergency exits to a public way	51	2,000	SF	\$17.56	/ SF	\$35,115		
Re grade the south side of the building outside the library/media center where there are water issues happening	52	Ч	Ea.	\$12,669.75	/ Ea.	\$12,670		
Re grade and landscape the areas where water pools to prevent water from being leaked	53	1	Ea.	\$26,391.85	/ Ea.	\$26,392		
Remove the pavers in the courtroom and replace it with concrete	54	1,440 SF	S	\$28.30	/ SF		\$40,758	
Repair the brick that is cracked and pulling away at corner near door 11	55	30	SF	\$216.83	/ SF	\$6,505		1
Masonry tuckpointing at exterior of the building where the brick is wearing	56	5,000 SF	SF	\$18.82	/ SF		\$94,111	1 1

\$17,369 \$116,872

\$116,872

\$88,522 \$23,080 \$577 \$44,464

\$15,170

\$481,667 \$18,509 **\$806,231** 

\$3,512 \$117,168

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## Ben Franklin Elementary School Grand Forks, ND





11/2/2022									ENGINEERS	ERS
Facility Assessment Estimate										
Description	I tem Number	Takeoff Qtv	Total Cost/Unit		Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Replace windows in the media center that are original to the building and are due for	57	6 Ea.	\$3,469.32 / Ea.	Ea.	\$20,816					\$20,816
reproceincin. Replace the several doors that are damaged including exterior door 5 and classroom 22 door and naine acisting doors frames.	58	10 Ea.	\$2,368.31 / Ea.	Ea.		\$23,683				\$23,683
add 22 additional parking stalls to the parking lot since it is not large enough	59	5,500 SF	\$14.84 / 5	SF				\$81,620	0	\$81,620
Replace the roof when it nears the end of its useable lifetime	60		/	/ SF		\$1,756,603				\$1,756,603
Replace the window in the boiler room that is cracked.	61	1 Ea.	-	/ Ea.	\$3,469					\$3,469
Exterior Upgrades Subtotal		52,311 SF	\$46.08 / \$	/ SF						\$2,410,511
Electrical Upgrades										
Add egress lighting to doors to exterior as is required by Building Code	62	52,311 SF	\$1.36 / SF	SF	\$71,143					\$71,143
Update the existing intercom system with a new IP system throughout entire school.	63	52,311 SF	\$3.76 / SF	г			\$196,689			\$196,689
Add additional door security all exterior doors with access control and monitoring	64	52,311 SF	\$1.21 / <u>5</u>	SF	\$63,296					\$63,296
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Diskria Ruildian Code	65	52,311 SF	\$0.69 / SF	R	\$36,095					\$36,095
Electrical Upgrades Subtotal		52,311 SF	\$7.02 / 5	SF						\$367,223
Mechanical Upgrades										
During any remodel associated with the plumbing fixtures, the piping should be investigated and replaced where needed.	99	52,311 SF	\$6.85 / 5	SF	\$358,330				×	\$358,330
The piping will need to be replaced during the next kitchen remodel to ensure there is no	67	680 SF	\$160.85 / S	SF	\$109,378					\$109,378
building up of grease. There is no grease interceptor currently installed on the waste line for the three-compartment sink and other grease producing fixtures. It is recommended and a city requirement that a grease interceptor be installed to protect the waste piping										
ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald notertion in accordance with the uniform plumbing code	68	52,311 SF	\$0.32 / SF	SF	\$16,740				×	\$16,740
Mechanical Upgrades Subtotal		52,311 SF	\$9.26 / SF	SF						\$484,448
Total Capital Maintenance		52,311 SF	\$77.77	/ SF \$1	\$1,004,235	\$2,668,997	\$313,561	\$81,62 <b>0</b>	(	\$4,068,413
Total Construction Cost		77,496 SF	\$194.16 /	/ SF \$2	\$2,700,772	\$2,668,997	\$313,561	\$9,363,472	ā	\$15,046,802
*** All above estimated costs are total construction costs. These include general cond		1 fees, permits, ins	tions, CM fees, permits, insurances, bonds, taxes	axes						
Contingencies & Soft Costs	;			-	-					
	69	%0.c			\$135,038.61	5133,449.84	\$15,678.07			\$/52,340 5752,340
construction contingency Escalation	71	3.0%		/r	10.05.0514	\$133,449.84 \$0.00	10.8/0,c1¢ \$0.00	\$0.00		04c,2c/ç \$0
A & E Fees	72	7.0%		v	\$189,054.05	\$186,829.78	\$21,949.30	\$655,4		\$1,053,276
FF & E	73	2.0%			\$54,015.44	\$53,379.94	\$6,271.23	\$187,269.44	4	\$300,936
Owner Contingency	74	1.5%			\$40,511.58	\$40,034.95	\$4,703.42	\$140,452.08	8	\$225,702
Total Contingencies & Soft Costs					\$553,658	\$547,144	\$64,280		01	\$3,084,594
Total Facility Assessment Cost Estimate		77,496 SF		/SF \$∶	\$3,254,430	\$3,216,141	\$377,841	\$11,282,984	1	\$18,131,397
Total Critical & Educational Adequacy		77.496 SF	\$187.59 /	1 SF						\$14,537,414

\$14,537,41

\$187.59 / SF

77,496 SF

**Total Critical & Educational Adequacy** 

# A. EXISTING BUILDING INVENTORY201B. ARCHITECTURAL FINISHES202C. MECHANICAL/ELECTRICAL ASSESSMENT204D. EXISTING DEFICIENCIES208E. COST ANALYSIS213



## CENTURY ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **A. EXISTING BUILDING INVENTORY**

Century Elementary School is located at 3351 17th Avenue S in Grand Forks. The school was originally built in 1989 and an addition of a southwest classroom wing was built in 1991.

Century is accessible to the north by 17th Avenue S, to the west by S 34th Street, and to the south by Primrose Court. The school is bordered to the east by Lions Park. Student pick-up and drop-off takes place in the smaller parking lot to the north of the school. This lot can be accessed from both 17th Avenue S and S 34th Street. There is a larger parking lot to the south of the school that can be accessed by S 34th Street.

#### **FLOOR PLAN**



#### **FLOOR PLAN**

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Century Elementary School was built in 1989 and has since received one addition in 1991. The school lacks a fire suppression system and could benefit from some cosmetic cleaning and repairs.

#### SITE

The exterior sidewalks, curbs, and pavement are in good condition. Some movement in the concrete is prevalent, especially at Door 11 and 12 where the concrete inclines toward the building. There are some exposed outlets on the exterior of the building that should be covered and the light outside of Door 3 is broken. The gutter outside of the cafeteria is broken and all gutters should be cleaned out.

#### MASONRY

There is some cosmetic cracking in the concrete masonry unit (CMU) and brick throughout the building, both exterior and interior. CMU is cracked above the red, metal decorative roof in commons area, exterior bricks at the corner of angled windows are pulling away, and the brick is cracked aligning with the edge of the stoop by Door 4 and 7. All exterior masonry should be cleaned. Weeps appear to be below grade, which doesn't allow for proper drainage. Mortar could be repaired in some areas as it is cracking and wearing, especially outside of the music room window (001).

#### ADDITIONAL EXTERIOR MATERIALS

In addition to masonry, the exterior façade also consists of exterior insulation and finish systems (EIFS) and metal siding (002). The EIFS is damaged outside of the cafeteria and the metal siding has some minor denting throughout, but appears to be in good condition.

#### ROOF

There are no notable roof issues.

#### **OPENINGS**

The door openings within the school are in good condition. Door 8B is rusting and has paint chipping off. Windows are in good condition as well, but there has been water leakage above the window in the music room (003).

#### CEILINGS

The main ceiling finish throughout the building is acoustical ceiling tile (ACT). There are several ACT tiles that have water damage. The damage is most apparent in classrooms 10, 12, and 21, and the girls' restroom across from rooms 68 and 69. There is a ceiling leak in the corner of the resource room. The skylight at Door 11 is cracked. Alternative options should be explored for the skylights that are by entrances and in the library, due to the cost and difficulty of maintaining them.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### ARCHITECTURAL FINISHES CONTINUED

#### WALLS

The interior walls consist mainly of painted masonry, painted gypsum board, vinyl wall coverings, and tile. There are some minor cosmetic wall damages throughout the school. The most notable cosmetic issues consist of cracks in the wall between the kitchen and cafeteria, crack in the wall outside of the instrumental music room (004), and some areas where the vinyl wall covering is releasing from the gypsum substrate (005). Large portions of exterior walls are covered with vinyl covering on the interior side. It is recommended the vinyl wall covering be removed from the interior surface of exterior walls, as this could potentially create a double vapor barrier and trap moisture within the walls. Current code does not permit the use of vinyl wall covering on outside walls for this reason.

#### FLOORING

There are no notable issues with the flooring throughout the school. Most rooms have carpet which appears to have been updated and is in good condition.

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



## C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

• The facility is currently not sprinkled. It is recommended that with a major facility upgrade that an NFPA 13 compliant wet sprinkler system be installed throughout the facility when required by the Grand Forks local jurisdiction having authority. There is an existing 8" water main routed along the East side of the building where a dedicated 6" sprinkler main could be brought into the building.

#### PLUMBING

- The majority of the plumbing throughout where spaces have not had remodeled with complete piping replacement has piping in place from the original 1989 construction set and the addition in 1992. The piping is currently of age where it does not require a dedicated change out project.
- There are (3) electric domestic water heater that have been recently replaced and in good working order. The primary water heater is a commercial line of AO Smith located in the boiler room. Another electric water heater has been added above the kitchen and another above the library. The water heaters would only need to be replaced based on a failure and would be able to fixed or replaced rather easily and quickly as water heaters of this type are not long lead time items and typically in stock at wholesale houses.
- The kitchen does not currently include a grease interceptor where required by the City of Grand Forks to collect grease before discharging to the city sewer. A grease interceptor should be installed to be in compliance with the city of Grand Forks. The plumbing fixtures within the kitchen should be replaced during the next kitchen remodel project as they are original.
- The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures. Fifteen toilets have been replaced within the last two years. There are currently (4) gang bathroom groups that are original and are showing sign of their age and should be replaced. The district has been replacing sensor activated lavatory faucets with manual type as fixtures start to fail. The sink faucets in the classrooms and break rooms are manually operated. During any toilet room remodeling, all of the existing toilet carriers, fixtures and corresponding drain, waste & vent as well as domestic hot and cold water should be replaced while the chases would be accessible prior to concealing the piping when completed.
- ASSE 1070 compliant thermostatic mixing valves should be added to public lavatories for scald protection to comply with the current plumbing code.

#### HEATING

- The heating plant consisting of (2) Thermal Solutions Arctic 3,000 MBH condensing boilers, (2) 25 HP heating pumps,
   (2) 3 HP boiler pumps, vertical bladder tank and other miscellaneous hydronic specialties were replaced with the 2021 project and do not need to be upgraded at this time.
- The original unit heaters, cabinet unit heaters, finned tube radiation, and terminal heating coils are still in place and updated with controls only during the 2021 project. These units can remain in operation as long as continued maintenance of the motors and cleaning of the coils is completed. During any remodel work, it would be recommended to replace the existing components to allow for new motors for maintenance purposes and covers for aesthetics.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### VENTILATION AND EXHAUST

- The existing air handling units 1 through 6 and 8 had modifications during the 2021 project. The project consisted of replacing components needed for the controls retrofit whereas the existing AHU's themselves remained in place. The air handling units are approximately 30 years old and are not up to current energy standards in regards to casing construction (insulation) or leakage rates and therefore should be replaced. The units are currently in operational condition so it would not be an immediate necessity to replace these units, but these units should be budgeted for replacement in the next 5-10 years if not sooner.
- Air handling unit #7 was completed replaced with the 2021 project and is completely up to date with no modifications required.
- The kitchen has a dishwasher exhaust fan with a type II hood. There is a kitchen makeupair fan system connected to the type I hood along with the grease exhaust fan. Continued regularly scheduled maintenance will keep this system operational until a full remodel of the kitchen takes place at which time the system should be upgraded with variable air volume controls in lieu of constant volume for energy savings.
- Ductwork throughout the building is original to the building and addition and will likely have excessive leakage. Any areas where being remodeled should have the existing ductwork replaced with joints sealed to reduce air leakage.

#### **AIR CONDITIONING**

• The chilled water system including a JCI 125 nominal ton air cooled chiller, 25 HP chilled water pumps, compression tank and other miscellaneous hydronic specialties were replaced with the 2021 project and do not need to be upgraded at this time.

#### AUTOMATIC TEMPERATURE CONTROLS

• Controls throughout the building were changed from pneumatic to electronic (Johnson Controls) with the 2021 project and do not need to be upgraded. Changes to automatic temperature controls would only be recommended when there are changes associated with replacing air handling units, domestic hot water system, etc. It is anticipated that during an AHU replacement project where controls have been recently upgraded that the majority of the existing controllers and automatic temperature control components can be reused.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 300KVA 480/277V padmount transformer located on east exterior of building.
- Power is routed underground from the transformer to a wall-mounted CT cabinet just to the south. Power is then routed through the exterior wall and into the service entrance switchboard within a mechanical room.
- Peak load on this transformer in the past 12 months was 252kW (304A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is adequate.

#### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

#### POWER DISTRIBUTION

- The service entrance switchboard is a 480/277V 800A Siemens Series 6. Power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- Branch panels throughout building were noted to be very fair condition. A few panels have been added over time for renovation projects.
- There are no suggestions for updates to branch panels, at this time.

#### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the halls and classrooms have been updated to LED lighting.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures. It was noted that several stretches of the exterior did not have any lighting.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

#### LIGHTING CONTROL SYSTEMS

- Other than a few bathrooms with automatic lighting control, lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas utilize dimming operation.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via photocell and/or timeclock.
- All exterior lighting control is suggested to be tied into new digital lighting management, as outlined in interior lighting portion above.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Recessed speakers were noted to be located all throughout circulation areas and classrooms.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done via hardwiring.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- A bell system was noted throughout hallways. Function of the bells was unknown at the time of walkthrough.
- Classroom technology varied between classrooms. Technology observed consisted of digital displays and classroom sound reinforcement.

#### SAFETY & SECURITY SYSTEMS

- Roughly 5 exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras. A buzz-in system consisting of a 2-way speaker and camera is located at the main entrance.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- An intrusion detection system consisting of motion detection throughout hallways was installed several years back, but has since been disconnected entirely because of false alarms.
- Fire alarm control panel was recently updated to Simplex 4100ES. Panel is capable of voice evacuation, but currently utilized horns throughout school. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices. Locations of notification devices was noted to be adequate.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **D. EXISTING DEFICIENCIES**

The analysis of the existing Century Elementary School has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

#### 1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.
- Various doors have hardware that is not accessible, most notably in storage rooms and classroom restrooms.
- Restrooms in the building are not accessible. This includes restrooms in classrooms (006), across from the gym, outside the library, in the sick room, across from rooms 68/69, and in the kitchen.
- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass (007).
- Several sinks in the building are not accessible, specifically in the resource room, library work room, lounge, sick room, classrooms, and restrooms. (008)
- Portions of exterior walls have vinyl wall covering on the interior side, which is not to code.
- Door 7 does not have a direct access to a public way.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Mortar could be repaired in some areas as it is cracking and wearing, especially outside of the music room window.



In addition to masonry, the exterior façade also consists of EIFS and metal siding.



Windows are in good condition as well, but there has been water leakage above the window in the music room.



The most notable cosmetic issues consist of cracks in the wall between the kitchen and cafeteria, crack in the wall outside of the instrumental music room.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX





Some areas where the vinyl wall covering is releasing from the gypsum substrate.

Restrooms in the building are not accessible. This includes restrooms in classrooms



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass



Several sinks in the building are not accessible, specifically in the resource room, library work room, lounge, sick room, classrooms, and restrooms.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	4,078 SF	3,098 SF	980
Athletics	5,949 SF	6,600 SF	-651
Circulation	12,610 SF	21,562 SF	-8,952
Classrooms	25,956 SF	25,700 SF	256
Common Spaces	1,565 SF	2,250 SF	-685
Food Service/Cafeteria	4,857 SF	6,258 SF	-1,401
Library/Media Center	3,255 SF	1,545 SF	1,710
Mechanical/Electrical	3,755 SF	5,391 SF	-1,636
Music	1,975 SF	3,300 SF	-1,325
Restrooms	1,672 SF	1,797 SF	-125
Special Education	4,974 SF	5,450 SF	-476

Total Missing Square Footage -12,305

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### SECURITY CONCERNS

#### LACK OF LEARNING/COLLABORATION/SUPPORT SPACES

- The current commons area is not great for collaboration.
- Improved spaces are needed for special education and specialized programs.
- There is a lack of areas for sensory space.
- There is not enough space in the cafeteria. Breakfast meal and encore can be difficult.
- More classroom space is needed for the future.

#### UPDATED FURNITURE, EQUIPMENT, AND FIXTURES

- Furniture and equipment could be more conducive to 21st Century learning.
- Windows need updating.
- Audio/intercom system needs updating.

#### PARKING/STUDENT DROP-OFF AND PICK-UP

- There are not enough parking spaces
- Student drop-off and pick-up need improvements.

#### ACCESSIBILITY IMPROVEMENTS

- The school is need of specialized restrooms for medically fragile students.
- The playground is not ADA accessible.

#### **TOP PRIORITIES**

- 1. Safety/Healthy Environment
- 2. More Collaborative/Community Spaces
- 3. More Space for Special Education

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	Century Elementary School Grand Forks, ND 11/2/2022
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STRUCTION SINEERS	
<b>ENGIN</b>	

11/2/2022								ENCON	CONSIRUCTION ENGINEERS	NON
Facility Assessment Estimate										
	ltem					5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	lit	Critical	Maint	Maint	Adequacy	needs	Total Cost
ADA and Building Code Compliance										
Add accessible lower water fountains throughout the building	1	8 Ea.	\$21,944.54	/ Ea.	\$175,556					\$175,556
Upgrade door hardware with ADA hardware	2	50 Ea.	\$983.61	/ Ea.	\$49,180					<b>\$49,180</b>
Remodel restrooms in classrooms to make them meet accessibility requirements	3	19 Ea.	\$37,497.11	/ Ea.	\$712,445				×	\$712,445
Remodel public restrooms across from the gym to make them accessible and the bathrooms next to the kitchen	4	4 Ea.	\$74,892.86	/ Ea.	\$299,571				×	\$299,571
Remodel single user restrooms outside the library, in the sick room, across from rooms 68/69	5	7 Ea.	\$37,497.11	/ Ea.	\$262,480				×	\$262,480
Replace wire glass throughout the building that is no longer up to code (frame to remain)	9	1,600 SF	\$33.65	/ SF	\$53,840					\$53,840
Replace casework (201f of base, top, and upper) per room and sinks in classrooms, library work room Jounge, and sick room that are not accessible	7	31 Ea.	\$26,939.88	/ Еа.	\$835,136					\$835,136
Remove vinyl wall coverings from the inside of exterior walls that is creating a double vapor barrier. skim coat existing sheetrock and paint	∞	12,000 SF	\$7.16	/ SF	\$85,920					\$85,920
Add sidewalk at door 7 that connects to a public way.	6	300 SF	\$17.56	/ SF	\$5,267					\$5,267
Total Code Compliance		75,387 SF	\$32.89 <i> </i>	/ SF	\$2,479,397	\$0	\$0	\$0		\$2,479,397
Security										
Secure entrance and administration office remodel	10	820 SF	\$266.94	/ SF				\$218,891		\$218,891
Total Security		820 SF	\$266.94	/ SF	\$0	\$0	\$0	<b>\$218,891</b>		<b>\$218,891</b>
Addition/Remodel (Educational Adequacy)										
Administration	11	SF	\$339.20	/ SF				\$0		\$0
Art	12	SF	\$351.74 <i>,</i>	/ SF				\$0		\$0
Athletics	13	651 SF	\$360.52	/ SF				\$234,697		\$234,697
Auditorium	14	SF	\$485.35 ,	/ SF				\$0		\$0
Business Education	15	SF	\$376.82	/ SF				\$0		\$0
Circulation	16	8,952 SF		/ SF				\$3,373,409		\$3,373,409
Classrooms	17	SF	\$376.82	/ SF				\$0		\$0
Common Spaces	18	685 SF		/ SF				\$269,288		\$269,288
FACS	19	SF	\$393.12 <i>\</i>	/ SF				\$0		\$0
Food Service/Cafeteria	20	1,401 SF	\$458.33 <i>;</i>	/ SF				\$642,117		\$642,117
Library/Media Center	21	SF		/ SF				\$0		\$0
Mechanical/Electrical	22	1,636 SF	\$307.85	/ SF				\$503,648		\$503,648
Music	23	1,325 SF	\$401.90 <i>\</i>	/ SF				\$532,516		\$532,516
Restrooms	24	125 SF		/ SF				\$58,076		\$58 <b>,</b> 076
Science	25	SF		/ SF				\$0		\$0
Special Education	26	476 SF		/ SF				\$161,971		\$161,971
Technical Education	27	SF	\$381.83	/ SF				\$0		\$0
Technology Education	28	SF	\$394.37	/ SF				\$0		\$0
Total Adequacy		15,251 SF	\$378.71	/ SF	\$0	\$0	\$0	\$5,775,721		\$5,775,721

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# Century Elementary School Grand Forks, ND 11/2/2022





Facility Assessment Estimate									
	ltem				5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	Critical	Maint	Maint	Adequacy	needs	Total Cost
Capital Maintenance									
Interior Upgrades									
Repair the cosmetic cracking in the CMU and brick throughout the building	29	75,387 SF	/	SF	\$19,601				\$19,601
Remove rust and paint exterior door 8B	30	1 Ea.	\$321.38 /	Ea.	\$321				\$321
Investigate and repair the water leakage above the window in the music room	31	1 Ea.	\$2,368.35 / 1	Ea. \$2,	\$2,368				\$2,368
Replace damaged ACT	32	5,000 SF	-	/ SF	\$47,676			×	\$47,676
Investigate and fix the leak in the ceiling in corner of the resource room.	33	1 Ea.	`	/ Ea. \$46,325	325				\$46,325
Repair the damaged minor cosmetic wall damages throughout the school	34	75,387 SF	\$0.24 /	/ SF		\$18,093			\$18,093
Repair vinyl wall covering where it is peeling away from the wall	35	75,387 SF	\$0.36 / §	SF	\$27,139				\$27,139
Interior Upgrades Subtotal		75,387 SF	\$2.14 / §	SF					\$161,523
Exterior Upgrades									
Replace damaged sidewalk	36	800 SF	\$17.56 / \$	SF \$14,046	046				\$14,046
Protect exposed outlets on the exterior of the building that are not. covered	37	1 Ea.	\$2,694.93 / 1	Ea. \$2,	\$2,695				\$2,695
Replace light outside of door 3 that is broken	38	1 Ea.	\$934.65 / I	Ea. \$	\$935				\$935
Repair the gutter outside of the cafeteria that is broken and clean out all gutters	39	1 Ea.	\$3,671.15 / 1	Ea. \$3,671	571				\$3,671
Repair the exterior brick masonry by a combination of tuckpointing, brick replacement and cleaning as needed	40	75,387 SF	\$3.78 /	/ SF \$284,963	963				\$284,963
Weeps appear to be below grade, which doesn't allow for proper drainage.	41		0 / 0	0					\$0
Repair damaged EFIS outside of the cafeteria	42	1 Ea.	\$12,039.75 / I		040				\$12,040
Remove the skylight at door 11 that is cracked, infill with structural steel and roofing	43	196 SF	\$296.45 /	/ SF \$58,104	104				\$58 <b>,</b> 104
Replace the roof when it nears the end of its useable lifetime	44	75,387 SF	\$34.79 /	SF \$2,622,714	714				\$2,622,714
Remove and infill the rest of the skylights (6)	45	1,344 SF	-	/ SF		\$398,429			\$398,429
Exterior Upgrades Subtotal		75,387 SF	\$45.07 / \$	SF					\$3,397,596
creation upplicates Add egress lighting to doors to exterior as is required by Building Code add additional exterior lighting where there are several stretches of the exterior that do not have any	46	75,387 SF	\$1.35 / 9	SF \$101,772	772				\$101,772
lighting Upgrade of all interior lighting controls throughout to digital lighting management	47	75,387 SF	\$2.51 / 9	SF	\$189,221				\$189,221
Upgrade of all exterior lighting controls throughout to digital lighting management	48	75,387 SF	\$0.25 / §	SF	\$18,847				\$18,847
Update the existing intercom system with a new IP system throughout entire school.	49	75,387 SF	\$3.76 / \$	SF	\$283,455				\$283,455
Add additional door security all exterior doors with access control and monitoring	50	75,387 SF	\$0.85 /	SF \$64,079	779				\$64,079
It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.	51	75,387 SF	\$7.21 //	S.	\$543,540				\$543,540
Electrical Upgrades Subtotal		75,387 SF	\$15.93 / SF	5					\$1,200,915

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# Century Elementary School Grand Forks, ND 11/2/2022



Eacility Assassment Estimate									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Mechanical Upgrades									
Add sprinklers to the building including a new water service line	52	75,387 SF	\$13.05 / S	SF \$98	\$983,955				\$983,955
It is recommended and a city requirement that a grease interceptor be installed to protect the wasta priving orden and realized bit theory all making features	53	1,320 SF	\$ / 86:59\$	SF \$8	\$87,094				\$87,094
During any toilet room remodeling, all of the existing toilet carriers, fixtures and	54	75,387 SF	\$1.14 / S	SF \$8	\$85,564				\$85,564
corresponding drain, waste & vent as well as domestic hot and cold water should be								>	
replaced while the chases would be accessible prior to concealing the piping when								<	
completed.									
ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald brotection in accordance with the uniform plumbing code.	55	75,387 SF	\$0.32 / S	SF \$2	\$24,124				\$24,124
The original unit heaters, cabinet unit heaters, finned tube radiation, and terminal heating	56	75,387 SF	\$0.56 / SF	10		\$42,217			\$42,217
coils are still in place and updated with controls only during the 2021 project. These units									
can remain in operation as long as continued maintenance of the motors and cleaning of									
the coils is completed. During any remodel work, it would be recommended to replace the									
existing components to allow for new motors for maintenance purposes and covers for									
acthatic									
The existing air handling units 1 through 6 and 8 had modifications during the 2021 project. The project consisted of replacing components needed for the controls retrofit whereas the	57	75,387 SF	\$2.54 / S	SF		\$191,483			\$191,483
existing AHU's themselves remained in place. The air handling units are approximately 30									
years old and are not up to current energy standards in regards to casing construction									
(insulation) or leakage rates and therefore should be replaced. The units are currently in									
operational condition so it would not be an immediate necessity to replace these units, but									
these units should be budgeted for replacement in the next 5-10 years if not sooner.									
			•						
The kitchen has a dishwasher exhaust fan with a type II hood. There is a kitchen makeup air	85	12,38/ SF	2 / 86.0¢	2F	\$/3,8/9				\$/3,8/9
Tan system connected to the type I nood along with the grease exhaust fan. Continued									
regularly scheduled maintenance will keep this system operational until a tull remodel of									
the kitchen takes place at which time the system should be upgraded with variable air									
volume controls in lieu of constant volume for energy savings.									
Ductwork throughout the building is original to the building and addition and will likely have	59	75.387 SF	\$8.56 / 5	SF	\$645.313				\$645.313
excessive leakage. Any areas where heing remodeled should have the existing durthork									
rentared with inits sealed to reduce air leakage									
Mechanical Upgrades Subtotal		75,387 SF	\$28.30 / SF	F.					\$2,133,628
Total Capital Maintenance		77,911 SF	\$88.48 / <u>5</u>	/ SF \$4,394,449	,449 \$1,848,993	\$650,221	\$0		\$6,893,663
Total Construction Cost		93.982 SF	\$163.52 / 5	/ SF \$6.873.845	.845 \$1.848.993		\$5.994.612		\$15.367.672
*** All above estimated costs are total construction costs. These include general cond	ditions, Livi	fees, permits, i	conditions, LM Jees, permits, insurances, bonds, taxes	taxes					

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Century Elementary School Grand Forks, ND 11/2/2022							CON	CONSTRUCTION	
Facility Assessment Estimate									
	ltem				5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	Critical	Maint	Maint	Adequacy	needs	Total Cost
Contingencies & Soft Costs									
Design Contingency	60	5.0%		\$343,692.27	\$92,449.64	\$32,511.07	\$299,730.61		\$768,384
Construction Contingency	61	5.0%		\$343,692.27	\$92,449.64	\$32,511.07	\$299,730.61		\$768,384
Escalation	62	0.0%		\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	63	7.0%		\$481,169.18	\$129,429.49	\$45,515.50	\$419,622.85		\$1,075,737
FF & E	64	2.0%		\$137,476.91	\$36,979.85	\$13,004.43	\$119,892.24		\$307,353

\$230,515 \$3,150,373 \$18,518,044 \$15,506,49:

\$1,228,895 \$7,223,508 \$89,919.18

\$133,295 \$783,517 \$9,753.32

\$27,734.89 **\$379,044** \$2,228,036

\$103,107.68 \$1,409,138 \$8,282,984

1.5%

65

\$197.04 / SF / SF

\$164.99

93,982 SF 93,982 SF

**Total Facility Assessment Cost Estimate Total Critical & Educational Adequacy** 

**Total Contingencies & Soft Costs** 

Owner Contingency

A. EXISTING BUILDING INVENTORY	218
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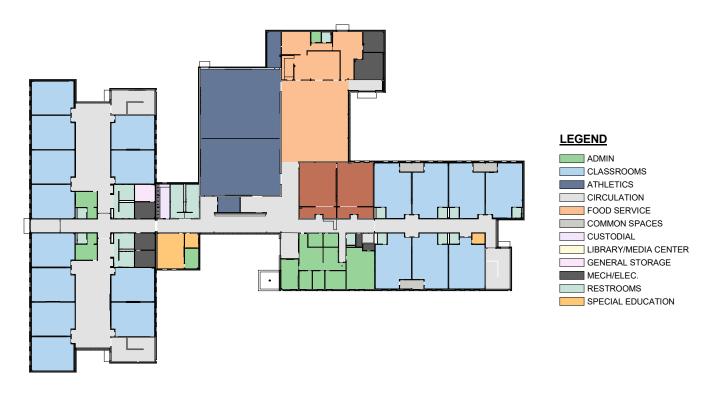
**FACILITY ASSESSMENT EXISTING BUILDING INVENTORY** ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **A. EXISTING BUILDING INVENTORY**

Discovery Elementary School is located at 3300 43rd Avenue S, in Grand Forks. The school opened in 2015 and hasn't undergone any additions or renovations.

Discovery is accessible to the west by S 34th Street, to the south by 43rd Avenue S, and to the east by S 32nd Street. Students arrive at the south entrance via parent drop-off lane and enter the school through Door 1. The visitor pick-up lot is also located to the south of the building allowing access to the main office through Door 1. The faculty parking lot is located to the east of the building with access to Door 7 and 8.

#### **FLOOR PLANS**

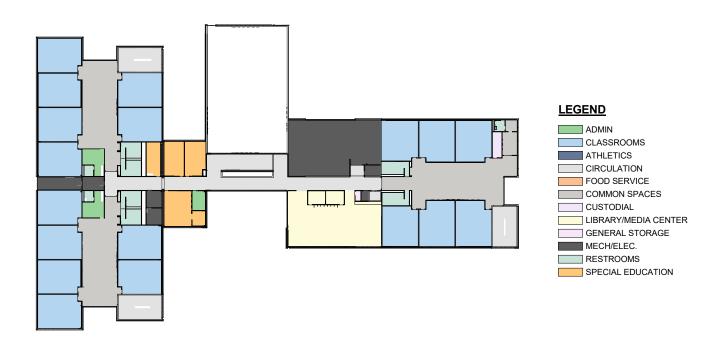


LOWER FLOOR

**FACILITY ASSESSMENT EXISTING BUILDING INVENTORY** ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

EXISTING BUILDING INVENTORY CONTINUED

#### **FLOOR PLANS**



**UPPER FLOOR** 

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Discovery Elementary School opened its doors in 2015. A concern with the building is that there is no voice activated alarm system. The site is currently lacking in parking and does not have any sort of irrigation/sprinkler system. There are a few water issues in the building as well. Water leaking and pooling in the 2nd floor mechanical room is resulting in ceiling leaks into the music and band rooms below. The original casework of the building is low quality and damages easily. The laminate is peeling on the counters (001) and replacement should be considered; damage is especially apparent in library islands (002). Another concern is the lack of storage in restrooms (003). The school's open concept is appreciated, but it would be more functional if certain areas, such as the library, were closed off with doors. Overall, the building is in very good condition.

#### SITE

There are several concerns with the site. The slab is sagging and sinking around the stoop at Door 7 (004, 005). There is also a wind issue at Door 7 due to the building's layout and orientation. Other concerns with the site include the lack of parking and the lack of an irrigation system.

#### MASONRY

There are no notable issues with the masonry.

#### ADDITIONAL EXTERIOR MATERIALS

The exterior of the building is primarily masonry with large portions of glazing. Along with the glass, spandrel panels are also located within the aluminum mullions throughout the building's façade.

#### ROOF

There are no notable issues with the roof.

#### **OPENINGS**

Doors at the entrance of each wing/pod don't latch, so they cannot be locked.

#### CEILINGS

Water is leaking and pooling in the 2nd floor mechanical room (006) which is resulting in ceiling leaks into the music and band rooms below (007, 008). There are also several ceiling tiles throughout the school that have water damage (009, 010, 011).

#### WALLS

The walls are painted masonry, painted gypsum board, have vinyl wall coverings, or are tiled. All walls appear to be in good condition

#### FLOORING

Flooring throughout the school is in good condition.

#### SECURITY

There is no voice activation on alarm system in the school.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



# C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

Fire sprinkler systems are installed throughout the entire building. The system is in good condition and offers full protection of the entire building. Depending on the level of work performed in the building, sprinkler systems may need to be modified.

#### PLUMBING

Plumbing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in exposed spaces appear to be in very good condition. Based on the age of the piping there is no concern with deterioration of the existing piping at this point. The kitchen three compartment sink has a recessed grease interceptor installed to protect the waste piping system.

The restroom plumbing fixtures throughout the building are white vitreous china fixtures with the sensor activate flush valves for water closets and urinals. Lavatory faucets are manual operated. The sink faucets in the classrooms and break rooms are manually operated with classroom sinks also having a bubbler for drinking water.

Domestic hot water is produced by one gas fired water heater serving the kitchen and three electric water heaters serving different wings of the building. Water heaters are all original to the building from 2014 and are in good condition. Each water heater system has a recirculating pump to maintain hot water at the plumbing fixtures.

#### HEATING

Heating for the building is produced by three (3) condensing Aerco Benchmark 1500 MBH boilers. Boilers, heating system pumps, and heating piping are all original from 2014. Variable frequency drives (VFDs) are provided for the main building circulating pumps and the boiler circulating pumps creating a variable primary/variable secondary pumping system.

Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in very good condition. Based on the age of the piping there is no concern with deterioration of the existing piping at this point.

Perimeter hot water finned tube radiation is installed in exterior classrooms and offices for supplemental heat. Hot water cabinet unit heater and suspended unit heaters provide heat for vestibules, stairwells, mechanical rooms, and other similar spaces. Variable air volume (VAV) boxes with hot water reheat coils are provided to provide zone level conditioning to spaces.

#### **VENTILATION AND EXHAUST**

The ventilation and exhaust systems in the school include four (4) indoor air handling units, two (2) roof mounted air handling units, and various exhaust fans. Air handling units all have hot water heating coils, chilled water cooling coils, and DDC controls. Air handling units all have air flow measuring station installed on the outdoor air intakes for verification and

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



monitoring of proper ventilation rates. Air handling units have fan arrays for supply and return with each fan array having a primary and backup VFD for control. These offer very good control and efficiency for the system.

#### AIR CONDITIONING

Air conditioning for the school is provided by a 230-ton air cooled chiller. Redundant chiller loop pumps and redundant building loop chilled water pumps are installed in the system. VFDs are provided on all circulating pumps for variable speed pumping capability. An in-room computer room air conditioning unit is provided for cooling in the main IT room. Remote condenser for this unit is located on the roof.

Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in very good condition. Based on the age of the piping there is no concern with deterioration of the existing piping at this point.

During the walkthrough the boiler room was very warm. A transfer fan could be added to circulate air between the boiler room and adjacent receiving room to mitigate this.

#### AUTOMATIC TEMPERATURE CONTROLS

Controls throughout the building are a Direct Digital Controls (DDC) system provided by Johnson Controls Inc. (JCI). The controls system is integrated with the existing Grand Forks Public School's Building Automation System (BAS). Controls are original to the building, installed in 2014, and are in good condition.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Power is delivered to the facility by Xcel Energy via 750kVA 480/277V 3-phase padmount transformer located near northeast corner of the building. Power is routed from the transformer through a CT cabinet that is sitting adjacent to the transformer, and then underground to the main service entrance switchboard located in the electrical room directly to the south. Peak load on this transformer in the past 12 months was 309kW (373A), as provided by Xcel Energy.
- Service appears to be acceptable, as is. Capacity is more than adequate.

#### **STANDBY POWER**

- The emergency generator is located at the exterior northeast corner of the building. The generator is 480/277V 60kW and is manufactured by Cummins. Two automatic transfer switches are located within the service entrance electrical space. One for life safety loads, and one for all other loads desired to be on emergency power.
- No improvements are suggested to the generator, at this time. Generator appears to have been maintained and tested over time to ensure efficient operation.

#### **POWER DISTRIBUTION**

- The electrical service is delivered underground into a 480/277V 3-phase 2000A Siemens Type SB2 switchboard. Power to all areas of the building is supplied from this main switchboard. This includes various distribution panels, branch panels, and mechanical equipment.
- With peak demand on the service within the past year being 373A, the capacity of the existing switchboard is more than adequate. At this time, there are no recommendations for improvements.
- No improvements are suggested for the building electrical service.

#### LIGHTING

- All lighting within building currently consists of LED.
- It was stated that suspended can lights within cafeteria area and other areas throughout school are now obsolete and parts cannot be obtained for repairs.
- No upgrades are suggested for interior lighting.
- All exterior lighting currently consists of LED.
- No upgrades are suggested for exterior lighting.
- Emergency egress lighting provided via generator or battery back lighting. Exit signage appeared to be adequate.
- Egress lighting and exit signage appears to be adequate and no updates are suggested.

#### LIGHTING CONTROL SYSTEMS

- Lighting controls within entire school, where required by Energy Code, consist of automatic devices. System consists of network lighting controls routed back to main data closet. Lighting in majority of spaces is not dimming-capable.
- No upgrades are suggested for interior lighting controls.
- All exterior lighting is controlled via automatic lighting controls. Exterior lighting also utilizes a master manual switch.
- No upgrades are suggested for exterior lighting controls.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building with dedicated wireless access points within classrooms. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex Building Communication System. System has the capability of paging several specific zones, as desired. Recessed speakers were noted to be located all throughout circulation areas, in all classrooms, and in almost all "normally-occupied" spaces. Speakers also observed at exterior canopies.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done wirelessly. Separate independent battery-powered clocks were also observed in a few locations. Large majority were analog clocks with digital clocks in some public areas.
- Intercom, clock, and bell systems appear to be adequate and no updates are suggested.
- Classroom technology varied between spaces. Technology observed consisted of short-throw projectors, and classroom sound reinforcement.

#### **SAFETY & SECURITY SYSTEMS**

- Majority of doors to exterior of building, along with several interior doors, consist of electronic door hardware.
- Electronic door hardware appears to be adequate and no updates are suggested.
- Security camera system consists of IP-based cameras throughout building.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4100ES with voice capabilities. Fire detection noted to be adequate. Notification consists of strobes, ceiling-recessed speakers, and speaker/strobe devices. All strobe locations consist of a "Fire" device and an "Alert" device for mass notification.
- Fire alarm / mass notification system appears to be adequate and no updates are suggested.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS

# **D. EXISTING DEFICIENCIES**

The analysis of the existing Discovery Elementary School has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Sinks in commons areas are not accessible (012).
- Fire alarm systems should have permanently installed audible alarms (013).

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



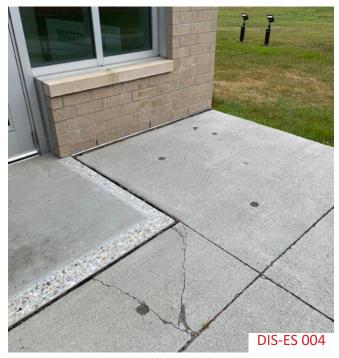
The original casework of the building is low quality and damages easily. The laminate is peeling on the counters .



Replacement should be considered; damage is especially apparent in library islands.



Another concern is the lack of storage in restrooms.



The slab is sagging and sinking around the stoop at door 7.

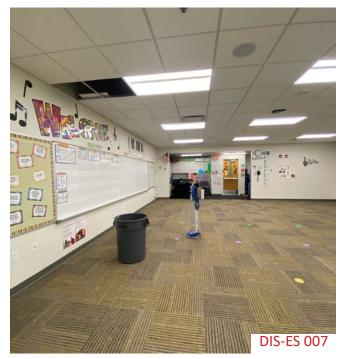
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The slab is sagging and sinking around the stoop at door 7.



Water is leaking and pooling in the 2nd floor mechanical room.



Water is leaking and pooling in the 2nd floor mechanical room which is resulting in ceiling leaks into the music and band rooms below.



Water is leaking and pooling in the 2nd floor mechanical room which is resulting in ceiling leaks into the music and band rooms below.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



There are also several ceiling tiles throughout the school that have water damage.



There are also several ceiling tiles throughout the school that have water damage.

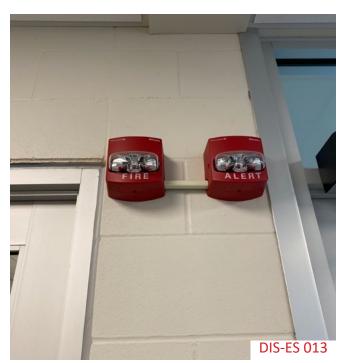


There are also several ceiling tiles throughout the school that have water damage.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Sinks in commons areas are not accessible.



Fire alarm systems should have permanently installed audible alarms.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	3,516 SF	3,300 SF	216
Athletics	6,054 SF	3,400 SF	2,654
Circulation	15,971 SF	25,272 SF	-9,301
Classrooms	30,864 SF	33,900 SF	-3,036
Common Spaces	7,106 SF	4,200 SF	2,906
Food Service/Cafeteria	4,878 SF	7,388 SF	-2,510
Library/Media Center	2,697 SF	2,017 SF	680
Mechanical/Electrical	4,843 SF	6,318 SF	-1,475
Music	2,192 SF	5,000 SF	-2,808
Restrooms	3,128 SF	2,106 SF	1,022
Special Education	2,208 SF	2,600 SF	-392

Total Missing Square Footage -12,044

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### SECURITY CONCERNS

• There are unconventional spaces for lockdowns/shelter in place.

#### LACKING SPECIALTY AREAS

- There are not private rooms for therapy or rooms without windows.
- There is a lack of open flex spaces.
- There is only one staff restroom on the first floor.
- The gym is small and cannot fit bleachers.

#### THERE IS ONLY ONE ELEVATOR IN THE SCHOOL.

• There is no freight elevator.

#### **TOP PRIORITIES**

- 1. Shelter in Place Area
- 2. Increased Parking
- 3. More Storage of Winter Gear

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# Discovery Elementary School Grand Forks, ND 11/2/2022



Facility Assessment Estimate									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
ADA and Building Code Compliance									
Replace casework (20lf of base, top, and upper) per common room and sinks to make them accessible	1	4 Ea.	\$26,939.88 / Ea.	a. \$107,760					\$107,760
Total Code Compliance		92,118 SF	\$1.17 / S	SF \$107,760	0\$	0\$	0\$		\$107,760
Addition/Remodel (Educational Adequacy)									
Administration	2	SF	\$339.20 / SF	14.			0\$		\$0
Art	3	SF	\$351.74 / SF	14-			0\$		\$0
Athletics	4	SF	\$360.52 / SF	Ц			0\$		\$0
Auditorium	5	SF	\$485.35 / SF	14			\$0		\$0
Business Education	9	SF	\$376.82 / SF	14-			0\$		\$0
Circulation	7	9,301 SF	\$376.83 / SF	14			\$3,504,923		\$3,504,923
Classrooms	∞	3,036 SF	\$376.82 / SF	ц.			\$1,144,023		\$1,144,023
Common Spaces	6	SF	\$393.12 / SF	Ц			0\$		\$0
FACS	10	SF	\$393.12 / SF				0\$		\$0
Food Service/Cafeteria	11	2,510 SF	\$458.33 / SF	Ц			\$1,150,402		\$1,150,402
Library/Media Center	12	SF	\$395.63 / SF	Ц			0\$		\$0
Mechanical/Electrical	13	1,475 SF	\$307.85 / SF	14			\$454,084		\$454,084
Music	14	2,808 SF	\$401.90 / SF	4			\$1,128,531		\$1,128,531
Restrooms	15	SF	\$464.61 / SF	-			0\$		\$0
Science	16	SF	\$431.99 / SF				0\$		\$0
Special Education	17	392 SF	\$340.28 / SF				\$133,388		\$133,388
Technical Education	18	SF	\$381.83 / SF				0\$		\$0
Technology Education	19	SF	\$394.37 / SF	-			0\$		\$0
Total Adequacy		19,522 SF	\$384.97 / S	SF \$0	\$0	\$0	\$7,515,351		\$7,515,351
Capital Maintenance									
Interior Upgrades									
Fix water leak in the 2nd floor mechanical room that is resulting in ceiling leaks into the music and band rooms below.	20	1 Ea.	\$26,141.24 / E	Ea. \$26,141					\$26,141
Replace the original casework in the building since it is low quality and damages easily.	21	2,735 SF	\$389.57 / SF			\$1,065,483			\$1,065,483
Reattached PLAM countertops that are peeling at the library islands	22	1 Ea.	\$12,548.14 / E	Ea. \$12,548					\$12,548
Replace hardware on the doors at the entrance of each wing/pod with latches, so they be locked.	23	12 Ea.	\$651.32 / E	Ea.	\$7,816				\$7,816
Replace the water damaged ceiling tiles throughout the school	24	2,394 SF	\$9.54 / SF		\$22,827				\$22,827
Interior Upgrades Subtotal		92,118 SF	\$12.32 / SF	ц					\$1,134,816

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# Discovery Elementary School Grand Forks, ND 11/2/2022



Facility Assessment Estimate									
								Svnergistic	
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	with other needs	Total Cost
Exterior Upgrades									
Replace the slab at door 7 since it is sagging and sinking	25	500 SF	\$17.56 / SF	F \$8,780					\$8,780
Add 8 additional parking stalls to the parking lot since it is not large enough	26	2,000 SF	\$14.84 / SF	14			\$29,680		\$29,680
Replace the roof when it nears the end of its useable lifetime	27	75,387 SF	\$31.46 / SF	14-		\$2,371,675			\$2,371,675
Change the door swing of door 7 to fix the wind issue due to the building's layout and orientation	28	1 Ea.	\$3,561.29 / Ea.	a. \$3,561					\$3,561
Exterior Upgrades Subtotal		92,118 SF	\$26.20 / SF	ц					\$2,413,696
Electrical Upgrades									
Replace lighting in the cafeteria area since the suspended can lights are now obsolete and parts cannot be obtained for repairs	29	3,000 SF	\$7.32 / SF	и.		\$21,960			\$21,960
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Buildine Code	30	92,118 SF	\$5.32 / SF		\$490,068				\$490,068
Electrical Upgrades Subtotal		92,118 SF	\$5.56 / SF	ц					\$512,028
Mechanical Upgrades									
During the walkthrough the boiler room was very warm. Add a transfer fan to circulate air between the boiler room and adjacent receiving room to mitigate this.	31	1 Ea.	\$12,367.24 / Ea.	e.	\$12,367				\$12,367
Mechanical Upgrades Subtotal		92,118 SF	\$0.13 / SF						\$12,367
Total Capital Maintenance		92,118 SF	\$44.21 / SF	F \$51,031	\$533 <b>,</b> 078	\$3,459,118	\$29,680		\$4,072,907
Total Construction Cost		111,640 SF	\$104.77 / SF	F \$158,790	\$533,078	\$3,459,118	\$7,545,031		\$11,696,017
*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	litions, CM	fees, permits, insu	irances, bonds, ta	xes					
Contingencies & Soft Costs									
Design Contingency	32	5.0%		\$7,939.51	\$26,653.90	\$172,955.91	\$377,251.53		\$584,801
Construction Contingency	33	5.0%		\$7,939.51	\$26,653.90	\$172,955.91	\$377,251.53		<b>\$584,801</b>
Escalation	34	0.0%		\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	35	7.0%		\$11,115.31	\$37,315.46	\$242,138.27	\$528,152.14		\$818,721
FF & E	36	2.0%		\$3,175.80	\$10,661.56	\$69,182.36	\$150,900.61		\$233,920
Owner Contingency	37	1.5%		\$2,381.85	\$7,996.17	\$51,886.77	\$113,175.46		\$175,440
Total Contingencies & Soft Costs				\$32,552	\$109,281	\$709,119	\$1,546,731		\$2,397,683
Total Facility Assessment Cost Estimate		111,640 SF	\$126.24 / SF	F \$191,342	\$642,359	\$4,168,237	\$9,091,762		\$14,093,700
Total Critical & Educational Adequacy		111,640 SF	\$83.15 <b> </b> /SF	ш					\$9,283,104

Sec.	
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J. NELSON KELLY

ELEMENTARY

SCHOOL

KTAP

# KELLY ELEMENTARY SCHOOL

3000

KELLY ELEMENTARY SCHOOL FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

# **A. EXISTING BUILDING INVENTORY**

Kelly Elementary School is located at 3000 Cherry Street and was originally built in 1966. Since then, the school has undergone three additions. The first addition was made to the south side of the school in 1973. This addition included restrooms, an office, mechanical room, and a central resource area with three open team classrooms around it. In 1982, a second addition was built. This new addition was added to the west side of the school and included various classrooms and special education rooms. The third addition was built in 1989 and expanded the school farther west. It included a new gym, music rooms, support spaces, and a remodel of the existing kitchen. Following the additions, the school underwent a remodel in 2004 and a reroof in 2010. The school is currently undergoing a small remodel to replace the multipurpose room near the office with two classrooms, intervention rooms, star rooms, and a sensory room.

Kelly Elementary School is accessible by an alleyway to the north, Cherry Street to the east, and 32nd Avenue S to the south. There is a small parking lot to the north of the building and a larger parking lot to the south of the building.



#### **FLOOR PLAN**

#### MAIN FLOOR

 KELLY ELEMENTARY SCHOOL

 FACILITY ASSESSMENT
 EXISTING BUILDING INVENTORY
 ARCHITECTURAL FINISHES

# **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Kelly Elementary School's original portion was completed in 1966. Additions were made in 1973, 1982, and 1989. In 2004 a remodel was done, and the building was reroofed in 2010. Another remodel is currently taking place. There are areas in both the exterior and interior of the building where signs of wear and tear are present. Certain finishes, hardware, and appliances in the building are outdated and/or damaged (001). There are accessibility issues throughout the school.

#### SITE

The exterior sidewalks, curbs, and pavement show some cracking. Asphalt is pushed up against the building, burying weep holes (002). The playground was recently redone and meets accessibility requirements.

#### MASONRY

The exterior brick is in overall good condition. Caulking is starting to deteriorate and should be redone.

#### ADDITIONAL EXTERIOR MATERIALS

Metal paneling around the gym has numerous dents from balls hitting it (003). Wood paneling and pressed panels are in overall good condition.

#### ROOF

The roof was recently redone 1 - 2 years ago.

#### **OPENINGS**

Door openings within the school are in good condition. The east side of the school received new windows in the summer of 2022. Other windows are aged, and caulking is deteriorating (004, 005).

#### CEILINGS

The ceilings within the school mostly consist of acoustical ceiling tile (ACT) and are in good condition.

#### WALLS

The interior walls are either painted masonry, painted gypsum board, have vinyl wall covering, or are tiled. All walls appear to be in good condition and no visible issues were noted.

#### FLOORING

The floors in the school are either carpet or various types of tiles. The carpet is dated, but tile is in overall good condition.

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

CILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



# C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

• There is no fire sprinkler system installed within the school. It is recommended that a fire sprinkler system be installed within the school, and would be required that sprinklers be installed throughout the entire building per NFPA standards.

#### PLUMBING

- Most of the plumbing piping throughout the building is original to each section of the building. Piping was added to the remodeled gymnasium in 2004, as well as most of the plumbing fixtures being replaced at that time. Maintenance staff did not report any issues at the time of the walk through. During any new remodel area, the pipe hangers and associated piping should be considered being replaced as part of the long term planning.
- The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures with the water closets being flush valve floor mounted toilets. The lavatory faucets are a combination of sensor type and manually operated. The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail. The sink faucets in the classrooms and break rooms are manually operated.
- Domestic hot water is produced by one (1) 250 MBH gas fired water heater in the boiler room of the original building and (1) 4.5KW electric water heater in the mezzanine mechanical room of the 1989 addition. Both water heaters have integral storage tanks. Water heaters were installed in 1997 and 2010, respectively. The gas fired water heater is past its expected end-of-life and is showing it's age. The electric water heater seems to be in good condition. The gas fired domestic water heater and associated circulating pump is being designed to be replaced as part of a 2022/2023 project.
- Kitchen plumbing fixtures and piping is relatively new and in good condition. There is no grease interceptor currently installed on the waste line for the three-compartment sink and other grease producing fixtures. It is recommended and a city requirement that a grease interceptor be installed to protect the waste piping system.
- ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.

#### HEATING

- Heating for the entire building comes from two (2) non-condensing Weil McLain boilers. One Boiler was installed in 1989 and converted from steam to hot water in 2004. The other boiler and all of the associated pumps were installed in 2004. Primary/secondary circulation pumps and multiple loops are used to distribute hot water throughout the building. The converted boiler is past it's expected end-of-life, but both still seem to be in fair condition. The boiler plant is being designed to be replaced as part of a 2022/2023 project.
- Existing piping throughout the building is concealed in the tunnels, walls, and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in good condition. During any new remodel area, the pipe hangers and associated piping should be considered being replaced as part of the long term planning.
- Hot water terminal reheat coils and electric terminal reheat coils are used only for the remodeled gym and office spaces in the 1982 addition for zoning. Perimeter hot water and electric finned tube radiation is installed in some exterior offices, restrooms, and corridors for supplemental heat. Hot water and electric cabinet unit heaters and suspended unit heaters provide heat for vestibules, mechanical rooms, and other similar spaces. These are all original to each section of the building and should be considered being replaced as part of the long term planning.

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **VENTILATION AND EXHAUST**

- The ventilation and exhaust systems in the school include various air handling units, unit ventilators, packaged rooftop units, and various exhaust fans. The indoor air handling units and exhaust fans throughout the building is original and past their useful life. Indoor Air Quality should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates. Existing indoor air handling units and unit ventilators have inline starters for fan control and pneumatic controls. It should be considered that the indoor air handling units be replaced with new variable air volume units with VFDs for fan speed modulation, chilled water or DX cooling coils, heating water coils, and DDC controls. Indoor air handling unit for the remodeled gymnasium is currently suspended in a mechanical room. This space is limited and, due to serviceability and clearance requirements, may require new unit to be installed on the roof. Unit ventilators are designed to be replaced with induction displacement units with chilled water coils, hot water coils, and perimeter finned tube radiation to condition the classrooms and cafeteria as part of a 2022/2023 project. The induction displacement units will be paired with a rooftop dedicated outdoor air unit with VFDs for fan speed modulation, energy recovery wheel, chilled water coils, hot water coils, and DDC controls for the ventilation air.
- Ductwork throughout the older portions of the building is at the end of its useful life and will have excessive leakage. Any areas of the building where cooling is proposed will need to have all supply ductwork insulated to meet energy code and limit condensation formation.

#### **AIR CONDITIONING**

Air conditioning systems in the admin area, kitchen, 1973 addition, and 1982 addition classrooms consist of packaged DX cooling on the rooftop air handing units. These units were replaced in 2004 for the 1982 addition, kitchen and admin area, while the rooftop units for the 1973 addition were replaced in 2010. The indoor air handling unit serving 1989 addition classrooms has a remote split system DX condensing unit and is original to the building. As designed for a 2022/2023 project, an air cooled chiller plant with a variable speed base mounted circulation pump to be installed and chilled water piping will be ran to all units serving the classroom and kitchen area within the original building. It is recommended that a remote split system DX condensing unit with variable controls, DX cooling coils, and associated refrigerant piping be installed for the remaining indoor air handling units to meet the requirements of ASHRAE 62.1 for ventilation rates, and ASHRAE Standard 55 for cooling and dehumidification.

#### AUTOMATIC TEMPERATURE CONTROLS

• Controls throughout the original building and 1989 addition are pneumatic controls and original to the building. These pneumatic controls offer limited control capability and no ability for monitoring and alarm. There are not proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. It is recommended that all existing pneumatic controls be replaced with Direct Digital Controls (DDC) systems. The DDC system should be integrated with the existing Grand Forks Public School's Building Automation System (BAS). The system would be integrated across the district to allow for single stop monitoring and controls of all buildings in the district.

CILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 225KVA 208/120V padmount transformer located at north end of building.
- Power is routed from the transformer through a wall-mount CT cabinet mounted just to the south of the transformer. Power is then routed through the wall and into the main service entrance switchboard. Peak load on this transformer in the past 12 months was 239kW (664A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is more than adequate.

#### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

#### POWER DISTRIBUTION

- The building's electrical services is routed from the CT cabinet through the north exterior wall into the main service entrance switchboard within the main electrical space at the interior of the building. The service entrance switchboard is a 208/120V 1600A Siemens Series 6. Power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- The service entrance switchboard does not currently utilize a single main service disconnect. The switchboard was seemingly installed as main lug only and all breakers within switchboard are currently operating as service disconnects. While this is very unorthodox, it is allowed by Code. However, Code only allows six separate service disconnects within a single facility. This will limit the amount of breakers that can be installed within this service entrance switchboard.
- A distribution panel located adjacent to the main switchboard was noted to be very old and in need of replacement. The distribution panel was updated a bit after the flood of 1997, but it is recommend that this panel be replaced in it's entirety.
- Branch panels throughout building were noted to be in fair condition. While some appear to be nearing the end of their useful life, they are still in work order. These panels are recommended to be replaced with any renovation project.

#### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the gym have been updated to LED lighting.
- School is currently scheduled to undergo a lighting upgrade project that will replace all non-LED lighting within school with energy-efficient LED lighting. This should cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

CILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas capable of dimming control.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via three separate timeclocks that have been installed over time.
- All exterior lighting control is suggested to be tied into digital lighting management, as outlined in interior lighting portion above.

#### **COMMUNICATIONS SYSTEMS**

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Recessed speakers were noted to be located all throughout circulation areas. Intercom speakers not located within classrooms.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done via hardwiring. Clocks consist of primarily analog devices.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of digital displays and classroom sound reinforcement.

#### **SAFETY & SECURITY SYSTEMS**

- A select few exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras. A buzz-in system consisting of a 2-way speaker and camera is located at the school's main entrance.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4010. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices and locations appeared to be adequate.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

CILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **D. EXISTING DEFICIENCIES**

The analysis of the existing Kelly Elementary School has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- The building is not sprinklered.
- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass. (006)
- Restrooms in classrooms are not accessible. (007)
- Sinks in classrooms are not accessible. (008)
- Pipes throughout the building under sinks are not protected. (009)
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains. (010, 011)
- Many doors throughout the building have hardware that is not accessible. (012)
- Faculty restroom and gym office restrooms are not accessible. (013, 014)
- Sinks in library workroom and faculty lounge are not accessible. (015)
- Interior windows in the library computer lab do not have required tempered glass for safety.
- All public restrooms are not accessible. (016, 017)
- The mop sink in the custodial room requires a splash guard.
- Door 2 entrance is not wide enough for entry clearance. (018)

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Certain finishes, hardware, and appliances in the building are outdated and/or damaged.



Asphalt is pushed up against the building burying weep holes.



Metal paneling around the gym has numerous dents from balls hitting it.



Other windows are aged, and caulking is deteriorating.



Other windows are aged, and caulking is deteriorating.



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass.



Restrooms in classrooms are not accessible.



Sinks in classrooms are not accessible.



Pipes throughout the building under sinks are not protected.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.



Many doors throughout the building have hardware that is not accessible.



Faculty restroom and gym office restrooms are not accessible.



Faculty restroom and gym office restrooms are not accessible.



Sinks in library workroom and faculty lounge are not accessible.



All public restrooms are not accessible.



All public restrooms are not accessible.



Door 2 entrance is not wide enough for entry clearance.

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	2,773 SF	4,000 SF	-1,227
Athletics	8,135 SF	3,000 SF	5,135
Circulation	10,112 SF	9,060 SF	1,052
Classrooms	21,300 SF	22,650 SF	-1,350
Food Service/Cafeteria	3,019 SF	6,798 SF	-3,779
Library/Media Center	3,983 SF	2,291 SF	1,692
Mechanical/Electrical	3,129 SF	4,515 SF	-1,386
Music	1,751 SF	2,000 SF	-249
Restrooms	1,619 SF	1,505 SF	114
Special Education	2,068 SF	3,850 SF	-1,782
Technology Education	711 SF	1,000 SF	-289

Total Missing Square Footage -2,069

# KELLY ELEMENTARY SCHOOL FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### AIR QUALITY/CONTROL

• There is not air conditioning in the kindergarten, 1st and 2nd grade classrooms.

#### ADA ACCESSIBILITY

#### SECURITY ISSUES

#### LACK LEARNING/SUPPORT SPACES

- The cafeteria is too small.
- The school is currently adding more special education space, but there still will not be enough room to accommodate.

#### **OVERALL ENVIRONMENT DOES NOT SUPPORT 21ST CENTURY LEARNING**

- There are not enough outlets in schools.
- There is a lack of natural light throughout the school.

#### PARKING ISSUES

#### **TOP PRIORITIES**

- 1. Safety/Security/ADA Accessibility
- 2. Common Gathering/Collaboration Spaces
- 3. Band/Orchestra Rooms

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Kelly Elementary School Grand Forks, ND

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Facility Assessment Estimate         Item       Item       Item       Total C         Description       Item       Total C         Description       Item       Total C         Description       Item       Total C         Replace wire glass throughout the building that is no longer up to code (frame to remain)       1       1       1       Satistic structure of the building that is no longer up to code (frame to remain)       1       1       1       Satistic structure of the building that is no longer up to code (frame to remain)       1       1       1       1       Satistic structure of the building that is no longer up to code (frame to remain)       1       1       1       1       Satistic structure to make them ADA accessible.       2       11       En       Satistic structure to colspan="2">Satistic structure structure to make them ADA accessible is related to accessible by replace model accessible by replace model acceleration with ADA accessible by replacing 20 If       Satistic structure to make them ADA accessible by replacing 20 If       Satistic structure to make them ADA accessible by replac	akeoff Qty 1,600 SF 1,600 SF 11 Ea. 11 Ea. 10 Ea. 25 Ea. 20 Ea. 2	Total Cost/Unit           \$33.65         \$F           \$33,65         \$F           \$37,497.11         [Ea.           \$26,939.48         [Ea.           \$21,944.54         [Ea.           \$51,934.54         [Ea.           \$537,497.11         [Ea.           \$526,939.48         [Ea.           \$537,497.11         [Ea.           \$537,497.11         [Ea.           \$537,497.11         [Ea.           \$537,497.11         [Ea.           \$537,492.11         [Ea.           \$537,492.11         [Ea.           \$537,492.11         [Ea.           \$54,322         [54.32]           \$54,322.86         [Ea.           \$14,962.26         [Ea.           \$14,962.26         [Ea.           \$14,962.26         [Ea.	Critice \$5 \$41 \$41 \$57 \$57 \$21 \$57 \$57 \$57 \$57 \$57 \$57 \$57 \$57 \$57 \$57	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other	Total Cost
Item         Takeoff Oty           Number         1           1         1,600           2         11           2         11           3         25           4         1           5         11           6         5           7         2           6         9           7         2           10         5           11         1           11         1           11         1           12         2           13         2,800           13         2,800           13         2,800	akeoff Qty           1,600         5F           1,600         5F           11         Ea.           25         Ea.           26         Ea.           27         Ea.           28         Ea.           29         Ea.           20         Ea.           21         Ea.           22         Ea.           23         Ea.           24         Ea.           25         Ea.           26         Ea.           27         Ea.           28         Ea.           29         Ea.           20         Ea.           21         Ea.           23         Sf           24         Sf           27,383         Sf					Educational Adequacy	Synergistic with other	Total Cost
Number         Takeoff Qty           1         1         1,600         5F           2         11         Ea.           3         2         11         Ea.           4         1         1         Ea.           5         11         Ea.         Ea.           6         5         10         Ea.           7         7         2         Ea.           9         9         40         5F           11         1         Ea.         1           12         11         1         Ea.           11         1         1         Ea.           12         1         1         Ea.           13         2,800         5F         1           13         2,800         5F         5	akeoff Qty           1,600         SF           11         Ea.           11         Ea.           11         Ea.           12         Ea.           25         Ea.           26         Ea.           27         Ea.           28         Ea.           29         Ea.           21         Ea.           22         Ea.           23         Ea.           24         SF           23         Ea.           24         Ea.           25         Ea.           26         Ea.           27         Ea.           28         SF           7,383         SF				Maint	Adequacy		Total Cost
1     1,600     SF       2     11     Ea.       3     25     Ea.       4     1     Ea.       5     10     Ea.       6     50     Ea.       7     2     Ea.       9     40     SF       11     1     Ea.       12     10     6       13     2,800     SF       13     2,800     SF							needs	
1     1,600     5F       2     11     Ea.       3     25     Ea.       4     1     Ea.       5     10     Ea.       6     50     Ea.       7     2     Ea.       7     2     Ea.       9     40     5F       10     10     Ea.       11     1     Ea.       12     11     Ea.       13     2,800     5F       13     2,800     5F								
2     11     Ea.       3     25     Ea.       4     1     Ea.       5     10     Ea.       6     50     Ea.       7     2     Ea.       8     2     Ea.       9     40     Sr       11     1     Ea.       12     11     1       13     2,800     Sr       13     2,800     Sr								\$53,840
3     25     Ea.       4     1     Ea.       5     10     Ea.       6     50     Ea.       7     2     Ea.       8     2     Ea.       9     40     5       10     1     Ea.       11     1     Ea.       12     11     1       13     2,800     5					_			\$412,468
4     1     Ea.       5     10     Ea.       6     5     10       6     5     50       6     5     5       10     Ea.       10     Ea.       10     Ea.       11     1       11     1       12     67,383       5     56								\$673,497
5         10         Ea.           6         50         Ea.           nents.         7         2         Ea.           lacing.201f         8         2         Ea.           lacing.201f         8         2         Ea.           10         6         8         2         Ea.           11         10         6         Ea.         1           12         11         1         Ea.         1           13         2,800         5         2         2							×	\$16,385
6         50         Ea.           nents.         7         2         Ea.           lacing 20 lf         8         2         Ea.           lacing 20 lf         8         40         5F           9         40         5F         5           10         6         Ea.         5           11         1         1         1           12         67,383         5F         5           13         2,800         5F         5								\$219,445
nents.         7         2         Ea.           lacing201f         8         2         Ea.           lacing201f         8         2         Ea.           9         40         F         Ea.           10         6         Ea.         Ea.           11         1         Ea.         Ea.           12         67,383         SF         SF           13         2,800         SF         SF								\$49,180
lacing 20 If     8     2     Ea.       9     40     SF     9       10     6     Ea.     1       11     1     Ea.     1       12     11     1     Ea.       13     2,800     SF		<u> </u>						\$74,994
9     40     5F       10     6     Ea.     57       11     1     1     Ea.     57       12     12     1     Ea.     51       13     2,800     5F     55		$\sim$ $\sim$ $\sim$ $\sim$	\$ \$44					\$53,880
10     6     6     57       11     1     1     6       12     1     1     51       12     6     7,383     57       13     2,800     57     5		$\sim$ $\sim$ $\sim$	\$44					\$2,573
11     1     1     Ea.       12     12     1     Ea.     \$10       13     57,383     SF     \$2       13     2,800     SF     \$5		<u> </u>						\$449,357
12 1 Ea. \$1/ 67,383 SF 51 13 2,800 SF 55		$\sim$	- ¢36¢					\$365
67,383         5F         5           13         2,800         5F         5           2,800         5F         5         5		/	. \$14,962					\$14,962
13 2,800 5F 5	2 800 EF		: \$2,020,947	0\$	0\$	0\$		\$2,020,947
2.800 SF 5:		¢266 94 / 55				57A7 A37		57A7 A37
2.800 SF	10 0001'z	-						
	2,800 SF	\$266.94 / SF	\$0	\$0	\$0	\$747,432		\$747,432
Addition/Remodel (Educational Adequacy)								
Administration 14 1.227 SF 333		\$339.20 / SF				\$416,198		\$416,198
Art 15 SF 335	SF	\$351.74 / SF				0\$		\$0
Athletics 16 5F 336	SF	\$360.52 / SF				0\$		\$0
Auditorium 17 SF \$48	SF	\$485.35 / SF				\$0		\$0
Business Education 2F \$37	SF	\$376.82 / SF				0\$		\$0
SF	SF	\$376.83 / SF				0\$		\$0
Classrooms 20 1.350 SF 337		\$376.82 / SF				\$508,706		\$508,706
SF	SF	\$393.12 / SF				0\$		\$0
SF		\$393.12 / SF				\$0		\$0
Food Service/Cafeteria 2.379 SF \$45		\$458.33 / SF				\$1,732,019		\$1,732,019
SF	SF	\$395.63 / SF				0\$		\$0
Mechanical/Electrical 25 1.386 SF 330		\$307.85 / SF				\$426,685		\$426,685
Music 249 SF \$40		\$401.90 / SF				\$100,073		\$100,073
Restrooms         27         5F         \$46	SF	\$464.61 / SF				0\$		\$0
SF	SF	\$431.99 / SF				0\$		\$0
1,782 SF		\$340.28 / SF				\$606,372		\$606,372
30 SF	SF	`				\$0		\$0
ion 31 289 SF	289 SF	~				\$113,974		\$113,974
Total Adequacy 10,062 SF \$388	0,062 SF	\$388.00 / SF	\$0	ŝ	\$0	\$3,904,027		\$3,904,027

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11/2/2022



11/2/2022								ENGINEERS	2
Facility Assessment Estimate								1	
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Capital Maintenance									
Interior Upgrades Update certain finishes, hardware, and appliances in the building that are outdated and/or	32	67.383 SF	\$1.02 / SF		\$68.731				\$68.731
damaged			,						
Replace the carpet that dated	33					\$490,050			\$490,050
Interior Upgrades Subtotal		b/,383 SF	7 / 34 28.29 / 3F						18/,866¢
Exterior Upgrades									
Repair the exterior sidewalks, curbs, and pavement that are cracking.	34	800 SF	\$17.56 / SF	\$14,048					\$14,048
Replace asphalt that is pushed up against the building burying weep holes	35	1 Ea.	\$65,142.14 / Ea.	ı. \$65,142					\$65,142
Touch up caulking at exterior brick	36	1 Ea.		÷	\$24,157				\$24,157
Replace metal paneling around the gym since it has numerous dents from balls hitting it	37	5,685 SF	\$34.25 / SF		\$194,711				\$194,711
Replace the roof when it nears the end of its useable lifetime	38	66,268 SF	\$32.46 / SF	\$2,151,059					\$2,151,059
Replace windows that are aged except for the recently replaced windows on the East side	39	44 Ea.	\$3,469.32 / Ea.	÷	\$152,650				\$152,650
Exterior Upgrades Subtotal		67,383 SF	\$38.61 / SF						\$2,601,768
Electrical Upgrades									
The service entrance switchboard does not currently utilize a single main service disconnect. The switchboard was seemingly installed as main lug only and all breakers within switchboard are currently operating as service disconnects. While this is very unorthodox, it is allowed by Code. However, Code only allows six separate service disconnects within a single facility. This will limit the amount of breakers that can be installed within this service entrance switchboard.	40	67,383 SF	\$4.25 / SF		\$286,378				\$286,378
A distribution panel located adjacent to the main switchboard was noted to be very old and in need of replacement. The distribution panel was updated a bit after the flood of 1997, but it is recommend that this panel be replaced in it's entirety.	41	67,383 SF	\$0.87 / SF		\$58,623				\$58,623
Branch panels throughout building were noted to be in fair condition. While some appear to be nearing the end of their useful life, they are still in work order. These panels are recommended to be replaced with any renovation project.	42	67,383 SF			\$232,471				\$232,471
Add egress lighting to doors to exterior as is required by Building Code	43	67,383 SF	\$0.75 / SF	\$50,537					\$50,537
Upgrade of all interior lighting controls throughout to digital lighting management	44	67,383 SF	\$2.51 / SF		\$169,131				\$169,131
Upgrade of all exterior lighting controls throughout to digital lighting management	45	67,383 SF	\$0.25 / SF		\$16,846				\$16,846
Update the existing intercom system with a new IP system throughout entire school.	46	67,383 SF	\$3.76 / SF		\$253,360				\$253,360
Add additional door security all exterior doors with access control and monitoring	47	67,383 SF	\$0.85 / SF	\$57,276					\$57,276
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Building Code	48	67,383 SF	\$0.69 / SF	\$46,494					\$46,494
Electrical Upgrades Subtotal		67,383 SF	\$17.38 / SF						\$1,171,117

# Kelly Elementary School Grand Forks, ND 11/2/2022

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Facility Assessment Estimate									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Mechanical Upgrades									
Add sprinklers to the building by adding a new water service line	49	67,383 SF	\$13.05 / SF	F \$879,348	8				\$879,348
During any new remodel area, the pipe hangers and associated piping should be considered being replaced as part of the long term planning.	50	67,383 SF	\$2.68 / SF	Ŀ	\$180,586			Х	\$180,586
It is recommended and a city requirement that a grease interceptor be installed to protect the waste opine system.	51	67,383 SF	\$0.57 / SF	F \$38,408	8				\$38,408
ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.	52	67,383 SF	\$0.32 / SF	Ŀ	\$21,563			×	\$21,563
Hot water terminal reheat coils and electric terminal reheat coils are used only for the remodeled gym and office spaces in the 1982 addition for zoning. Perimeter hot water and electric finned tube radiation is installed in some exterior offices, restrooms, and corridors for supplemental heat. Hot water and electric cabinet unit heaters and suspended unit heaters provide heat for vestibules, mechanical rooms, and other similar spaces. These are all original to each section of the building and should be considered being replaced as part of the long term planning.	53	67,383 SF	\$2.35 / 5F	u.	\$158,350	-			\$158,350
The ventilation and exhaust systems in the school include various air handling units, unit ventilators, packaged rooftop units, and various exhaust fans. The indoor air handling units and exhaust fans throughout the building is original and past their useful life. Indoor Air Quality, should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates. Existing indoor air handling units and unit ventilators have inline starters for fan control and pneumatic controls. It should be considered that the indoor air handling units for fan control and pneumatic controls. It should be considered that the indoor air handling unit for the replaced with new variable air volume units with VFDs for fan speed modulation, chilled water or DX cooling coils, heating water coils, and DDC controls. Indoor air handling unit for the remodeled gymmasium is currently suspended in a mechanical room. This space is limited and, due to serviceability and clearance requirements, may require new unit to be installed on the roof. Unit ventilators are designed to be replaced with induction displacement units with VFDs for fan speed modulation, endicated on the cooft, onthe deater coils, and DDC controls indoor air handling unit for the removes the could clearance requirements, may require new unit to be installed on the cooft. Unit ventilators are designed to be replaced with induction displacement units with chilled water coils, hot water coils, and DDC controls for the redistion, energy recovery wheel, chilled water coils, hot water coils, and DDC controls for the redistion, energy recovery wheel, chilled water coils, hot water coils, and DDC controls for the ventilation air	54	67,383 SF	\$41.21 / SF	۶2,776,853	m				\$2,776,853
Ductwork throughout the older portions of the building is at the end of its useful life and will have excessive leakage. Any areas of the building where cooling is proposed will need to have all supply ductwork insulated to meet energy code and limit condensation formation.	55	67,383 SF	\$8.56 / SF	ц.		\$576,798			\$576,798
It is recommended that all existing pneumatic controls be replaced with Direct Digital Controls (DDC) systems.	56	67,383 SF	\$12.01 / SF	ш	\$809,270	-			\$809,270
Mechanical Upgrades Subtotal		67,383 SF	\$80.75 / SF	F					\$5,441,177
Total Capital Maintenance		67,383 SF	\$145.03 / S	SF \$6,079,166	6 \$2,626,827	\$1,066,848	\$0		\$9,772,842

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com	COST ANALYSIS CONTINUED										
	Kelly Elementary School										
	Grand Forks, ND										
	11/2/2022								ENC	CONSIRUCTION ENGINEERS	RS RS
	Facility Assessment Estimate										
		ltem					5 yrs Deferred 10 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
	Description	Number	Takeoff Qty	Total Cost/Unit	it	Critical	Maint	Maint	Adequacy	needs	Total Cost
	Total Construction Cost		80,245 SF	\$204.94 / SF		\$8,100,114	\$2,626,827	\$1,066,848	\$4,651,459		\$16,445,248
	*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	litions, CM J	ees, permits, insu	ırances, bonds,	taxes						
	Contingencies & Soft Costs										
	Design Contingency	57	5.0%			\$405,005.68	\$131,341.37	\$53,342.42	\$232,572.94		\$822,262
	Construction Contingency	58	5.0%			\$405,005.68	\$131,341.37	\$53,342.42	\$232,572.94		\$822,262
	Escalation	59	0.0%			\$0.00	\$0.00	\$0.00	\$0.00		\$0
	A & E Fees	60	7.0%			\$567,007.95	\$183,877.92	\$74,679.39	\$325,602.12		\$1,151,167
	FF & E	61	2.0%			\$162,002.27	\$52,536.55	\$21,336.97	\$93,029.18		\$328,905
	Owner Contingency	62	1.5%			\$121,501.70	\$39,402.41	\$16,002.73	\$69,771.88		\$246,679
	Total Contingencies & Soft Costs					\$1,660,523	\$538,500	\$218,704	\$953,549		\$3,371,276
	Total Facility Assessment Cost Estimate		80,245 SF	\$246.95 / SF		\$9,760,637	\$3,165,327	\$1,285,552	\$5,605,008		\$19,816,524
	Total Critical & Educational Adequacy		80,245 SF	\$191.48 / SF	SF						\$15,365,645

A. EXISTING BUILDING INVENTORY	255
B. ARCHITECTURAL FINISHES	256
C. MECHANICAL/ELECTRICAL ASSESSMENT	257
D. EXISTING DEFICIENCIES	261
E. COST ANALYSIS	270



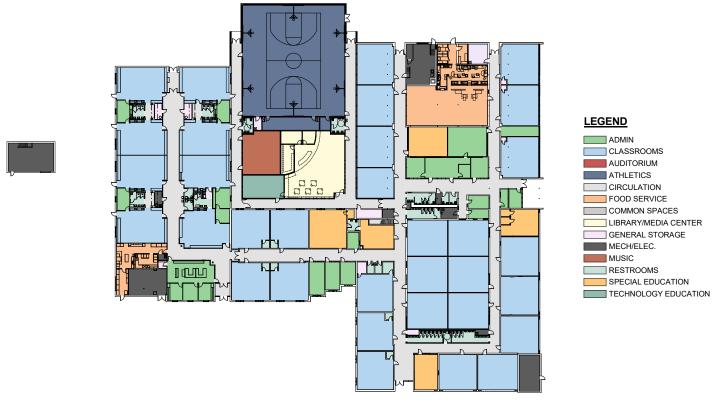
LAKE AGASSIZ SCHOOL

# LAKE AGASSIZ ELEMENTARY SCHOOL + HEAD START

# A. EXISTING BUILDING INVENTORY

Lake Agassiz Elementary School is located at 605 Stanford Road in Grand Forks. Within the same building is Grand Forks Head Start, that has an address of 3600 6th Avenue N. The original elementary school opened in 1961, but the student population quickly outgrew the building and additions were needed. An addition was completed in 1975 and in 1982, another addition and remodel were finished. The additions mainly included classrooms to accommodate more students. In 1995, Head Start was added to Lake Agassiz Elementary to offer services to children from low-income families in their early education days. In 2007, another addition was complete to add a gymnasium and support spaces for the school.

Lake Agassiz Elementary School and Head Start is accessible by 6th Avenue N to the south and Stanford Road to the east. There is a parking lot that starts in the southwest corner of the building and wraps around the west and north side of the building for faculty use.



### FLOOR PLAN

### **FLOOR PLAN**

# **B. ARCHITECTURAL FINISHES**

### SUMMARY

Lake Agassiz Elementary School opened in 1961 with multiple additions to accommodate the growing enrollment. The school lacks in space as larger classrooms are being split into two, the nurse's office lacks space, and staff are creating small rooms wherever they can. Casework in classrooms is dated, but functions.

### SITE

Concrete found around the building shows cracking (001). The concrete at Door 1 should be leveled out (002).

### MASONRY

The exterior brick of the building is in overall good shape, but the mortar needs to be washed. Caulking around the base of the building could use a touch up (003). There are a few areas with damaged brick (004). Flashing at the bottom of the brick portion of the wall was caulked over, preventing proper water drainage. Water pools on the lintel and it is causing it to rust and deteriorate (005).

### ADDITIONAL EXTERIOR MATERIALS

There are portions of the exterior insulation and finish systems (EIFS) around the building that is in good condition. Metal paneling on the addition is in good condition.

### ROOF

Roof has been patched over time, as needed.

### **OPENINGS**

Doors and windows are in relatively good condition. The original glazing compound on windows is coming off and needs to be redone (006). West facing metal doors are aged and should be replaced (007).

### CEILINGS

The ceilings within the school are mostly compromised of acoustical ceiling tile (ACT). Some classrooms have sagging tile due to humidity (008).

### WALLS

The interior walls are either painted masonry, painted gypsum board, have vinyl wall coverings, or have tiling. Some concrete masonry unit (CMU) brick is caving in from ducts (009).

### FLOORING

Carpet in the building is aging, but still in good condition (010).

### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.



# C. MECHANICAL/ELECTRICAL ASSESSMENT

### FIRE PROTECTION

• Fire sprinkler system is currently installed throughout the entire building. Depending on the level of work performed in the building, sprinkler systems may need to be modified to accommodate any new work.

### PLUMBING

- Most of the plumbing piping throughout the building is original to each section of the building. Piping was added from the plumbing mains to the remodeled gymnasium in 2007, as well as most of the plumbing fixtures being replaced at that time. Maintenance staff reported a lack of hot water at the faculty lounge. Recommend investigating the hot water and recirculating hot water piping to determine the issue.
- The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures with the water closets being a combination of flush valve and tank type floor mounted toilets. The lavatory faucets are a combination of sensor type and manually operated. The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail. The sink faucets in the classrooms and break rooms are manually operated.
- Domestic hot water for the original 1960 building along with the 1975, 1982, and 2007 additions is produced by one (1) 250 MBH gas fired water heater in the boiler room of the original building. The domestic hot water for the 1995 Head Start addition's kitchen is produced by one (1) 30KW electric water heater in the mechanical room of the 1995 addition. The rest of the domestic hot water for the 1995 addition is produced by two (2) 4.5 KW. All water heaters have integral storage tanks. Water heaters were installed in 2007, 2011, 2015, and 2014, respectively. The gas fired water heater is nearing its expected end-of-life and is showing it's age. The electric water heater seems to be in good condition. It should be considered to replace the gas fired water heater with a direct vent fully-condensing water heater to maximize efficiency as part of the long term planning.
- Kitchen plumbing fixtures and piping is relatively new and in good condition. Maintenance staff did not report any issues at the time of the walk through.
- The gymnasium restrooms have a single water closet and two urinals for boy's restroom and two water closets for girl's restroom off the main gym. A code study verifying occupant load and required fixture counts should be done for the building to verify the number of fixtures is adequate.
- ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.

### HEATING

- Heating for the entire building comes from one (1) Bell & Gossett shell & tube steam to hot water heat exchanger. The heat exchanger and associated piping and pumps were installed during the 2007 addition/remodel. Multiple circulation pumps and loops are used to distribute hot water throughout the building. The heating water plant is being designed to be replaced as part of a 2022/2023 project.
- Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in good condition.
- Hot water terminal reheat coils are used throughout the building for zoning. Perimeter radiant ceiling panels are
  installed in exterior classrooms and offices for supplemental heat in the 1975 and 1982 additions only. Hot water
  cabinet unit heater and suspended unit heaters provide heat for vestibules, stairwells, mechanical rooms, and other
  similar spaces. The unit heaters have all been replaced during the 2007 addition/remodel or newer and appear to be in
  good condition. The radiant ceiling panels are original to the building and should be considered to be replaced with new
  as part of the long term planning.

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### VENTILATION AND EXHAUST

- The ventilation and exhaust systems in the school include various air handling units, packaged rooftop units, and various exhaust fans. Indoor Air Quality should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates. All of the existing air handling equipment have been replaced since 2007 or newer and appear to be in good condition.
- Ductwork throughout the 1975 and 1982 addition of the building not replaced in the 2007 addition/remodel is at the end of its useful life and will have excessive leakage. Recommend replacing the ductwork with new.

### AIR CONDITIONING

• Air conditioning systems in the original 1960 building and all of the 1975, 1982, and 2007 additions consist of packaged DX cooling on the rooftop air handing units. All of these units were replaced or added in 2007. The indoor air handling unit serving 1995 Head Start addition has a remote split system DX condensing unit and has been recently replaced. All of these units appear to be in good condition.

### AUTOMATIC TEMPERATURE CONTROLS

• There appears to be proper controls for air flow monitoring to control ventilation rates based on occupancies and ASHRAE 62.1 requirements for recommended outdoor air are being met. The Direct Digital Controls (DDC) system should be integrated with the existing Grand Forks Public School's Building Automation System (BAS). The system would be integrated across the district to allow for single stop monitoring and controls of all buildings in the district.

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 500KVA 208/120V padmount transformer located on north side of building.
- Power is routed underground from the transformer to an adjacent CT cabinet. Then routed underground into the main electrical service entrance space and into main distribution switchboard.
- Peak loads on this transformer in the past 12 months was 280kW (778A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is adequate.
- STANDBY POWER
- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

### **POWER DISTRIBUTION**

- The service entrance switchboard is a 208/120V 1900A Siemens Type SB1 Switchboard. Power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- No upgrades are suggested for the service entrance, at this time.
- Branch panels throughout building were noted to be in fair condition.

### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the gym have been updated to LED lighting.
- School is currently scheduled to undergo a lighting upgrade project that will replace all non-LED lighting within school with energy-efficient LED lighting. This should cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas capable of dimming operation.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via timeclock and photocell.
- All exterior lighting control is suggested to be tied into digital lighting management, as outlined in interior lighting portion above.

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### **COMMUNICATIONS SYSTEMS**

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System, with some remnants of a Rauland intercom system throughout building.. Recessed speakers were noted to be located all throughout circulation areas and several "normally-occupied" areas. Intercom speakers were not noted within classrooms.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done via hardwiring. Clocks consist or primarily analog devices. It was stated that as clocks become unusable, they are replaced by simple battery-powered clocks.
- Clocks consist of primarily analog devices.
- Bell system, when required, is operated through intercom system.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This
  would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired.
  This system would also include an upgraded wireless clock system. The intercom system and clock system
  would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of digital displays, shortthrow projectors, and classroom sound reinforcement.

### **SAFETY & SECURITY SYSTEMS**

- A select few exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4010. Pull stations noted to be located at each exit of building. Fire detection was noted to be adequate. Notification consists of strobes and horn/strobe devices and locations appeared to be adequate.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

## **D. EXISTING DEFICIENCIES**

The analysis of the existing Grand Forks Central High School has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This portion includes assessment of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building are identified and listed below.

- Sinks in classrooms are not accessible. (011)
- Sinks in restrooms are not accessible. (012)
- Display case does not have required safety glass. (013)
- Door 1,2, and 10 are not protected with an enclosed vestibule, as required by energy code. (014, 015)
- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass. (016)
- Door hardware on doors to the STAR rooms is not accessible.
- The restrooms near the first-grade classrooms are not accessible due to the absence of grab bars. (017, 018)



Concrete found around the building shows cracking.



The concrete at door one should be leveled out.



Caulking around the base of the building could use a touch up.



West facing metal doors are aged and should be replaced.



There are a few areas with damaged brick.



Flashing at the bottom of the brick portion of the wall was caulked over, preventing proper water drainage. Water pools on the lintel and it is causing it to rust and deteriorate.



The original glazing compound on windows is coming off and needs to be redone.



Some classrooms have sagging tile due to humidity.





Some CMU brick is caving in from ducts.



Carpet in the building is aging but still in good condition.



Sinks in classrooms are not accessible.



Sinks in restrooms are not accessible.



Display case does not have required safety glass.



Doors 1,2, and 10 are not protected with an enclosed vestibule, as required by energy code.



Doors 1,2, and 10 are not protected with an enclosed vestibule, as required by energy code.



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass.



The restrooms near the first-grade classrooms are not accessible due to the absence of grab bars.



The restrooms near the first-grade classrooms are not accessible due to the absence of grab bars.

### EXISTING DEFICIENCIES CONTINUED

### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	5,187 SF	4,800 SF	387
Athletics	7,293 SF	3,400 SF	3,893
Circulation	12,449 SF	21,229 SF	-8,780
Classrooms	29,156 SF	30,500 SF	-1,344
Food Service/Cafeteria	3,736 SF	8,342 SF	-4,606
Library/Media Center	2,405 SF	2,545 SF	-140
Mechanical/Electrical	2,836 SF	5,307 SF	-2,471
Music	953 SF	1,000 SF	-47
Restrooms	2,203 SF	1,769 SF	434
Special Education	3,177 SF	3,950 SF	-773
Technology Education	565 SF	1,000 SF	-435

Total Missing Square Footage -13,882

### EXISTING DEFICIENCIES CONTINUED

### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

### **SECURITY ISSUES**

• The main office is not located in an ideal place for those entering the building.

### LACK OF LEARNING AND SUPPORT SPACES

- Music and band share a classroom.
- There is not a place for paras to keep their belongings.
- There is not space for administration or staff meetings.
- There are not enough collaboration spaces.
- The cafeteria is too small. It takes over two hours to complete lunch.

### SPACES ARE NOT ADJACENT TO EACH OTHER

• Kindergarten classrooms are not all near each other due to the different locations of nearby restrooms.

### PARKING/STUDENT DROP-OFF AND PICK-UP

- There are not enough parking spaces.
- Student drop-off and pick-up is not exceptional.
- The school is unable to have parent events during the day due to the lack of parking.
- There is not a separate parking lot for Head Start.
- Kids have to walk through the parking lot to get to the playground.

### **TOP PRIORITIES**

- 1. Security
- 2. Larger Cafeteria
- 3. A Solution to Avoid Having Kids Walk Through Parking Lot to Get to Playground

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# Lake Agassiz Elementary School & Head Start Grand Forks, ND



11/2/2022									CONSTRUCTION ENGINEERS	ERS
Facility Assessment										
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Jnit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Code Compliance Replace casework (10ff of base and top) per classroom and sinks in classrooms are not	1	8 Ea	\$14,965.45	/ Ea	\$119,724					\$119,724
accessible										
Add accessible sinks in restrooms	2	4 Ea		/ Ea	\$22,579					\$22,579
Replace the glass in the display case with the required tempered glass	з	1 Ea		/ Ea	\$4,516					\$4,516
Add an interior vestibule at doors 1,2, and 10 to meet energy code	4	3 Ea	\$20	/ Ea	\$61,687					\$61,687
Replace wire glass throughout the building that is no longer up to code (frame to remain)	5	800 SF	\$35.53	/ SF	\$28,428					\$28,428
Uograde door hardware with ADA hardware into STAR rooms	9	20 Ea	\$1.150.29	/ Ea	\$23.006					\$23.006
Add grab bars in restrooms near first grade area	7			/	\$953					\$953
Total Code Compliance		76,617 SF		/	\$260,892	0\$	\$0	0\$		\$260,892
Security										
Secure entrance, administration office and special education relocation remodel	8	3,530 SF	\$266.94	/ SF				\$942,298		\$942,298
Total Security		3,530 SF	ŝ		\$0	\$0	\$0	ŝ		\$942,298
Addition/Remodel (Educational Adequacy)										
Administration	6	SF	\$339.20	/ SF				0\$		\$0
Art	10	SF		/ SF				0\$		¢
Athletics	11	SF	\$360.52	/ SF				0\$		\$0
Auditorium	12	SF	\$485.35	/ SF				0\$		\$0
Business Education	13	SF	\$376.82	/ SF				0\$		\$0
Circulation	14	8,780 SF	\$376.83	/ SF				\$3,308,593		\$3,308,593
Classrooms	15	1,344 SF	\$376.82	/ SF				\$506,445		\$506,445
Common Spaces	16	SF		/ SF				0\$		¢\$
FACS	17	SF		/ SF				0\$		\$0
Food Service/Cafeteria	18	4,606 SF	\$458.33	/ SF				\$2,111,056		\$2,111,056
Library/Media Center	19	140 SF	\$395.63	/ SF				\$55,388		\$55,388
Mechanical/Electrical	20	2,471 SF		/ SF				\$760,706		\$760,706
Music	21	47 SF	\$401.90	/ SF				\$18,889		\$18,889
Restrooms	22	SF	\$464.61	/ SF				0\$		¢\$
Science	23	SF		/ SF				0\$		\$0
Special Education	24	773 SF	\$340.28	/ SF				\$263,034		\$263,034
Technical Education	25	SF		/ SF				0\$		\$0
Technology Education	26	435 SF	\$394.37	/ SF				\$171,553		\$171,553
Total Adequacy		18,596 SF	\$386.95	/ SF	\$0	\$0	\$0	\$7,195,663		\$7,195,663
Capital Maintenance										
Interior Upgrades										
Replace ACT in classrooms with water damage	27	8,500 SF		/ SF		\$81,049				\$81,049
Repair damaged CMU brick that is caving in from ducts	28		\$3,	/ Ea.	\$6,272					\$6,272
Replace aging carpet in the building	29		v,	/			\$199,121			\$199,121
Interior Upgrades Subtotal		76,617 SF	<b>\$3.74</b>	/ SF						\$286,442
Exterior Upgrades	00					007704				
Replace damaged concrete around the building that is cracking	ۍ ۲	2,000 SF		/ Y		\$34,1U8				\$34,1U8
Remove and replace the concrete at door that is not level	31	352 SF	\$1/.10 / SF	/ ¥		Ş6,019			_	\$6,019

# Lake Agassiz Elementary School & Head Start Grand Forks, ND

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Facility Assessment										
Description	Item Number	Takeoff Otv	Total Cost/Unit	nit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Clean the exterior brick of the building where the motor needs to be washed	32	5,000 SF	\$6.47	/ SF			\$32,350			\$32,350
Replace caulking around the base of the building as needed	33	1,000 LF	\$6.27	/ LF	\$6,272					\$6,272
Replaced damaged brick	34	20 SF	\$194.43	/ SF	\$3,889					\$3,889
Repair damage area around EFIS	35	1 Ea	\$6,272.02	/ Ea	\$6,272					\$6,272
General maintenance of the windows and doors as needed	36	25 Ea	\$501.76	/ Ea		\$12,544				\$12,544
Replace the roof when it nears the end of its useable lifetime	37	76,617 SF	\$39.30	/ SF		\$3,011,048				\$3,011,048
Replace west facing metal doors that are aged	38	4 Ea	\$2,896.74	/ Ea		\$11,587				\$11,587
Exterior Upgrades Subtotal		76,617 SF	<b>\$40.78</b>	/ SF						\$3,124,090
Electrical Upgrades										
Add egress lighting to doors to exterior as is required by Building Code	39	76,617 SF	\$1.23	/ SF	\$94,239					\$94,239
Upgrade of all interior lighting controls throughout to digital lighting management	40	76,617 SF	\$1.88	/ SF		\$144,163				\$144,163
Upgrade of all exterior lighting controls throughout to digital lighting management	41	76,617 SF	\$0.19	/ SF		\$14,416				\$14,416
Update the existing intercom system with a new IP system throughout entire school	42	76,617 SF	\$3.76	/ SF		\$288,080				\$288,080
Add additional door security all exterior doors with access control and monitoring	43	76,617 SF	\$1.21	/ SF	\$92,707					\$92,707
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Building Code	44	76,617 SF	\$0.69	/ SF	\$52,860					\$52,860
Electrical Upgrades Subtotal		76,617 SF	<b>\$8.96</b>	/ SF						\$686,465
Mechanical Upgrades										
Modify existing sprinklers to meet NFPA standards	45			/ SF	\$48,054					\$48,054
Maintenance staff reported a lack of hot water at the faculty lounge. Investigating the hot water and recirculating hot water piping to determine the issue.	46	76,617 SF	\$0.16	/ SF	\$12,259					\$12,259
The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail. The sink faucets in the classrooms and break rooms are manually onersted.	47	76,617 SF	\$1.25	/ SF		\$96,109				\$96,109
It should be considered to replace the gas fired water heater with a direct vent fully- condensing water heater to maximize efficiency as part of the long term planning.	48	76,617 SF	\$1.23	/ SF			\$94,080			\$94,080
Add ASSE 1070 thermostatic mixing valves to public lavatories for scald protection in accordance with the uniform blumbing code.	49	76,617 SF	\$0.31	/ SF		\$24,027				\$24,027
Replaced radiant ceiling panels that are original to the building as part of the long term planning	50	76,617 SF	\$0.82	/ SF			\$62,471			\$62,471
Improve indoor air quality throughout the building to meet ASHRAE 62.1 for controllable ventilation rates.	51	76,617 SF	\$5.02	/ SF	\$384,435					\$384,435
Replace ductwork that is at the end of its useful life and that has excess leakage	52	76,617 SF	\$7.53	/ SF	\$576,653					\$576,653
Replace all existing pneumatic controls with a direct digital control system	53	76,617 SF	\$5.02	/ SF		\$384,617				\$384,617
Mechanical Upgrades Subtotal		76,617 SF	<b>\$21.96</b>	/ SF						\$1,682,705
Total Capital Maintenance		76,617 SF	\$75.44	/ SF	\$1,283,911	\$4,107,769	\$388,022	\$0		\$5,779,701
Total Construction Cost		98,743 SF	<b>\$143.59</b>		\$1,544,802	\$4,107,769	\$388,022	\$8,137,962		\$14,178,554
*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	ditions, CM	fees, permits,	insurances, bon	ls, taxes						

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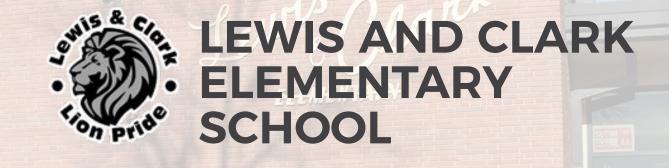
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Grand Forks, ND 11/2/2022

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11/2/2022								• •::>	CONSTRUCTION ENGINEERS	ERS
Facility Assessment										
	ltem					5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with	
Description	Number	Takeoff Qty	Total Cost/Unit	it	Critical	Maint	Maint	Adequacy	other needs	Total Cost
Contingencies & Soft Costs										
Design Contingency	54	5.0%			\$77,240.11	\$205,388.43	\$19,401.09	\$406,898.08		\$708,928
Construction Contingency	55	5.0%			\$77,240.11	\$205,388.43	\$19,401.09	\$406,898.08		\$708,928
Escalation	56	0.0%			\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	57	7.0%			\$108,136.15	\$287,543.81	\$27,161.52	\$569,657.31		\$992,499
FF & E	58	2.0%			\$30,896.04	\$82,155.37	\$7,760.43	\$162,759.23		\$283,571
Owner Contingency	59	1.5%			\$23,172.03	\$61,616.53	\$5,820.33	\$122,069.42		\$212,678
Total Contingencies & Soft Costs					\$316,684	\$842,093	\$79,544	\$1,668,282		\$2,906,604
Total Facility Assessment Cost Estimate		98,743 SF	\$173.03 /	/ SF	\$1,861,487	\$4,949,861	\$467,566	\$9,806,244		\$17,085,158
Total Critical & Educational Adequacy		98,743 SF	\$118.16 / SF	SF						\$11,667,730

A. EXISTING BUILDING INVENTORY	274
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C. MECHANICAL/ELECTRICAL ASSESSMENT	277
D. EXISTING DEFICIENCIES	281
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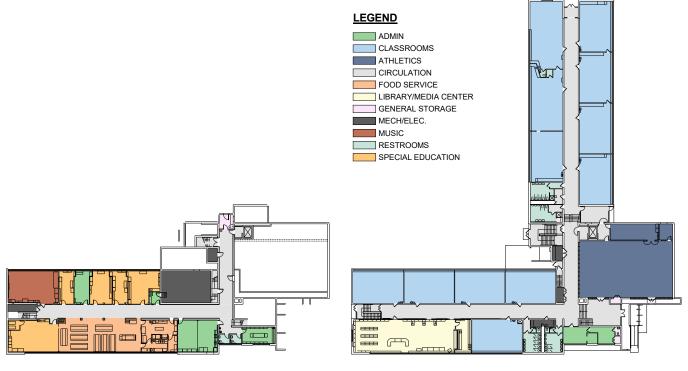


# **A. EXISTING BUILDING INVENTORY**

Lewis and Clark Elementary School is located at 1100 13th Avenue S, in Grand Forks. The school was built in 1952 and the addition of a north classroom wing was completed 1955. The school underwent remodeling in 1998 and a reroof in 2010.

The school is accessible from the south by 13th Avenue S, to the west by S 12th Street, and to the north by 12th Ave Street. There is a parking lot located on the west side of the school, accessible from S 12th Street.

### FLOOR PLAN



First Floor

Second Floor

MAIN LEVEL

### **B. ARCHITECTURAL FINISHES**

### SUMMARY

Lewis and Clark Elementary School opened in 1953. The school received an addition in 1955, remodel in 1998, and was reroofed in 2010. There is no air conditioning in the school and temperature regulation is an issue. Rooms above the boilers can reach up to 95° in the winter, while the toilet in the principal's office has been removed due to the reoccurring freezing of pipes. The boys' restroom leaks into the conference room below, and there are roof leaks in the office. Lack of space within the school is another concern. There are no adequate spaces for collaboration and group work, and specialists are forced to teach from a portable cart because there are not enough classrooms. Due to the lack of space, staff are working in stair and elevator landings (001). The limited number of outlets for devices is also a problem. Casework and finishes throughout the school are dated and showing signs of wear (002, 003). Not all head start classrooms have restrooms.

### SITE

There are some site concerns with parking and accessibility. Accessible parking spots are located next to a non-accessible building entrance (004). Not all entrances are accessible, and several exterior ramps and stairs lack required railings. Water leaks into the lower-level crawl space from the exterior (005). The rim board should be painted and repaired. Boards on the platform outside of Door 7 are sagging and the platform should have a railing (006, 007).

### MASONRY

The exterior brick is in decent condition. Tuckpointing is wearing (008) and there are signs of moisture at the bottom of exterior brick walls (009).

### ADDITIONAL EXTERIOR MATERIALS

The exterior of the building consists of masonry and exterior insulation and finish systems (EIFS). Caulking should be redone as it is worn and deteriorating (010). There is damage to the bottom edge of the EIFS around the perimeter (011).

### ROOF

The roof leaks into the front office. There are no other notable roof issues.

### **OPENINGS**

There is damage to the header above Door 5 at the exterior and paint is peeling. Many interior doors and windows in the school do not have fire glass.

### CEILINGS

There are multiple ceiling finishes in the school, including acoustical ceiling tile (ACT), painted gypsum board, and soffit panels. The ceilings appear to be in overall good condition with typical signs of wear.

ELEWIS AND CLARK ELEMENTARY SCHOOL FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### ARCHITECTURAL FINISHES CONTINUED

### WALLS

Interior walls are mainly painted masonry, painted gypsum board, tile, covered with vinyl wall covering (VWC) or have fiberglass reinforced plastic (FRP) panels. Colors appear to be outdated and uncoordinated with other finishes. Paint generally appears to be in good condition apart from minor blemishes. There is wall damage in the restroom by Room 12 and VWC damage throughout the school.

### FLOORING

Carpet has been replaced in some spaces but overall, the flooring throughout the school is dated and showing signs of wear (012, 013). The flooring is cracked by Door 1 and there are cracks in the flooring of several staircases (014, 015). There is concern with the floor structure in the library due to the load the books place upon it (016). This area was originally built to be classrooms and the current load should be examined to confirm that the structure is adequate to hold it.

### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school. The lack of cell phone service in the office and basement and bad Wi-Fi connection in the basement are other security concerns.

ELEWIS AND CLARK ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



# C. MECHANICAL/ELECTRICAL ASSESSMENT

### FIRE PROTECTION

• Fire sprinkler system is currently installed throughout the entire building. Depending on the level of work performed in the building, sprinkler systems may need to be modified to accommodate any new work.

### PLUMBING

- Most of the plumbing piping throughout the 1955 addition is original as well as all of the underground piping. Maintenance staff reported a leak from the restroom group next to the admin area as well as a sewer drainage problem outside the building. During any new remodel, the pipe hangers and associated piping are recommended to be replaced. Recommend investigating the exterior drainage piping and potentially adding a sewage ejector or lining the pipe to help mitigate or prevent the sewer back-ups.
- The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures with the water closets being a combination of tank type and flush valve floor mounted toilets. The lavatory faucets are mostly manually operated. The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail all of the other Grand Forks Public Schools. The sink faucets in the classrooms and break rooms are manually operated.
- Domestic hot water is produced by one (1) 250 MBH gas fired water heater with an integral storage tanks in the boiler room for the entire building. The domestic hot water heating plant was recently replaced in 2022.
- Kitchen plumbing fixtures and piping were replaced in 1997 and in appear to be good condition. There is no grease interceptor currently installed on the waste line for the three-compartment sink and other grease producing fixtures. It is recommended and a city requirement that a grease interceptor be installed to protect the waste piping system.
- ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.

### HEATING

- Heating for the entire building comes from two (2) 2,700 MBH steam boilers. The boiler plant is being designed to be replaced as part of a 2022/2023 ESCO project and will have new hot water boilers.
- Existing steam and condensate piping throughout the building is concealed in the soffits, tunnels, walls, and above the ceilings in public areas. The majority of the existing steam and condensate piping where concealed is original to the building and needs to be replaced in order to convert to a hot water system.
- The existing multi-zone air handling unit in the lower level has a steam heating coil and serves the North side of the West addition, kitchen, conference room, paper supply room and corridor in the lower level. The gymnasium has two existing air handlers located on the mezzanine level that have steam coils There are three ceiling suspended classroom unit ventilators in the lower level as well as throughout the classrooms on the main floor that will need to be replaced to the ESCO steam to hot water conversion
- Perimeter hot water and electric finned tube radiation is installed in some exterior offices, restrooms, and corridors for supplemental heat. Hot water and electric cabinet unit heaters and suspended unit heaters provide heat for vestibules, mechanical rooms, and other similar spaces. These are all original steam units to the building and need to be replaced for the conversion to a hot water system.

# LEWIS AND CLARK ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### **VENTILATION AND EXHAUST**

- The ventilation and exhaust systems in the school include various air handling units, unit ventilators, and various exhaust fans. The indoor air handling units and exhaust fans throughout the building is original and past their useful life. Indoor Air Quality should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates. Existing indoor air handling units and unit ventilators have inline starters for fan control and pneumatic controls. We recommend the indoor air handling units be replaced with new variable air volume units with VFDs for fan speed modulation, chilled water or DX cooling coils, heating water coils, and DDC controls. Indoor air handling unit for the remodeled gymnasium is currently suspended in the mezzanine. This space is limited and, due to serviceability and clearance requirements, may require new unit to be installed on the roof. Unit ventilators are designed to be replaced with induction displacement units with chilled water coils, hot water coils, and perimeter finned tube radiation to condition the classrooms and cafeteria as part of a 2022/2023 project. The induction displacement units will be paired with a rooftop dedicated outdoor air unit with VFDs for fan speed modulation, energy recovery wheel, chilled water coils, hot water coils, hot water coils, and DDC controls for the ventilation air.
- Ductwork throughout the older portions of the building is at the end of its useful life and will have excessive leakage. Any areas of the building where cooling is proposed will need to have all supply ductwork insulated to meet energy code and limit condensation formation.

### **AIR CONDITIONING**

- Split system air conditioning system existing in the administration area. These units are similar to a "Sanyo" with the indoor portion mounted high on a wall and the condensing units are located on the roof. The systems will be in place to supplement the new 2022/2023 HVAC replacement project where chilled beams will be installed within the space to meet ASHRAE 62.1 for ventilation rates, and ASHRAE Standard 55 for cooling and dehumidification.
- The new 2022/2023 project will installed an air cooled chiller with necessary piping components, chilled beams, induction displacement beams and replacement AHU's with chilled water coils.

### AUTOMATIC TEMPERATURE CONTROLS

• All controls throughout the building are pneumatic controls and original to the building. These pneumatic controls offer limited control capability and no ability for monitoring and alarm. There are not proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. All of the controls within the school are planned to be replaced with Direct Digital Controls (DDC) systems as part of a 2022/2023 project. The DDC systems will be integrated into the existing Grand Forks Public School's Building Automation System for central monitoring and control.

# ELEWIS AND CLARK ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 208/120V padmount transformer located on west side of building.
- Power is routed underground from the transformer to a wall-mounted CT cabinet to the east. Power is then routed through the exterior wall and into the back of the service entrance switchboard located within electrical closet.
- Peak loads on this transformer in the past 12 months was 182kW (505A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is adequate.

### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

### POWER DISTRIBUTION

- The service entrance switchboard is a 208/120V 1200A Cutler-Hammer Pow-R-Line C Switchboard. Power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- No upgrades are suggested for the service entrance, at this time.
- Branch panels throughout building were noted to be in fair condition. While some appear to be nearing the end of their useful life, they are still in work order. These panels are recommended to be replaced with any renovation project.

### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the gym have been updated to LED lighting.
- School is currently scheduled to undergo a lighting upgrade project that will replace all non-LED lighting within school with energy-efficient LED lighting. This should cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas capable of dimming operation.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via timeclock and photocell.

All exterior lighting control is suggested to be tied into digital lighting management, as outlined in interior lighting portion above.

# LEWIS AND CLARK ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building.
- It was stated by staff that wifi signal in the basement area was far less than satisfactory. They have tried to fix this by moving various wireless access points, but nothing seems to improve signals.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Recessed speakers were noted to be located all throughout circulation areas, classrooms, and all "normally-occupied" areas. Several interior intercom speakers are not currently functional and some full-building announcements can not reach certain areas. There are currently intercom speakers at the exterior, but it was noted by staff that they did not work.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system has been upgraded to American Time system with clocks located all throughout school. All communication between clocks and central system is done via wireless communication. Clocks consist of primarily analog devices.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of digital displays, short-throw projectors, and classroom sound reinforcement. It was stated by staff that several classroom sound reinforcement systems did not currently work.

### SAFETY & SECURITY SYSTEMS

- A select few exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras. A buzz-in system consisting of a 2-way speaker and camera is located at the school's front and rear entrances.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4007ES. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices and locations appeared to be adequate. Devices appeared to be very old.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

### **D. EXISTING DEFICIENCIES**

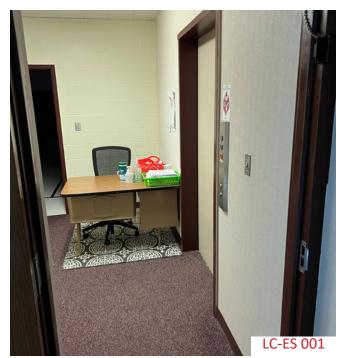
The analysis of the existing Lewis and Clark Elementary School has been broken down into three categories: code compliance/Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

### 1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Handrails on stairs do not provide the code required extensions at the top and bottom of the stairs.
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains (017).
- Public restrooms are not accessible (018).
- Restrooms in classrooms are not accessible (019).
- Faculty restrooms are not accessible (020, 021).
- Railing on the stairs by Door 2 is lacking an accompanying guard rail and does not meet the required code (022).
- Window in the gym does not have the required safety glass (023).
- Many doors and windows throughout the school do not have fire glass, as required by code (024, 025).
- Ramp outside of Door 1 is missing a railing as required by code (026).
- Ramp outside of Door 5 does not have a railing on both sides as required by code. The railings should extend the full length of the ramp (027).
- Various doors throughout the building have door hardware that is not accessible (028).
- Sinks in classrooms are not accessible (029).
- Several doors fail to meet required maneuvering clearances for accessibility (030).
- Stair landing is not large enough, causing doors to project farther into the landing than code permits (031).
- Door 5 is not protected with an enclosed vestibule, as required by energy code (032).

# **EXAMPLE 1** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Due to the lack of space staff are working in stair and elevator landings.



Accessible parking spots are located next to a non-accessible building entrance.



Casework and finishes throughout the school are dated and showing signs of wear.

### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Casework and finishes throughout the school are dated and showing signs of wear.

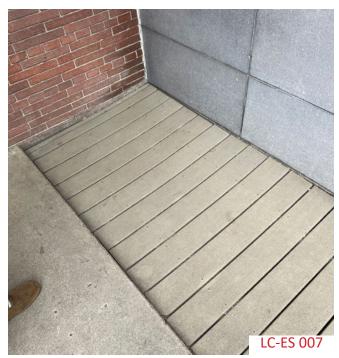


Water leaks into the lower-level crawl space from the exterior.



Boards on the platform outside of door 7 are sagging and the platform should have a railing.

# **EXAMPLE 1** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Boards on the platform outside of door 7 are sagging and the platform should have a railing.



Tuckpointing is wearing.



Tuckpointing is wearing and there are signs of moisture at the bottom of exterior brick walls

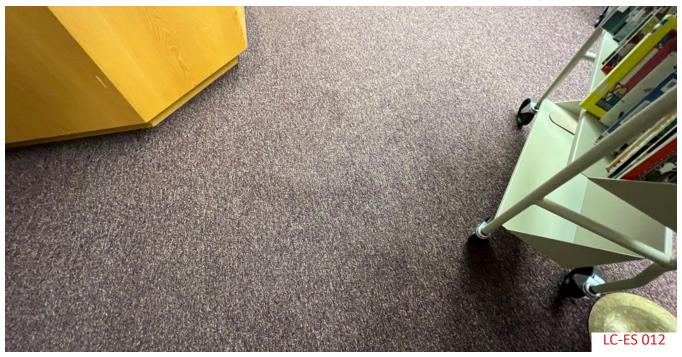
# **EXAMPLE 1** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Caulking should be redone as it is worn and deteriorating.



There is damage to the bottom edge of the EIFS around the perimeter.



Carpet has been replaced in some spaces but overall, the flooring throughout the school is dated and showing signs of wear.

### **EEWIS AND CLARK ELEMENTARY SCHOOL** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Carpet has been replaced in some spaces but overall, the flooring throughout the school is dated and showing signs of wear.



The flooring is cracked by door 1 and there are cracks in the flooring of several staircases.



The flooring is cracked by door 1 and there are cracks in the flooring of several staircases.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains

# **EXAMPLE 1** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



There is concern with the floor structure in the library due to the load the books place upon it.



Public restrooms are not accessible



Restrooms in classrooms are not accessible

### **EEWIS AND CLARK ELEMENTARY SCHOOL** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Faculty restrooms are not accessible



Faculty restrooms are not accessible



Railing on the stairs by Door 2 is lacking an accompanying guard rail and does not meet the required code



Many doors and windows throughout the school do not have fire glass, as required by code

## EWIS AND CLARK ELEMENTARY SCHOOL FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Window in the gym does not have the required safety glass



Many doors and windows throughout the school do not have fire glass, as required by code



Ramp outside of Door 1 is missing a railing as required by code

### **EEWIS AND CLARK ELEMENTARY SCHOOL** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Ramp outside of Door 5 does not have a railing on both sides as required by code. The railings should extend the full length of the ramp



Various doors throughout the building have door hardware that is not accessible



Sinks in classrooms are not accessible

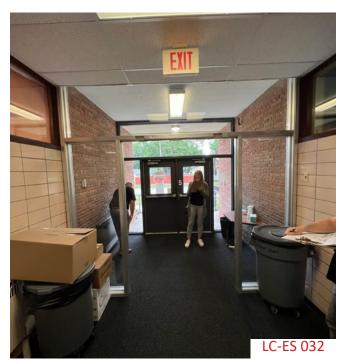


Stair landing is not large enough, causing doors to project farther into the landing than code permits

## EWIS AND CLARK ELEMENTARY SCHOOL FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Stair landing is not large enough, causing doors to project farther into the landing than code permits.



Door 5 should have a vestibule, per energy code requirements.

# **EXAMPLE 1** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### EXISTING DEFICIENCIES CONTINUED

### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	1,639 SF	1,340 SF	299
Athletics	3,169 SF	3,400 SF	-231
Circulation	7,673 SF	9,610 SF	-1,937
Classrooms	10,384 SF	11,050 SF	-666
Food Service/Caferia	1,951 SF	3,290 SF	-1,339
Library/Media Center	1,936 SF	946 SF	990
Mechanical/Electrical	1,179 SF	2,402 SF	-1,223
Music	814 SF	1,000 SF	-186
Restrooms	1,002 SF	800 SF	202
Special Education	2,100 SF	3,050 SF	-950

Total Missing Square Footage -5,041

# LEWIS AND CLARK ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### EXISTING DEFICIENCIES CONTINUED

### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

### AIR QUALITY/CONTROL ISSUES

• Rooms above the boiler room can get up to 95 degrees in the winter.

### SECURITY/SAFETY CONCERNS

- An improved, secure entrance is needed.
- There is a lot of activity at night near the school and more lighting is needed.
- Announcement system needs to be updated.
- There is not any cell service in the basement of the school.
- There is not a flashing crosswalk sign near the school.

### ADA ACCESSIBILITY

• Stair railings are not adequate.

### LACKING SUPPORT SPACE

- There is not enough collaboration space.
- There is not a private space for the school nurse.

### LEARNING/SUPPORT SPACES IN THE BASEMENT

- The cafeteria is in the basement and can get very hot and loud.
- Special education space in the basement.

### CURRENT SPACE DOES NOT SUPPORT 21ST CENTURY LEARNING

• Electricity is not adequate and classrooms do not have enough outlets.

### PARKING AND STUDENT DROP-OFF/PICK-UP IS NOT ADEQUATE.

### **TOP PRIORITIES**

- 1. Spaces for Collaboration
- 2. Address ADA Accessibility Concerns
- 3. Electricity Upgrades

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Lewis and Clark Elementary School Grand Forks, ND



11/2/2022								NON LON	CONSTRUCTION FNGINFERS	Z Z
Facility Assessment Estimate										
Description	ltem Number	Takeoff Qtv	Total Cost/Unit		5 Critical	5 yrs Deferred	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Suilding Code Compliance										
Add handrail extensions at the top and bottom of the stairs	7	60 LF	\$153.64 /	LF	\$9,218					\$9,218
Add accessible lower water fountains throughout the building	2	6 Ea.	\$21,944.54 /	Ea. S	\$131,667					\$131,667
Remodel public restrooms to make them accessible	3	4 Ea.	\$74,892.86 /	Ea. S	\$299,571				×	\$299,571
Remodel restrooms in classrooms to make them accessible	4	2 Ea.	\$37,497.11 /	Ea.	\$74,994				×	\$74,994
Remodel faculty restrooms to make them accessible	5	2 Ea.	\$37,497.11 /	Ea.	\$74,994				×	\$74,994
Remove and replace handrail (60 lf) and guardrails (15 lf) with on the stairs by door 2 that do not meet the required code	9	75 LF	\$199.43 /	Ŀ	\$14,957					\$14,957
New guard rail will include a separate handrail required by code.	7		/							
Replace glass in window in the gym with tempered glass (frame to remain)	∞	16 SF	\$74.33 /	SF	\$1,189					\$1,189
Replace glass throughout with fire glass as required by code in the many doors and windows throughout the school	6	600 SF	\$74.33 /	SF	\$44,598					\$44,598
Add railings to ramp outside of door 1	10	80 LF	\$414.64 /	LF	\$33,171					\$33,171
Add railings on both sides to ramp outside that extends the full length of the ramp	11	100 LF	\$414.64 /	LF	\$41,464					\$41,464
Upgrade door hardware with ADA hardware	12	50 Ea.	\$983.61 /	Ea.	\$49,180					\$49,180
Replace casework (20lf of base, top, and upper) per classroom and sinks in classrooms are	13	10 Ea.	\$26,939.88 /		\$269,399				×	\$269,399
Change swing on doors where the door approaches fail to meet required push/pull	14	10 Ea.	\$3,561.29 /	Ea.	\$35,613					\$35,613
clearances Remove and install new stairs since the doors are too close to the stair nosing	15	1 Ea.	\$148,642.96	/ Ea.	\$148,643					\$148,643
Add interior storefront to door 5 to create vestibule per energy code requirements	16	1 Ea.	\$24,348.35 /	Ea.	\$24,348					\$24,348
Total Code Compliance		35,658 SF	\$35.14 /	SF \$1,2	\$1,253,009	\$0	\$0	\$0		\$1,253,009
Security										
Administration Office Entry (Addition and Remodel)	17	2,835 SF	\$295.34 /	/ SF				\$837,289		\$837,289
Total Security		2,835 SF	\$295.34 <i> </i>	/ SF	\$0	\$0	\$0	\$837,289		\$837,289
Addition/Remodel (Educational Adequacy)										
Administration	18	SF	\$339.20 /	SF				\$0		\$O
Art	19	SF		/ SF				\$0		\$0
Athletics	20	231 SF	\$360.52 /	SF				\$83,280		\$83,280
Auditorium	21	SF	\$485.35 /	SF				\$0		\$O
Business Education	22	SF	\$376.82 /	SF				\$0		\$0
Circulation	23	1,937 SF	\$376.83 /	SF				\$729,925		\$729,925
Classrooms	24	666 SF	\$376.82	SF				\$250,961		\$250,961
Common Spaces	25	SF	\$393.12 /	SF				\$0		\$0
FACS	26	SF	\$393.12 /	SF				\$0		\$0
Food Service/Cafeteria	27	1,339 SF	\$458.33 /	SF				\$613,700		\$613,700
Library/Media Center	28	SF	\$395.63 /	SF				\$0		\$0
Mechanical/Electrical	29	1,223 SF	\$307.85 /	SF				\$376,505		\$376,505
Music	30	186 SF	`	/ SF				\$74,753		\$74,753
Restrooms	31	SF	`	/ SF				\$0		\$0
Science	32	SF	\$431.99 /	/ SF	┥			\$0		\$0

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# Lewis and Clark Elementary School Grand Forks, ND 11/2/2022



Facility Assessment Estimate										2
Description	ltem Number	Takeoff Qty	Total Cost/Unit	:t/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Special Education	33	950 SF	: \$340.28	28 / SF				\$323,262		\$323,262
Technical Education	34	SF	: \$381.83	83 / SF				\$0		\$O
Technology Education	35	SF	: \$394.37	37 / SF				\$0		\$O
Total Adequacy		6,532 SF	F \$375.44	44 / SF	\$0	0\$	\$0	\$2,452,387		\$2,452,387
Capital Maintenance										
Interior Upgrades										
Investigate and fix the water leak in the boy's restroom that leaks into the conference	36	1 Ea.	a. \$46,638.24	24 / Ea.	\$46,638					\$46,638
room below Add convenience power outlets throughout the building	37	35,658 SF		\$9.65 / SF		\$344,100				\$344,100
Add a restroom to the head start classroom	38	1 Ea.	\$37,4	· / ·		\$37,497				\$37,497
Remove and replace casework that are dated and showing signs of wear (10 classrooms 20 If base, too, and upper per class room)	39	300 LF	\$389.57	57 / LF			\$116,872		×	\$116,872
Paint interior walls with a matching color to other finishes in areas where colors appear to be outdated and mis coordinated with other finishes.	40	35,658 SF		\$4.35 / SF			\$155,112			\$155,112
Repair wall damage in the restroom by room 12 and VWC damage throughout the school.	41	35,658 SF		\$0.35 / SF		\$12,480				\$12,480
Replace dated carpet	42	15,000 SF	: \$13.15	15 / SF			\$197,309			\$197,309
Repair the flooring that is cracked by door 1 and cracks in the flooring of several staircases	43	1 Ea.	а. \$2,675.32	32 / Ea.		\$2,675				\$2,675
Reinforce the structure of the floor in the library due to accommodate the load of the eracks of hooks	44	1,680 SF	\$262.50	50 / SF	\$441,000					\$441,000
Interior Upgrades Subtotal		35,658 SF	: \$37.96	96 / SF						\$1,353,684
Exterior Upgrades		_								
Add ramp with railing to the entrance of the building near the accessible parking spots	45	300 SF	: \$34.35	35 / SF	\$10,305					\$10,305
Install a deeper window well and free draining fill that is established below the opening to prevent water leaking into the lower-level crawl space from the exterior	46	1 Ea.	a. \$34,145.74	74 / Ea.	\$34,146					\$34,146
Paint and repair the damaged rim board	47	1 Ea.	a. \$7,435.25	25 / Ea.	\$7,435					\$7,435
Rebuild deck on the platform outside of door 7 that are sagging and add a railing	48	1 Ea.	a. \$24,361.84	84 / Ea.		\$24,362				\$24,362
Masonry tuckpointing at exterior of the building where the brick is wearing and where there are since of motisture at the horitom	49	10,000 SF	: \$18.82	82 / SF		\$188,222				\$188,222
Repair damage to the bottom edge of the EIFS around the perimeter	50	1 Ea.	a. \$3,462.24	24 / Ea.	\$3,462					\$3,462
Repair caulking that is worn and deteriorating	51	1 Ea.	a. \$8,435.65	65 / Ea.	\$8,436					\$8,436
Investigate and fix the roof leak in the front office.	52	1 Ea.	a. \$53,495.65	65 / Ea.	\$53 <b>,</b> 496					\$53,496
Add 10 additional parking stalls to the parking lot since it is not large enough	53	2,500 SF	: \$14.84	84 / SF				\$37,100		\$37,100
Replace the roof when it nears the end of its useable lifetime	54	24,826 SF		60 / SF			\$809,328			\$809,328
Repair damage to the header above door 5 at the exterior and patch peeling paint	55		\$2	/	\$2,437					\$2,437
Exterior Upgrades Subtotal		35,658 SF	: \$33.06	06 / SF						\$1,178,727

# COST ANALYSIS CONTINUED

# Lewis and Clark Elementary School

Grand Forks, ND 11/2/2022

# CONSTRUCTION ENGINEERS

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Facility Assessment Estimate									
	ltem				5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	Critical	Maint	Maint	Adequacy	needs	Total Cost
Electrical Upgrades									
Replace branch panels throughout building that are noted to be very old that are nearing the end of their useful life	56	35,658 SF	\$3.45 / SF		\$122,979				\$122,979
Add egress lighting to doors to exterior as is required by Building Code	57	35,658 SF	\$1.75 / SF		\$62,402				\$62,402
Upgrade of all interior lighting controls throughout to digital lighting management	58	35,658 SF	\$2.51 / SF		\$89,502				\$89,502
Upgrade of all exterior lighting controls throughout to digital lighting management	59	35,658 SF	\$0.25 / SF		\$8,915				\$8,915
Improve cell service in the office and basement and bad Wi-Fi connection	60	35,658 SF	\$0.85 / SF		\$30,309				\$30,309
Update the existing intercom system with a new IP system throughout entire school.	61	35,658 SF	\$3.76 / SF		\$134,074				\$134,074
Add additional door security all exterior doors with access control and monitoring	62	35,658 SF	\$1.21 / SF	: \$43,146	10				\$43,146
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Building Code	63	35,658 SF	\$0.69 / SF	; \$24,604	4				\$24,604
Electrical Upgrades Subtotal		35,658 SF	\$14.47 / SF						\$515,930
Mechanical Upgrades									
Most of the plumbing piping throughout the 1955 addition is original as well as all of the underground piping. Maintenance staff reported a leak from the restroom group next to the admin area as well as a sewer drainage problem outside the building. During any new remodel, the pipe hangers and associated piping are recommended to be replaced. Recommend investigating the exterior drainage piping and potentially adding a sewage ejector or lining the pipe to help mitigate or prevent the sewer back-ups.	64	35,658 SF	\$12.36 / SF		\$440,733				\$440,733
The restroom plumbing fixtures throughout the building are currently white vitreous China fixtures with the water closets being a combination of tank type and flush valve floor mounted toilets. The lavatory faucets are mostly manually operated. The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail all of the other Grand Forks Public Schools. The sink faucets in the classrooms and break rooms are manually operated.	65	35,658 SF	\$1.35 / SF		\$48,138				\$48,138
There is no grease interceptor currently installed on the waste line for the three- compartment sink and other grease producing fixtures. It is recommended and a city requirement that a grease interceptor be installed to protect the waste piping system	66	35,658 SF	\$4.35 / SF	: \$155,112	2				\$155,112
ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.	67	35,658 SF	\$0.32 / SF	: \$11,411	1				\$11,411
Mechanical Upgrades Subtotal		35,658 SF	\$18.38 / SF						\$655,394
Total Capital Maintenance		35,658 SF	\$103.87 / SF	F \$841,628	3 \$1,546,387	\$1,278,621	\$37,100		\$3,703,735
Total Construction Cost		45,025 SF	\$183.15 / SF	F \$2,094,636	5 \$1,546,387	\$1,278,621	\$3,326,776		\$8,246,420
*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	iditions, CN	1 fees, permits, in	ısurances, bonds, ta	xes					

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Lewis and Clark Elementary School									
Grand Forks, ND									
11/2/2022							ENCON	CONSTRUCTION ENGINEERS	ION RS
Facility Assessment Estimate									
	ltem				5 yrs Deferred	5 yrs Deferred 10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	Critical	Maint	Maint	Adequacy	needs	Total Cost
Contingencies & Soft Costs									
Design Contingency	68	5.0%		\$104,731.82	\$77,319.33	\$63,931.05	\$166,338.79		\$412,321
Construction Contingency	69	5.0%		\$104,731.82	\$77,319.33	\$63,931.05	\$166,338.79		\$412,321
Escalation	70	0.0%		\$0.00	00 <sup>.</sup> 0\$	\$0.00	\$0.00		0\$
A & E Fees	71	7.0%		\$146,624.54	\$108,247.06	\$89,503.47	\$232,874.31		\$577,249
FF & E	72	2.0%		\$41,892.73	\$30,927.73	\$25,572.42	\$66,535.52		\$164,928
Owner Contingency	73	1.5%		\$31,419.55	\$23,195.80	\$19,179.32	\$49,901.64		\$123,696
Total Contingencies & Soft Costs				\$429,400	\$317,009	\$262,117	\$681,989		\$1,690,516
Total Facility, Assessment Cash Facility		13 1CU 1V		- ¢7 E74 027	906 690 19	61 EAN 720	54 000 76F		

\$9,936,93( <mark>\$6,532,80</mark>;

\$4,008,765

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\$220.70 / SF

45,025 SF 45,025 SF

Total Facility Assessment Cost Estimate Total Critical & Educational Adequacy

S F

**\$145.09** 

A. EXISTING BUILDING INVENTOR B. ARCHITECTURAL FINISHES C. MECHANICAL/ELECTRICAL ASSESSMEN D. EXISTING DEFICIENCIES E. COST ANALYSIS



PHOENIX ELEMENTARY SCHOOL
 FACILITY ASSESSMENT
 EXISTING BUILDING INVENTORY
 ARCHITECTURAL FINISHES

# **A. EXISTING BUILDING INVENTORY**

Phoenix Elementary School is located at 351 4th Avenue S in Grand Forks and was built to replace Belmont and Lincoln Elementary School after the building was destroyed in the flood of 1997. The school opened in Fall 1998. Phoenix Elementary School is in a neighborhood south of downtown Grand Forks.

Phoenix E.S. is accessible by Chestnut Street to the west, 4th Avenue S to the north, and Belmont Road to the east. There is a parking lot shared with United Lutheran Church north of the school for staff and a parent drop off area in an alleyway on the south side of the school.

### **FLOOR PLANS**

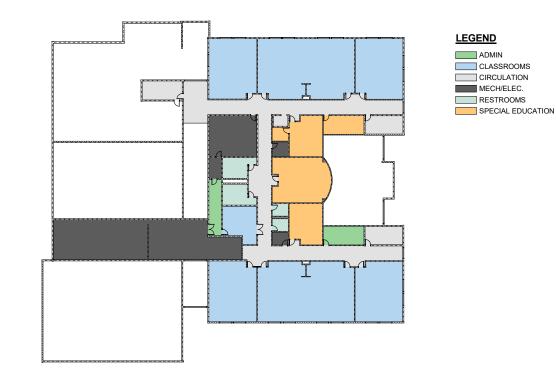




### **FIRST FLOOR**

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

EXISTING BUILDING INVENTORY CONTINUED



### SECOND FLOOR

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **B. ARCHITECTURAL FINISHES**

### SUMMARY

Phoenix Elementary School opened in 1998. The school lacks adequate storage space as many of the restrooms, electrical closets, and mechanical rooms double as storage (001). Many individual learning spaces have had to move to spaces that are not optimal for learning. For example, there is a one-on-one learning space inside of an electrical closet (002) and a specialized learning space within the mechanical and janitorial area of the building (003). Overall, the building is in good condition minus a few areas of typical wear and tear.

### SITE

Most of the concrete work and asphalt around the school are in good condition. Logistically, the site is constrained and congested. The building is surrounded by narrow streets and alleyways that are single direction (one-way). The alley to the south is very narrow and shared with neighboring residence. This alleyway is utilized for staff parking and parent drop off/ pick up. The adjoining west boundary street (Chestnut Street) is a northbound one-way intersecting with the south alleyway, which is misaligned with a continuing road (5th Avenue South). This causes drivers to circumvent the one-way and cross over a crosswalk to connect to 5th Avenue South, creating concern for the safety of the children who utilize the crosswalk (004). The current bus drop off/pick up situation on the west boundary (Chestnut Street) is not optimal, as the roadway is constricted for two-lane travel. The playground directly outside the building is outdated, broken, and inaccessible and should be replaced (005, 006). The play manufacturer is no longer in business, so parts are not available. A new playground has been constructed to the west of the school at the SE corner of Fourth Avenue South and Walnut Street.

### MASONRY

The exterior of the school is traditional brick, limestone brick, and limestone accents. The limestone needs cleaning in certain areas, but there are no structural concerns with it. A roof drain/overflow scupper on the north side of the building needs a concrete splash block beneath it and for the drain mesh to be repaired (007). Outside of the library where new asphalt was laid for drainage, the weepholes in the brick are potentially covered which can prevent moisture from leaving the brick (008). The expansions within the brick have been well maintained, as the caulk was redone less than three years ago (009).

### ADDITIONAL EXTERIOR MATERIALS

The exterior of Phoenix Elementary School is primarily masonry with several larger areas of glazing, mainly near entrances. There are no additional exterior materials.

### ROOF

The roof is overall in good shape, but it is nearing the time that it needs to get replaced. Grounds staff recommended adding PVC or vinyl covering to increase the duration of the roof's lifespan.

### **OPENINGS**

The door openings within the school are in good condition. The caulking where the windows meet the walls is in good condition, but the sealant/gasketing within the windows is in poor shape and needs to be redone. Due to the age of the windows, the sealant/gasket has shrunk and no longer runs the entire width of the glass panels (010, 011).

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### ARCHITECTURAL FINISHES CONTINUED

### CEILINGS

The ceilings within the school are mostly made of acoustical ceiling tile (ACT) and no visible issues were seen.

### WALLS

The interior walls are either painted masonry, painted gypsum board, have vinyl wall coverings, or have tiling. There are several areas where the vinyl wall covering is releasing from the gypsum wall board substrate (012). Other areas have signs of wear and tear and could use wall and corner guards to protect from future damage (013). Large portions of exterior walls are covered with vinyl covering on the interior. It is recommended the vinyl wall covering be removed from the interior surface of exterior walls, as this could potentially create a double vapor barrier and trap moisture within the walls (014). Current code does not permit the use of vinyl wall covering on outside walls for this reason. There is cracking in a concrete masonry unit (CMU) wall adjacent to a steel column that can be seen from the mechanical room and the hallway (015).

### FLOORING

All the classrooms have recently replaced carpet that is in good condition. The only area that does not have new carpet is the janitorial closet (016). There is an area in Room B235 where the precast concrete underneath the carpet has inconsistencies in its seams. Because of this, there is an uneven and sloped portion of the floor in the classroom (017). This could be followed in what would be perceived as the precast joint line and does not present itself as a structural deficiency.

### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



# C. MECHANICAL/ELECTRICAL ASSESSMENT

### FIRE PROTECTION

Fire sprinkler systems are installed throughout the building. Depending on the level of work performed in the building, sprinkler systems may need to be modified.

### PLUMBING

Plumbing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in exposed spaces appear to be in good condition. School maintenance staff reported that there have not been issues with the domestic water piping leaking or the piping deteriorating to the point of causing blockage. Some roof drain piping was reported as having leaks. This should be investigated, and existing piping replaced where deteriorated.

The restroom plumbing fixtures throughout the building are white vitreous china fixtures. Water closets and urinals have manual operated flush valves and lavatories have manual faucets. The sinks in the classrooms and break rooms are stainless steel with manually operated faucets. Classroom sinks also have bubblers for drinking water.

Domestic hot water is produced by two (2) 250 MBH gas fired water heaters with integral storage tanks. Water heaters were built in 2019 and are in good condition.

Thermostatic mixing valves meeting ASSE 1070 requirements should be added to public lavatories for scald protection.

### HEATING

Heating for the building is provided by two (2) condensing Thermal Solutions 3000 MBH boilers. Boilers and building circulating pumps were installed in 2020. The building circulating pumps are constant volume. Boilers are provided with isolation control valve to eliminate flow through the boiler when it is not firing. The boiler heating system utilizes natural gas for the primary fuel source and propane is provided for backup. The propane comes from a propane tank buried on site.

Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in good condition. Staff has not reported issues of leaking with existing piping.

Variable air volume (VAV) boxes with hot water reheat coils are used throughout the building for zoning. Hot water cabinet unit heaters and suspended unit heaters provide heat for vestibules, stairwells, mechanical rooms, and other similar spaces. There is perimeter finned tube radiation installed in the media center but does not appear to be installed in any of the building's other exterior rooms.

### **VENTILATION AND EXHAUST**

The ventilation and exhaust systems in the school include various indoor air handling units, and various exhaust fans. Air handling units are all installed in one central mechanical room. Air handling units have hot water heating coils and chilled water cooling coils but hot water coils are upstream of the cooling coils for all units. This coil configuration limits the potential for dehumidification at the unit. For units with reheat coils in the ductwork, dehumidification can still be achieved

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



by overcooling at the unit and reheating as required at the zone level. Single zone air handling units are constant volume units. These units are original to the building and we recommend that unit replacements be considered as part of long term planning. Recommend that variable frequency drives (VFDs) be added along with controls for these units to be variable air volume for energy savings. Indoor Air Quality and outside airflow should be addressed at the air handling units to meet ASHRAE 62.1 for controllable ventilation rates.

### AIR CONDITIONING

Air conditioning systems in the building is provided by an air-cooled chiller and chilled water distribution system. Chiller and associated circulating pump were installed in 2016 and are in good condition. Chilled water piping system is a variable primary system with a single circulating pump.

All air handling units were provided with chilled water cooling coils. These allow for control of cooling and dehumidification in the building. Existing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in good condition.

### AUTOMATIC TEMPERATURE CONTROLS

Controls throughout the building are electronic and Direct Digital Controls (DDC) provide by Johnson Controls Inc. (JCI), original to the building. Some actuators, valves, and control components have been replaced as devices fail. There do not appear to be proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 500KVA 480/277V padmount transformer located at northwest corner of building.
- Power is routed from the transformer through a wall-mount CT cabinet that is sitting at the exterior just outside of main service entrance space. Power is then routed through the wall and into the main service entrance switchboard. Peak loads on this transformer in the past 12 months was 126kW (152A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is more than adequate.

### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

### POWER DISTRIBUTION

- The building's main electrical services is delivered underground into a 480/277V 3-phase 1200A Siemens Type SB switchboard. Switchboard was updated in 1998 and is in fair condition. Power to all areas of the building, outside of the performance hall fire pump, is supplied from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels. Several pieces of the distribution system, including distribution and branch panels, were updated with the renovations over time.
- Several branch panels were noted to have been upgraded or added after the flood of 1997.
- With peak demand on the service within the past year being 152A, the capacity of the existing switchboard is more than adequate. At this time, there is no recommendation for improvements.

### LIGHTING

- Outside of small areas, like the gym, cafeteria, and boiler room, that have been updated to LED lighting, the large majority of the building interior consists of fluorescent lighting. Lighting was noted to be less than adequate in several areas, according to Illuminating Engineering Society (IES) recommended lighting levels.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch with very few areas capable of dimming control.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is currently being controlled via centrally located photocell.
- All exterior lighting control is suggested to be tied into digital lighting management, as outlined in interior lighting portion above.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Wireless access points were noted at regular intervals throughout building. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. System has the capability of paging specific zones, as desired. Recessed speakers were noted to be located all throughout circulation areas, in all classrooms, and in almost all "normally-occupied" spaces. Speakers also observed at exterior.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system has been upgrade within past few years and is manufactured by American Time with clocks located all throughout school. All communication between clocks and central system is done via hardwiring. Large majority are analog clocks.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of projectors, digital displays, and classroom sound reinforcement.

### **SAFETY & SECURITY SYSTEMS**

- Three exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras. A buzz-in system consisting of a 2-way speaker and camera is located at the north and south entrances.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- An intrusion detection system consisting of motion detection throughout hallways was installed several years back, but has since been disconnected entirely because of false alarms.
- Fire alarm control panel is Simplex 4020. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices. Several devices appeared to have been updated within the past several years, while others appeared very aged.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **D. EXISTING DEFICIENCIES**

The analysis of the existing Phoenix Elementary School has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, education adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

### 1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This portion of the assessment of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building are identified and listed below.

- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass (018).
- Both stairwells are lacking a separate handrail from the guardrails and existing guardrails do not meet height requirements (019, 020).
- Numerous single restrooms throughout the school are accessible, but with all the extra items stored there, are no longer accessible (021).
- Double doors in the Title 1 classroom (Room 171) do not have required panic hardware (022).
- The door to the restroom within the main office does not have sufficient clearances when swung open for accessibility.
- Sinks in the staff lounge, main office, nurse's office, and library office (Rooms A136, A137, B145 and no corresponding room number) are not accessible (023, 024, 025, 026).
- Mop sink in the second-floor janitorial closet (Room A214) needs fiber-reinforced panels on the adjacent walls (027).
- All classrooms with interior windows facing the atrium are missing sprinklers 4"-12" from the windows for fire protection (028).
- The guardrail in the mechanical room does not meet height requirements and appropriate handrails are missing (029).
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains (030).
- Door hardware, on the door to the STAR room in Room 229, is not accessible (031).
- The fire extinguisher cabinet next to Room B229 is missing the glass pane in the door.
- Due to the incline of the southernmost exterior ramp outside of the cafeteria, handrails are required on both sides of the ramp (032).
- The playground is not accessible on all sides (033).
- Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code.
- •

### INTERIOR AND EXTERIOR EXISTING CONDITION PHOTOS

A portion of the metal parapet cover is damaged near the loading docks on the north side of the school (034). Metal caging protecting the exterior speaker is damaged and should be replaced (035).

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The school, in general, lacks storage space as many of the restrooms, electrical closets, and mechanical rooms double as storage.



Many individual learning spaces have had to move to spaces that are not optimal for learning. For example, there is a one-on-one learning space inside of an electrical closet.



Many individual learning spaces have had to move to spaces that are not optimal for learning. For example, there is a specialized learning space within the mechanical and janitorial area of the building.



This causes drivers to circumvent the one-way and cross over a crosswalk to connect to 5th Avenue South, creating concern for the safety of the children who utilize the crosswalk.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The playground directly outside the building is outdated, broken, and inaccessible and should be replaced.



The playground directly outside the building is outdated, broken, and inaccessible and should be replaced.



A roof drain/overflow scupper on the north side of the building needs a concrete splash block beneath it and for the drain mesh to be repaired.



Outside of the library where new asphalt was laid for drainage, the weepholes in the brick are potentially covered which can prevent moisture from leaving the brick.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The expansions within the brick have been well maintained, as the caulk was redone less than three years ago.



Due to the age of the windows, the sealant/gasket has shrunk and no longer runs the entire width of the glass panels.



Due to the age of the windows, the sealant/gasket has shrunk and no longer runs the entire width of the glass panels.



There are several areas where the vinyl wall covering is releasing from the gypsum wall board substrate

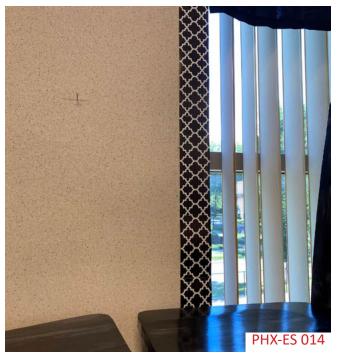
FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Other areas have signs of wear and tear and could use wall and corner guards to protect from future damage



There is cracking in a CMU wall adjacent to a steel column that can be seen from the mechanical room and the hallway.



It is recommended the vinyl wall covering be removed from the interior surface of exterior walls, as this could potentially create a double vapor barrier and trap moisture within the walls.



The only area that does not have new carpet is the janitorial closet.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



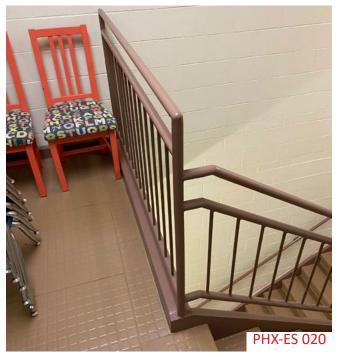
There is an area in Room B235 where the precast concrete underneath the carpet has inconsistencies in its seams. Because of this, there is an uneven and sloped portion of the floor in the classroom.



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass



Both stairwells are lacking a separate handrail from the guardrails and existing guardrails do not meet height requirements



Both stairwells are lacking a separate handrail from the guardrails and existing guardrails do not meet height requirements

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Numerous single restrooms throughout the school are accessible, but with all the extra items stored there, are no longer accessible



Double doors in the Title 1 classroom (Room 171) do not have required panic hardware



Sinks in the staff lounge, main office, nurse's office, and library office (Rooms A136, A137, B145 and no corresponding room number) are not accessible



Sinks in the staff lounge, main office, nurse's office, and library office (Rooms A136, A137, B145 and no corresponding room number) are not accessible

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Sinks in the staff lounge, main office, nurse's office, and library office (Rooms A136, A137, B145 and no corresponding room number) are not accessible



Sinks in the staff lounge, main office, nurse's office, and library office (Rooms A136, A137, B145 and no corresponding room number) are not accessible



Mop sink in the second-floor janitorial closet (Room A214) needs fiber-reinforced panels on the adjacent walls



All classrooms with interior windows facing the atrium are missing sprinklers 4"-12" from the windows for fire protection

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The guardrail in the mechanical room does not meet height requirements and appropriate handrails are missing



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains



Door hardware, on the door to the STAR room in Room 229, is not accessible

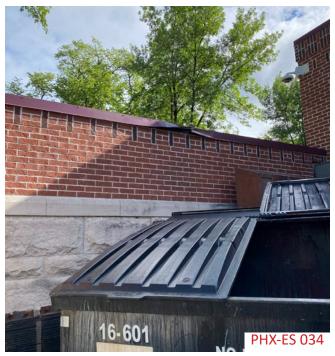


Due to the incline of the southernmost exterior ramp outside of the cafeteria, handrails are required on both sides of the ramp

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The playground is not accessible on all sides



A portion of the metal parapet cover is damaged near the loading docks on the north side of the school.



Metal caging protecting the exterior speaker is damaged and should be replaced.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### EXISTING DEFICIENCIES CONTINUED

### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	2,520 SF	2,986 SF	-466
Athletics	5,089 SF	3,400 SF	1,689
Auditorium	956 SF	2,200 SF	-1,244
Circulation	9,307 SF	15,373 SF	-6,066
Classrooms	14,048 SF	13,750 SF	298
Common Spaces	170 SF	150 SF	20
Food Services/Cafeteria	5,329 SF	4,526 SF	803
Library/Media Center	2,796 SF	1,895 SF	901
Mechanical/Electrical	3,394 SF	3,843 SF	-449
Music	1,799 SF	3,700 SF	-1,901
Restrooms	1,285 SF	1,281 SF	4
Special Education	3,767 SF	5,800 SF	-2,033
Technology Education	676 SF	1,000 SF	-324

Total Missing Square Footage -8,768

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### EXISTING DEFICIENCIES CONTINUED

### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

### SECURITY/ADA ACCESSIBILITY

- There are no secure entrances.
- There are no buttons to open doors.

### LACKING LEARNING AND SUPPORT SPACE

- There are only two classrooms for the District-wide autism/special education program and there are no adequate bathrooms.
- There is only one staff restroom upstairs and downstairs.
- There are not enough common and collaborative learning spaces.
- There are not enough spaces for specialty teachers.
- There are no gender-neutral bathrooms.

### PARKING AND STUDENT DROP-OFF AND PICK-UP

- There is not enough parking for visitors and parents.
- Pick-up and drop-off is not ideal.

### **TOP PRIORITIES**

- 1. Safety/Security and Accessibility
- 2. Parking and Student Drop-Off and Pick-Up Improvements

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Phoenix Elementary School Grand Forks, ND 11/2/2022



A classical problem of the prob	7707/7/11							EN	ENGINEERS	S
Attend         Attend<	Facility Assessment Estimate									
and Bullingtrands         Consistant         1         1.00         53.340         53.340         53.340         51.343         51.343         51.343         51.343         51.343         51.343         51.343         51.343         51.343         51.343         51.333         51.343         51.333         51.343         51.333         51.343         51.333         51.343         51.333         51.343         51.333         51.343         51.333 <th< th=""><th>Description</th><th>ltem Number</th><th>Takeoff Qty</th><th>Total Cost/Unit</th><th>Critical</th><th>5 yrs Deferred Maint</th><th>10 yrs Deferred Maint</th><th>Educational Adequacy</th><th>Synergistic with other needs</th><th>Total Cost</th></th<>	Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
a we gate throughout the building that is oblogine up to cade frame to memorial         1         Luo         S3.3.5         V	ADA and Building Code Compliance									
Exerction (E00) and function (E00) that are not use to one         2         100         513.63         10         53.66         10         53.66         10         53.66           able to the formation (E00) and function matche contract counce contract counce are strated and interformant a accordencial.         3         3         33.61.21         10         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         11         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         53.33.23         12         12         53.33.23         12         12         <	Replace wire glass throughout the building that is no longer up to code (frame to remain)	1	1,600 SF	/		0				\$53,840
0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	Replace guardrails (60lf) and handrail (120 lf) that are not up to code	2								\$35,897
a wing the dots of the feature fractional default in the feature fractional default in the feature fractional default in the dots of	Add grab bars in boys' restroom near the gymnasium at accessible urinal.	m		/		~				\$308
and offer the antic offer to meet required         5         2         1         3.5.4.1.3         1         5         3.5.4.1.3         1         5         3.5.4.1.3         1         1         1         1         1         1         1         1         1         1         1         1         1         3.5.4.1.3         1	Add panic hardware to double doors in Title Room 171.	4		/		~				\$2,528
	Change swing on the door to the restroom from the main offices to meet required	5				~				\$7,123
An atom the attend correct from the accord from yinth the attend from othe accord from yinth the attend from othe accord from yinth the a	Change swing and add panic hardware to room A132 to make accessible.	9		~						\$7,123
	Add ADA sinks in the staff lounge, main office, nurse's office, and library office by replacing 20 if of base than unmer part room to make accessible	7							×	\$107,760
	nop sink in the second-floor janitor	∞		/		10				\$365
auticality metaleal metalean one second for. sets the value of the fire extra metalean of the metalean of the extra metalean of the extra metalean of the metalean of	Modify sprinklers in the classrooms with interior windows to the commons area for fire safety	6		/		0				\$10,859
costable water fournal outside the restronome on the second floor.         11         1         512,44.4         1         6         512,44.4         1         6         712,44         1         6         712,44         1         6         712,44         1         6         712,44         1         6         712,44         1         5         532,32         1         5         532,32         1         5         533,32         1         5         533,32         1         5         533,32         1         5         533,32         1         5         533,32         1         5         533,32         1         5         533,32         1         1         2         533,32         1         1         2         533,32         1         1         2	Add guardrail/handrail in mechanical room.	10		/						\$4,387
b math where node or to STAR from in Room 223:         Lat         S 98.361         Lat         S 98.361         Lat         S 98.373         Lat         S 98.323         Lat         S 98.323.323         Lat         S 98.3	Add accessible water fountain outside the restrooms on the second floor.	11		/		10				\$21,945
stand131133.151133.211133.10111<	Replace hardware on door to STAR room in Room 229 to be accessible.	12		/		t				\$984
$a_{int}$ (wall concisited includies detertion walls that is creating a double vapor $12$ $7.50$ $5.3.700$ $10$ <	Add glass panel in the fire extinguisher cabinet next to Room B229.	13	1 Ea.	/		-				\$352
a: outh extertior rimp outside affetria and add guardrali (66 lf) to make accessible.151325230.66 $5$ $57.32$ $30.66$ $5$ $57.32$ $50.66$ $5$ $57.32$ $50.66$ $5$ $57.32$ $50.66$ $5$ $57.32$ $50.66$ $5$ $57.32$ $50.66$ $50$ $50$ $50$ $50$ $50$ $50$ $50$ $50$ $50$ $50$ $50$ $50.65$ $50$ $50.66$ $50.66$ $50.66$ $50$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ $50.66$ </td <td>Remove vinyl wall coverings from the inside of exterior walls that is creating a double vapor harrier: skim coat existing the prock and paint</td> <td>14</td> <td></td> <td>/</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td>\$53,700</td>	Remove vinyl wall coverings from the inside of exterior walls that is creating a double vapor harrier: skim coat existing the prock and paint	14		/		0				\$53,700
cestibility to playgound on all side.         it         ls         setsibility to playgound on all side.         x         x         x         x           cestibility to playgound on all side.         x         statication         x         statication         statication         statication         x	Replace south exterior ramp outside cafeteria and add guardrail (66 lf) to make accessible. (035)	15		/		10				\$27,306
Code Compliance         Cade Compliance         S 4,066         S + 0,01	Add accessibility to playground on all sides.	16	1 LS	~					×	\$45,327
ity       ity         entrance, administration office and special education relocation remodel       17       3.635       5       5.56.94       5 </td <td>Total Code Compliance</td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td>0\$</td> <td></td> <td>\$379,804</td>	Total Code Compliance			_				0\$		\$379,804
entrance, administration office and special education relocation	Security									
Security         3/63         5         3/66.94         5	Secure entrance, administration office and special education relocation remodel	17	3,635 SF		14			\$970,327		\$970,327
tion/Remodel (Educational Adequacy)           istration         18         466         5F         \$333.17         5F         \$158,067         \$158,075         \$158,075 <td>Total Security</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>\$970,327</td> <td></td> <td>\$970,327</td>	Total Security			-				\$970,327		\$970,327
istration184665 $$333.20$ 5 $$333.20$ 5 $$153,067$ $$153,075$ $$1$	Addition/Remodel (Educational Adequacy)									
interfact         interfact <t< td=""><td>Administration</td><td>18</td><td>466 SF</td><td></td><td>4</td><td></td><td></td><td>\$158,067</td><td></td><td>\$158,067</td></t<>	Administration	18	466 SF		4			\$158,067		\$158,067
ics20555360.527665050rium211,2445548.537555603,7755s:s Education221,2445548.537755603,7755s:s Education221,2445537.6837755tion236.0665537.68377555ons2455537.68377555on Spaces2575533.12777555on Spaces252555533.1277755on Spaces25255555555555for context2675533.127577555for context272755533.127577555for context282755533.12755 </td <td>Art</td> <td>19</td> <td>SF</td> <td>-</td> <td>4</td> <td></td> <td></td> <td>\$0</td> <td></td> <td>\$0</td>	Art	19	SF	-	4			\$0		\$0
nim $124$ $5$ $345.35$ $5$ $6$ $6$ $6$ $663.775$ $6$ $663.775$ $6$ $663.763$ $7$ $7$ $860.3775$ $7$ $860.3775$ $7$ $860.3775$ $7$ $860.3775$ $7$ $860.3775$ $7$ $860.3775$ $860.375$ $7$ $860.376$ $860.375$	Athletics	20	SF	/	14			\$0		\$0
:s: Education $:s: Education$ $:s: Education:s: Education:s: Education:s: Education:s: Education$	Auditorium	21		/				\$603,775		\$603,775
tion236,0665337.6.8376722,285,86955oms242475337.6.82757777on 5paces2575333.12777777on 5paces2575533.127777777on 5paces2575533.127777777on 5paces2575533.127777777icivic/Cafeteria2775533.127777777//Media Center2875533.1377777777//Media Center2875533.5677777777//Media Center297777777777777//Media Center2977	Business Education	22	SF	/	-			\$0		\$0
ooms $24$ $24$ $5$ $537.6.8$ $1/5$ $6$ $6$ $50$ $50$ on Spaces $25$ $5$ $533.12$ $1/5$ $6$ $6$ $50$ <td>Circulation</td> <td>23</td> <td></td> <td>/</td> <td></td> <td></td> <td></td> <td>\$2,285,869</td> <td></td> <td>\$2,285,869</td>	Circulation	23		/				\$2,285,869		\$2,285,869
on Spaces       25       57       533.12       / 57       5       533.12       / 57       5	Classrooms	24	SF	/				0\$		\$0
iervice/Cafteria       26       5 $$33.12$ $1$ 5 $$33.12$ $1$ 5 $$33.12$ $1$ 5 $$33.12$ $1$ 5 $$33.12$ $1$ 5 $$33.12$ $1$ 5 $$33.12$ $1$ 5 $$33.12$ $1$ 5 $$33.12$ $1$ <td< td=""><td>Common Spaces</td><td>25</td><td>SF</td><td>/</td><td>-</td><td></td><td></td><td>0\$</td><td></td><td>\$0</td></td<>	Common Spaces	25	SF	/	-			0\$		\$0
iervice/Cafeteria       27       SF       \$458.33       / SF       \$40       \$6       \$0       \$0         //Media Center       28       SF       \$395.63       / SF       \$395.63       7 SF       \$307.85       \$7       \$6 <t< td=""><td>FACS</td><td>26</td><td>SF</td><td>/</td><td>ц</td><td></td><td></td><td>\$0</td><td></td><td>\$0</td></t<>	FACS	26	SF	/	ц			\$0		\$0
//Media Center 28 S135.63 / SF \$395.63 / SF \$395.63 / SF \$307.85 / SF	Food Service/Cafeteria	27	SF	/	4			\$0		\$0
inical/Electrical     29     449     SF     \$307.85     / SF     \$1,901       30     1,901     SF     \$401.90     / SF     \$401.90     / SF	Library/Media Center	28	SF	/	14			\$0		\$0
30 1,901 SF \$401.90 // SF \$401.90 // SF	Mechanical/Electrical	29			ц.			\$138,226		\$138,226
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# Phoenix Elementary School

Grand Forks, ND 11/2/2022



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Facility Assessment Estimate				ľ						
Description	ltem Number	Takeoff Qty	Total Cost/Unit	it	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Restrooms	31	SF	\$464.61 ,	/ SF				0\$		¢¢
Science	32	SF	\$431.99	/ SF				0\$		\$0
Special Education	33	2,033 SF	\$340.28	/ SF				\$691,782		\$691,782
Technical Education	34	SF	\$381.83 J	/ SF				0\$		\$0
Technology Education	35	\$324 SF	<b>\$394.37</b>	/ SF				\$127,777		\$127,777
Total Adequacy		12,483 SF	\$382.08 <i>\</i>	/ SF	\$0	\$0	\$0	\$4,769,505		\$4,769,505
Capital Maintenance										
Interior Upgrades										
Patch vinyl wall coverings where it is peeling up in several areas	36	54,066 SF	\$0.25 J	/ SF		\$13,517				\$13,517
Add wall guards and corner guards through out the school to protect the areas from future	37	54,066 SF	\$1.10 <i>\</i>	/ SF		\$59,473				\$59 <b>,</b> 473
Repair the cracking in a CMU wall adjacent to a steel column that can be seen from the mechanical crow and the hallway	38	1 Ea.	\$1,423.45 <i>,</i>	/ Ea.	\$1,423					\$1,423
Remove flooring, add floor fill, and install new flooring in Room B235 where the precast concrete undernach the croet had inconsistency in its seams	39	1,008 SF	\$13.89 <i>,</i>	/ SF			\$14,001			\$14,001
Interior Upgrades Subtotal		54,066 SF	\$1.64	/ SF						<b>\$88,414</b>
Exterior Upgrades										
Repair the west curb in the drop-off alleyway that is damaged	40	1 Ea.	\$2,635.12	/ Еа.		\$2,635				\$2,635
Replace the outdated playground	41	1 Ea.	\$264,142.24	/ Еа.		\$264,142				\$264,142
Clean the exterior limestone	42	1 Ea.	\$10,248.24	/ Ea.		\$10,248				\$10,248
Fix the drain mesh in a fire drain on the north side of the building and add a concrete	43	1 Ea.	\$741.24	/ Ea.	\$741					\$741
splasn block beneath it Outside of the library where new asphalt was laid for drainage, the weepholes in the brick	44			0 /						\$0
have been covered which can prevent moisture from leaving the brick										
Replace the roof when it nears the end of its useable lifetime	45	35,134 SF	\$31.69 <i>.</i>	/ SF	\$1,113,396					\$1,113,396
Replace caulking around windows	46	49 Ea.	\$501.42 ,	/ Ea.		\$24,570				\$24,570
Replaced the damaged metal parapet near the loading docks on the north side of the school	47	1 Ea.	\$4,124.21	/ Еа.		\$4,124				\$4,124
Replace the metal caging protecting the exterior speaker that damaged	48	1 Ea.	\$2,412.24	/ Ea.		\$2,412				\$2,412
Exterior Upgrades Subtotal		54,066 SF	\$26.31	/ SF						\$1,422,269
Electrical Uogrades										
Add egress lighting to doors to exterior as is required by Building Code	49	54,066 SF	\$0.84	/ SF	\$45,415					\$45,415
Upgrade of all interior lighting controls throughout to digital lighting management	50	54,066 SF	\$2.51 <i>,</i>	/ SF		\$135,706				\$135,706
Upgrade of all exterior lighting controls throughout to digital lighting management	51	54,066 SF	\$0.25 <i>\</i>	/ SF		\$13,517				\$13,517
Update the existing intercom system with a new IP system throughout entire school.	52	54,066 SF	\$3.76 ,	/ SF		\$203,288				\$203,288
It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitorine.	53	54,066 SF	\$0.45 J	/ SF	\$24,330					\$24,330
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# Phoenix Elementary School Grand Forks, ND 11/2/2022



								ENC	ENGINEERS	RS
Facility Assessment Estimate										
	ltem					5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty	Total Cost/Unit	Init	Critical	Maint	Maint	Adequacy	needs	Total Cost
It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakora Ruilding Code	54	54,066 SF	\$0.69	/ SF	\$37,306					\$37,306
Electrical Upgrades Subtotal		54,066 SF	\$8.50	/ SF						\$459,561
Mechanical Upgrades										
Some roof drain piping was reported as having leaks. This should be investigated, and existing piping replaced where deteriorated.	55	54,066 SF	: \$1.45	/ SF	\$78,396					\$78,396
ASE 1070 thermostatic mixing values should be added to public lavatories for scald interferition in accordance with the uniform nlumbing code	56	54,066 SF	: \$0.32	/ SF	\$17,301				×	\$17,301
Variable air volume (VAV) boxes with hot water reheat coils are used throughout the building for zoning. Hot water cabinet unit heaters and suspended unit heaters provide heat for vestibules, stairwells, mechanical rooms, and other similar spaces. There is perimeter finned tube radiation installed in the media center but does not appear to be installed in any of the building's other exterior rooms.	57	54,066 SF	\$2.14	/ SF		\$115,701				\$115,701
The ventilation and exhaust systems in the school include various indoor air handling units, and various exhaust fans. Air handling units are all installed in one central mechanical room. Air handling units have hot water heating coils and chilled water cooling coils but hot water coils are upstream of the cooling coils for all units. This coil configuration limits the potential for dehumidification at the unit. For units with reheat coils in the ductwork, dehumidification can still be achieved by overcooling at the unit and reheating as required at the zone level. Single zone air handling units are constant volume units. These units are original to the building and we recommend that unit replacements be considered as part of long term planning. Recommend that volume for energy savings. Indoor Air Quality and outside airflow should be addressed at the air volume for energy savings. Indoor Air Quality and controllable ventilation rates.	ŭ	54,066 SF	\$3.45	/ SF		\$186,528				\$186,528
Replace all existing pneumatic controls with a direct digital control system	59	54,066 SF	: \$6.54	/ SF		\$353,592				\$353,592
Mechanical Upgrades Subtotal		54,066 SF	: \$13.90	/ SF						\$751,517
Total Capital Maintenance		54,066 SF	F \$50.34	/SF	\$1,318,309	\$1,389,452	\$14,001	\$0		\$2,721,761
Total Construction Cost		70,184 SF	F \$125.97 / SF	/ SF	\$1,698,112	\$1,389,452	\$14,001	\$5,739,83 <b>2</b>		\$8,841,397
*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	litions, CM	l fees, permits	s, insurances, bon	ds, tax	es					
Contingencies & Soft Costs				-						
Design Contingency	60	5.0%			\$84,905.62	\$69,472.58		\$286,991.61		\$442,070
Construction Contingency	61	5.0%			\$84,905.62	\$69\$	\$7	\$286, <u>5</u>		\$442,070
Escalation	62	0.0%			\$0.00					\$0
A & E Fees	63	7.0%			\$118,867.86	\$97,261.61				\$618,898
FF & E	64	2.0%			\$33,962.25	\$27,789.03		Ş		\$176,828
Owner Contingency	65	1.5%			\$25,471.68	\$20,841.77	\$210.02			\$132,621
Total Contingencies & Soft Costs					\$348,113	\$284,838				\$1,812,486
Total Facility Assessment Cost Estimate		70,184 SF		/ SF	\$2,046,225	\$1,674,289	<b>\$16,871</b>	\$6,916,498		\$10,653,884
Total Critical & Educational Adequacy		70,184 SF	F \$127.70	/ SF						\$8,962,723

A. EXISTING BUILDING INVENTORY	323
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C. MECHANICAL/ELECTRICAL ASSESSMENT	326
D. EXISTING DEFICIENCIES	330
E. COST ANALYSIS	342



# VIKING ELEMENTARY SCHOOL

SCHOOL

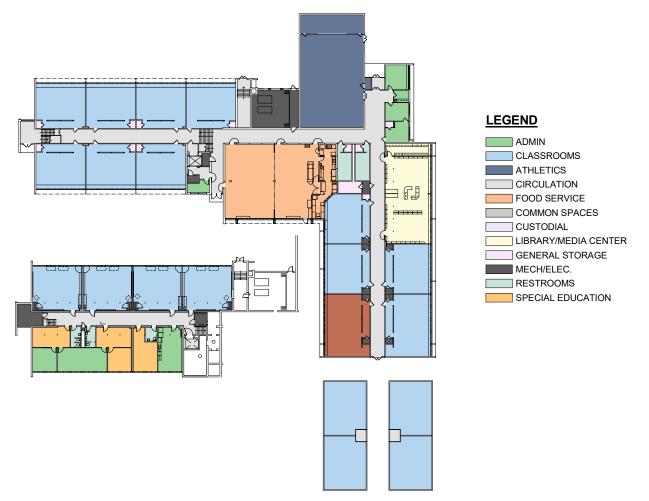
Viking Voyagers

# **A. EXISTING BUILDING INVENTORY**

Viking Elementary School is located at 809 22nd Avenue S, Grand Forks, ND and was built in 1957 with an addition in 1997 after the flood.

The school is accessible by S 10th Street to the west, 22nd Avenue S to the north, Oak Street to the east, and 24th Avenue S to the south. There is a small parking lot to the north of the school.

#### FLOOR PLAN



#### MAIN LEVEL

**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Viking Elementary School was built in 1957 and an addition was built in 1997 after the flood. There is no air conditioning in the school which makes it difficult to regulate temperature throughout the building, especially during the warmer months. There are issues with ground water leaking into the basement and moisture that is seeping through the foundation wall and blowing out the plaster. Space is limited in the school, especially in the kitchen and classrooms. Portable classrooms have been placed on site to temporarily address some space issues, but it is not a permanent fix. Exit signs in the building do not have proper illumination (001). Laminate under windows in the cafeteria is warped and lifting (002). Casework and finishes throughout the school are dated, but functional (003). The chimney shows cracking in the concrete masonry unit (CMU) brick and several areas of plaster are damaged as well.

#### SITE

The asphalt on the site has some cracking (004). Several entrances to the school have uneven concrete which creates issues for accessibility. The school's parking lot is not large enough and could use more stalls. Two portable classrooms are located on the south side of the building (005).

#### MASONRY

The exterior brick is in overall good condition. The brick mortar and caulking are in good condition. There is some cracking on exterior CMU brick (006), including up the chimney (007).

#### ADDITIONAL EXTERIOR MATERIALS

Plaster is cracking in some areas. Paint is peeling off the wood on the underside of overhangs around the building (008). Exterior overhangs consist of combustible material and may require sprinklers.

#### ROOF

The roof was redone 6-7 years ago and is in good condition.

#### **OPENINGS**

The door openings and windows within the school are in good condition. Weather stripping could be replaced (009) and potentially door hardware (010). Paint on exterior doors is deteriorating and in poor condition (011). Entrances are not protected with an enclosed vestibule.

#### CEILINGS

The ceilings within the school are mostly comprised of acoustical ceiling tiles (ACT). The ACT is generally in good condition, but there are some areas with water damage (012).

# We viking elementary school

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### ARCHITECTURAL FINISHES CONTINUED

#### WALLS

The interior walls are either painted masonry, painted gypsum board, have vinyl wall coverings, or have tiling. Large portions of exterior walls are covered with vinyl covering on the interior side. It is recommended the vinyl wall covering be removed from the interior surface of exterior walls, as this could potentially create a double vapor barrier and trap moisture within the walls. Current code does not permit the use of vinyl wall covering on outside walls for this reason.

#### FLOORING

The floors in the school are either carpeting or various types of tiling. The carpet is 9-10 years old, but in overall good condition. Some portions of the original tile are dated, but still in good condition. There is potential asbestos in portions of older tile (013).

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



## C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

• Fire sprinkler system is currently installed throughout the entire building. Depending on the level of work performed in the building, sprinkler systems may need to be modified to accommodate any new work.

#### PLUMBING

- Most of the plumbing piping in the west wing of the building is original. It was reported that all of the plumbing piping in the south wing was replaced about eight (8) years ago, along with all of the plumbing fixtures. Maintenance staff did not report any issues at the time of the walk through. During any new remodel, the pipe hangers and associated piping in the 1958 addition is recommended to be replaced as part of the long term planning.
- The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures with the water closets being a combination of tank type and flush valve floor mounted toilets. The lavatory faucets are mostly manually operated. The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail. The sink faucets in the classrooms and break rooms are manually operated.
- Domestic hot water is produced by two natural gas fired instantaneous water heaters and utilize a storage tank for capacity. The domestic hot water heating plant was installed in 2014 and appears to be in good condition.
- Kitchen plumbing fixtures and piping were replaced in 1996 and in appear to be good condition. There is no grease interceptor currently installed on the waste line for the three-compartment sink and other grease producing fixtures. It is recommended and a city requirement that a grease interceptor be installed to protect the waste piping system.
- ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.

#### HEATING

- Heating for the entire building comes from two (2) natural gas fired steam Weil McLain model LGB-14 boilers. The capacity of each boiler is 1,690 MBH. The steam boiler plant is designed to be replaced with a condensing hot water boiler plant as part of the ESCO project that is currently being bid. As part of the ESCO project, all steam and condensate piping and their associated components will be replaced with a hot water hydronic system.
- Existing steam and condensate piping throughout the building is concealed in the soffits, tunnels, walls, and above the ceilings in public areas. The majority of the existing steam and condensate piping where concealed is original to the building and needs to be replaced in order to convert to a hot water system.
- The existing air handling unit serving the West wing of the lower level as well as the two air handling units serving the gymnasium will need to have their steam heating coils replaced with hot water coils. There are classroom unit ventilators serving the cafeteria and classrooms that will need to be replaced to convert to a hot water heating system. An alternate bid for the project will be to replace the gym AHU's completely while adding a hot water coil.
- Perimeter hot water and electric finned tube radiation is installed in some exterior offices, restrooms, and corridors for supplemental heat. Hot water and electric cabinet unit heaters and suspended unit heaters provide heat for vestibules, mechanical rooms, and other similar spaces. These are all original steam units to the building and need to be replaced for the conversion to a hot water system.

#### VENTILATION AND EXHAUST

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



- The ventilation and exhaust systems in the school include various air handling units, unit ventilators, and various exhaust fans. The indoor air handling units and exhaust fans throughout the building is original and past their useful life. Indoor Air Quality should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates. Existing indoor air handling units and unit ventilators have inline starters for fan control and pneumatic controls. We recommend the indoor air handling units be replaced with new variable air volume units with VFDs for fan speed modulation, chilled water or DX cooling coils, heating water coils, and DDC controls. Indoor air handling unit for the remodeled gymnasium is currently suspended in the mezzanine. This space is limited and, due to serviceability and clearance requirements, may require new unit to be installed on the roof. Unit ventilators are designed to be replaced with induction displacement units with chilled water coils, hot water coils, and perimeter finned tube radiation to condition the classrooms and cafeteria as part of a 2022/2023 project. The induction displacement units will be paired with a rooftop dedicated outdoor air unit with VFDs for fan speed modulation, energy recovery wheel, chilled water coils, hot water coils, hot water coils, and DDC controls for the ventilation air.
- Ductwork throughout the older portions of the building is at the end of its useful life causing excessive leakage and should be replaced or have the joints sealed when the ductwork is exposed. Supply air ductwork should be insulated when replaced to meet energy code and limit condensation formation.

#### AIR CONDITIONING

- Split system air conditioning system existing in the administration area. These units are similar to a "Sanyo" with the indoor portion mounted high on a wall and the condensing units are located on the roof. The systems will be in place to supplement the new 2022/2023 HVAC replacement project where chilled beams will be installed within the space to meet ASHRAE 62.1 for ventilation rates, and ASHRAE Standard 55 for cooling and dehumidification.
- The new 2022/2023 project will install an air cooled chiller with necessary piping components, chilled beams, induction displacement beams and replacement AHU's with chilled water coils.

#### AUTOMATIC TEMPERATURE CONTROLS

• All controls throughout the building are pneumatic controls and original to the building. These pneumatic controls offer limited control capability and no ability for monitoring and alarm. There are not proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. All of the controls within the school are planned to be replaced with Direct Digital Controls (DDC) systems as part of a 2022/2023 project. The DDC systems will be integrated into the existing Grand Forks Public School's Building Automation System for central monitoring and control.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 208/120V pole-mounted transformer located on north side of building.
- Power is routed overhead from the transformer to a service mast at the roof of the school, down to the main service entrance switchboard, inside of which is the CT cabinet for metering.
- Peak loads on this transformer in the past 12 months was 64kW (178A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is adequate.

#### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

#### POWER DISTRIBUTION

- The service entrance switchboard is a 208/120V 800A Square D QED Power Style Switchboard. Power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- Service entrance switchboard is scheduled to be updated as part of mechanical systems updates taking place within the next year.
- Branch panels throughout building were noted to be in fair condition. While some appear to be nearing the end of their useful life, they are still in working order. These panels are recommended to be replaced with any renovation project.

#### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the gym have been updated to LED lighting.
- School is currently scheduled to undergo a lighting upgrade project that will replace all non-LED lighting with energyefficient LED lighting. This should cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

#### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas capable of dimming control.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via photocell/timeclock.
- All exterior lighting control is suggested to be tied into digital lighting management, as outlined in interior lighting portion above.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Wireless access points were also installed within lower level classrooms. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Recessed speakers were noted to be located all throughout circulation areas and in classrooms. Front office is capable of calling individual classrooms via telephone through the intercom system.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system has been upgraded to American Time system with clocks located all throughout school. All communication between clocks and central system is done via wireless communication. Clocks consist of primarily analog devices.
- Simplex bell system was also noted to be installed throughout school. It's specific usage was unknown.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of digital displays, short-throw projectors, and classroom sound reinforcement.

#### **SAFETY & SECURITY SYSTEMS**

- A select few exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras. A buzz-in system consisting of a 2-way speaker and camera is located at the school's main entrance.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4007ES. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices and locations appeared to be adequate.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **D. EXISTING DEFICIENCIES**

The analysis of the existing Viking Elementary School has been broken down into three categories: code compliance/Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass. (014)
- Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code. (015)
- Multiple classrooms have restrooms that are not accessible. (016, 017)
- Sinks in classrooms are not accessible. (018)
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains. (019)
- All boys' and girls' restrooms are not accessible. (020)
- Pipes in restrooms are exposed and should be protected. (021)
- Guard rails for all stairwells do not meet height requirements. (022)
- All stairs are lacking a separate handrail from the guard rail.
- Handrail cross sections exceed size limitations per code. (023)
- Doors in STAR rooms and storage rooms in the gym do not have accessible door hardware. (024)
- Handrails are not present in stairwells leading up to the stage (025) and on ramps leading to portable class-rooms (026).
- All public entrances should be protected with an enclosed vestibule, as required by energy code. (027)
- The stair landing where Door 4 is located has casework and furniture that is impeding on the path of egress.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Exit signs are dim and should be replaced.



Some laminate under windows in the cafeteria is lifting.



Casework in classrooms is dated, but functional.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The asphalt on the site has some cracking.



There is some cracking on exterior CMU brick, including up the chimney.



Two portable classrooms are located on the south side of the building.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



There is some cracking on exterior CMU brick.



In areas of overhangs around the building, paint is peeling underneath the wood.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



Weather stripping could be replaced.



Weather stripping could be replaced and potentially door hardware.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Paint on exterior doors is deteriorating and in poor condition.



The ACT is generally in good condition, but there are some areas with water damage.



There is potential asbestos in portions of older tile.



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code.



Multiple classrooms have restrooms that are not accessible.



Multiple classrooms have restrooms that are not accessible.



Sinks in classrooms are not accessible.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS





Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.

Pipes in restrooms are exposed and should be protected.



All boys' and girls' restrooms are not accessible.



Guard rails for all stairwells do not meet height requirements.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Handrail cross sections exceed size limitations per code.



Doors in STAR rooms and storage rooms in the gym do not have accessible door hardware.



Stairwells leading up to the stage do not have handrails on both sides.



Handrails are not present in stairwells on ramps leading to portable classrooms.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



All public entrances should be protected with an enclosed vestibule, as required by energy code.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	1,889 SF	2,500 SF	-611
Athletics	2,891 SF	3,600 SF	-709
Circulation	5,561 SF	11,015 SF	-5,454
Classrooms	13,298 SF	17,200 SF	-3,902
Food Service/Cafeteria	3,211 SF	5,020 SF	-1,809
Library/Media Center	1,825 SF	1,268 SF	557
Mechanical/Electrical	1,282 SF	2,754 SF	-1,472
Music	1,103 SF	1,000 SF	103
Restrooms	602 SF	918 SF	-316
Special Education	1,176 SF	1,800 SF	-624

Total Missing Square Footage -14,237

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### EXISTING DEFICIENCIES CONTINUED

#### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

#### LACK OF COLLABORATION/LEARNING/SUPPORT SPACES

- There is only one staff restroom in the entire school.
  - There are no collaboration spaces.
  - There is not enough storage space in the school.
  - Band and orchestra classes are in the lunchroom this year.
  - The school has been using portable classrooms for three years.
  - The gymnasium is too small for school events.
  - The nurse's off is too small.
  - The teacher's lounge is too small.
  - Several teachers are teaching from portable carts.

#### SECURITY/SAFETY

• A secure entrance is needed at the school.

PARKING

• There is not enough parking at the school, resulting in the school having to use two rows of parking at the nearby church.

#### **TOP PRIORITY**

1. Additional Classroom Space

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Viking Elementary School Grand Forks, ND 11/2/2022



11/2/2022									ENGINEERS	5 <mark>2</mark>
Facility Assessment Estimate										
Description	ltem Number	Takeoff Qty	Total Cost/Unit		Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
ADA and Building Code Compliance										
Replace wire glass throughout the building that is no longer up to code (frame to remain)	Ч	800 SF	\$33.65	/ SF	\$26,920					\$26,920
Remove vinyl wall coverings from the inside of exterior walls that is creating a double vapor barrier skim coat existing sheetrock and paint	2	5,820 SF	\$7.16	/ SF	\$41,671					\$41,671
Remodel restrooms in classrooms to make them meet accessibility requirements	с	21 Ea.	\$37,497.11	/ Ea.	\$787,439				×	\$787,439
Replace casework (20lf of base, top, and upper) per classroom and sinks in classrooms are	4	20 Ea.	\$26,939.88	/ Еа.	\$538,798					\$538,798
not accessible Add accessible lower water fountains throughout the building	ß	4 Ea.	\$21,944.54	/ Ea.	\$87,778					\$87,778
Remodel public restrooms to make them accessible	9	2 Ea.		/ Ea.	\$149,786				×	\$149,786
Protect exposed pipes under sinks in restrooms	7	1 Ea.	\$6,270.56	/ Ea.	\$6,271				×	\$6,271
Replace guard rails (55 lf) for all stairwells that are not tall enough for code compliance	∞	135 LF	\$199.43	/ LF	\$26,923					\$26,923
New guard rails will have a separate handrail from the guard rail.	6									
Replace all handrails (80 lf) on all stairs	10			/						
Upgrade door hardware with ADA hardware	11	25 Ea.		/ Ea.	\$24,590					\$24,590
Add handrails that are missing in stairwells leading up to the stage and on ramps leading to nortable reservoms	12	125 LF	\$135.78	/ LF	\$16,973					\$16,973
Add interior vestibules at entrances where they are missing	13	4 Ea.	\$22,262.27	/ Ea.	\$89,049					\$89,049
Remove casework and storage in the area of the entryway of door 4	14	1 Ea.		/ Ea.	\$5,348					\$5,348
Total Code Compliance		36,729 SF	\$49.05	/ SF \$:	\$1,801,546	\$0	\$0	\$0		\$1,801,546
Security										
Secure entrance and administration office remodel	15	900 SF	\$266.94	/ SF				\$240,246		\$240,246
Total Security		900 SF	\$266.94	/ SF	\$0	0\$	0\$	\$240,246		<b>\$240,246</b>
Addition/Remodel (Educational Adequacy)										
Administration	16	611 SF	\$339.20 / SF	/ SF				\$207,251		\$207,251
Art	17	SF	\$351.74	/ SF				\$0		\$0
Athletics	18	709 SF	\$360.52	/ SF				\$255,607		\$255,607
Auditorium	19	SF	\$485.35	/ SF				0\$		\$0
Business Education	20	SF	\$376.82	/ SF				\$0		\$0
Circulation	21	5,454 SF	\$376.83	/ SF				\$2,055,247		\$2,055,247
Classrooms	22	3,902 SF	\$376.82	/ SF				\$1,470,348		\$1,470,348
Common Spaces	23	SF	\$393.12	/ SF				0\$		\$0
FACS	24	SF	\$393.12	/ SF				0\$		\$0
Food Service/Cafeteria	25	1,809 SF	\$458.33	/ SF				\$829,114		\$829,114
Library/Media Center	26	SF	\$395.63	/ SF				\$0		\$0
Mechanical/Electrical	27	1,472 SF	\$307.85	/ SF				\$453,160		\$453,160
Music	28	SF	\$401.90	/ SF				\$0		\$0
Restrooms	29	316 SF	\$464.61	/ SF				\$146,817		\$146,817
Science	30	SF	\$431.99	/ SF				\$0		\$0
Special Education	31	624 SF	\$340.28	/ SF				\$212,332		\$212,332
Technical Education	32	SF	\$381.83	/ SF				\$0		\$0

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# Viking Elementary School Grand Forks, ND 11/2/2022



Facility Assessment Estimate										
						5 yrs	10 yrs		Synergistic	
Description	Number	Takeoff Qty	Total Cost/Unit	it	Critical	Deferred Maint	Deterred Maint	Educational Adequacy	with other needs	Total Cost
Technology Education	33	SF	\$394.37	/ SF				0\$		0\$
Total Adequacy		14,897 SF	\$377.92	/ SF	\$0	\$0	\$0	\$5,629,877		\$5,629,877
Capital Maintenance										
Interior Upgrades										
Prevent moisture from seeping through the foundation wall and blowing out the plaster	34	1 Ea.	\$21,148.24	/ Еа.		\$21,148				\$21,148
Repair laminate sills windows in the cafeteria that is lifting	35	1 Ea.	\$1,368.12	/ Еа.		\$1,368				\$1,368
Replace dated and damaged casework (50 If of base, top, upper)	36	150 LF	\$389.57	/ LF			\$58,436			\$58,436
Repair plaster that cracking in some areas and paint damaged areas	37	36,729 SF	\$1.65	/ SF		\$60,603				\$60,603
Replace weather stripping and door hardware at all exterior doors	38	10 Ea.	\$1,368.74	/ Еа.	\$13,687					\$13,687
Replace old VCT, assumed to be contaminated with asbestos, replace with new flooring including abatement rocts.	39	2,500 SF	\$24.78	/		\$61,950				\$61,950
Interior Upgrades Subtotal		36,729 SF	\$5.91	/ SF						\$217,193
Exterior Upgrades										
Regrade and landscape to prevent ground water from coming into the basement	40	1 Ea.	\$46,391.85	/ Еа.	\$46,392					\$46,392
Mill and overlay north parking lot asphalt	41	13,684 Ea.	<b>\$5.08</b>	/ Еа.		\$69,515				\$69,515
Remove and replace uneven sidewalks	42	500 SF	\$17.56	/ SF	\$8,779					\$8,779
Add 42 additional parking stalls to the parking lot since it is not large enough	43	10,500 SF	\$14.84	/ SF				\$155,820		\$155,820
Repair cracking on exterior brick and CMU including the chimney	44	36,729 SF	\$3.65	/ SF	\$134,061					\$134,061
Paint the overhangs around the building	45	1 Ea.	\$13,645.36	/ Еа.		\$13,645				\$13,645
Exterior Upgrades Subtotal		36,729 SF	\$11.66	/ SF						\$428,212
Electrical Upgrades										
Replace branch panels throughout building that are noted to be old that are nearing the end of their useful life	46	36,729 SF	\$3.45	/ SF		\$126,672				\$126,672
Add egress lighting to doors to exterior as is required by Building Code	47	36,729 SF	\$1.21	/ SF		\$44,342				\$44,342
Upgrade of all interior lighting controls throughout to digital lighting management	48	36,729 SF	\$2.5 <b>1</b>	/ SF		\$92,125				\$92,125
Upgrade of all exterior lighting controls throughout to digital lighting management	49	36,729 SF	\$0.25	/ SF		\$9,213				\$9,213
Update the existing intercom system with a new IP system throughout entire school	50	36,729 SF	\$3.76	/ SF		\$138,188				\$138,188
Add additional door security all exterior doors with access control and monitoring	51	36,729 SF	\$1.21	/ SF	\$44,342					\$44,342
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Building Code	52	36,729 SF	\$0.69	/ SF	\$25,334					\$25,334
Electrical Upgrades Subtotal		36,729 SF	\$13.07	/ SF						\$480,216

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Viking Elementary School Grand Forks, ND 11/2/2022									ENC	CONSTRUCTION	NON NON NON NON NON NON NON NON NON NON
Facility Assessment Estimate											
	ltem						5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
						Critical	IVIGIIIL		Auequary	needs	
During any new remodel, the pipe hangers and associated piping in the 1958 addition is recommended to be replaced as part of the long term planning.	53	36,729 SF	ш	\$10.14 /	/ SF			\$372,432		×	\$372,432
It is recommended and a city requirement that a grease interceptor be installed to protect	54	36,729 SF	ш	\$4.35 <i> </i>	/ SF	\$159,771					\$159,771
the waste piping system.			_	_							
ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform olumbing code	55	36,729 SF	ш	\$0.32 /	/ SF	\$11,753				×	\$11,753
Mechanical Upgrades Subtotal		36,729 SF	ш	\$14.81 <i> </i>	/ SF						\$543,956
Total Capital Maintenance		36,729 SF	ц.	\$45.46 <i> </i>	/ SF	\$444,119	\$638,769	\$430,868	\$155,820		\$1,669,576
Total Construction Cost		52,526 SF	F.	\$177.84 /	/ SF	\$2,245,665	\$638,769	\$430,868	\$6,025,943		\$9,341,245
*** All above estimated costs are total construction costs. These include general cond	litions, CM J	conditions, CM fees, permits, insurances, bonds, taxes	insuranc	es, bonds, t	saxc						
Contingencies & Soft Costs											
Design Contingency	56	5.0%				\$112,283.27	\$31,938.45	\$21,543.40	\$301,297.14		\$467,062
Construction Contingency	57	5.0%				\$112,283.27	\$31,938.45	\$21,543.40	\$301,297.14		\$467,062
Escalation	58	0.0%				\$0.00	\$0.00	\$0.00	\$0.00		0\$
A & E Fees	59	7.0%				\$157,196.57	\$44,713.83	\$30,160.76	\$421,815.99		\$653,887
FF & E	60	2.0%				\$44,913.31	\$12,775.38	\$8,617.36	\$120,518.86		\$186,825
Owner Contingency	61	1.5%				\$33,684.98	\$9,581.54	\$6,463.02	\$90,389.14		\$140,119
Total Contingencies & Soft Costs						\$460,361	\$130,948	\$88,32 <b>8</b>	\$1,235,318		\$1,914,955
Total Facility Assessment Cost Estimate		52,526 S	SF	\$214.30 /	/ SF	\$2,706,027	\$769,717	\$519,196	\$7,261,261		\$11,256,200
Total Critical & Educational Adequacy		52,526 SF	Ľ,	\$189.76 /	/ SF						\$9,967,288

# COST ANALYSIS CONTINUED

A. EXISTING BUILDING INVENTORY	346
B. ARCHITECTURAL FINISHES	347
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WILDER ELEMENTARY SCHOOL

**FACILITY ASSESSMENT EXISTING BUILDING INVENTORY** ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

# **A. EXISTING BUILDING INVENTORY**

Wilder Elementary School is located at 1009 N 3rd St, Grand Forks, ND and was one of the earlier schools constructed in the district. It was originally built in 1952 and underwent remodeling after the 1997 flood.

Wilder E.S. is accessible by 11th Ave N to the northwest, N 4th St to the southwest, and 10th Ave N to the southeast. There is a small parking lot directly to the northwest of the building.

#### FLOOR PLAN



#### MAIN LEVEL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **B. ARCHITECTURAL FINISHES**

#### SUMMARY

Wilder Elementary School's construction was completed in 1952 with a remodel completed after the 1997 flood. The school lacks in space as larger classrooms were split into two, the gym is also used as the cafeteria, and the nurse's office is too small (001, 002). There is also a lack of storage with the mechanical room acting as a storage room (003). Many elements in the school are dated including casework, tile, and classroom carpet (004, 005, 006). There are only two main restrooms for students that lack accessible stalls.

#### SITE

Concrete and asphalt work around the school show cracking and are in bad condition (007). The school's parking lot is extremely small with current drop-off/pick-up not optimal (008, 009). Main entrance (Door 1) lacks security and is not ideal for accessibility (010). Two portable classrooms are located on the east side of the building (011). Ramps to the portable classrooms are in rough condition (012) as some metal paneling is coming off.

#### MASONRY

The exterior of the building is traditional brick. No visible issues were seen with the brick. Caulking is in bad condition and should be redone (013).

#### ADDITIONAL EXTERIOR MATERIALS

Other exterior materials include EIFS and wood paneling. Cracking is seen along the span of the EIFS and the caulking needs to be redone (014, 015). The wood paneling has no visible issues (016).

#### ROOF

The roof consists of tar and rock. It is checked yearly for any repairs that need to be done.

#### **OPENINGS**

The door openings within the school are in good condition. Wire mesh windows outside are painted shut (017). Due to the age of the windows, the sealant has shrunk and no longer runs the entire width of the glass panels (018). Staff noted that windows and doors are the biggest loss of air.

#### CEILINGS

The ceilings within the school are mostly comprised of Acoustical Ceiling Tile (ACT). No visible issues were seen, besides normal wear.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY **ARCHITECTURAL FINISHES** MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### ARCHITECTURAL FINISHES CONTINUED

#### WALLS

The interior walls are either painted masonry, painted gypsum board, have vinyl wall coverings, or have tiling. There are several areas where the vinyl wall covering is releasing from the gypsum substrate (019). Portions of exterior walls are covered with vinyl covering on the interior. It is recommended the vinyl wall covering be removed from the interior surface of exterior walls, as this could potentially create a double vapor barrier and trap moisture within the walls. Current code does not permit the use of vinyl wall covering on outside walls for this reason.

#### FLOORING

Most of the school consists of carpet. Carpet in the hallways is newer, and the classrooms have older carpet that is worn and dated (020, 021). Portions of the carpet in the library is warping (022). Some classrooms have dated tile in front of the cabinetry (023).

#### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



# C. MECHANICAL/ELECTRICAL ASSESSMENT

#### FIRE PROTECTION

• Fire sprinkler system is currently installed throughout the entire building. Depending on the level of work performed in the building, sprinkler systems may need to be modified to accommodate any new work.

#### PLUMBING

- The kitchen was upgraded in the 1998 project and a grease interceptor was installed in accordance with the city of Grand Forks. The plumbing fixtures in the kitchen as well as the piping all appeared to be in good shape.
- All of the domestic water piping, vent piping and plumbing fixtures were replaced as part of the 1998 project and appear to be in good shape without need of replacement. Portions of the water piping below grade were replaced to accommodate the changes in 1998, otherwise the remainder are original and should still be in good working order.
- The restroom plumbing fixtures throughout the building are currently white vitreous china fixtures with the water closets. The lavatory faucets are a mix of manually operated and sensor activated. The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail. The sink faucets in the classrooms and break rooms are manually operated.
- Domestic hot water is produced by a commercial grade PVI Conquest 399 MBH water heater which is a high quality water heater and in good working order. There is no need to replace this water heater, while continuing to provide regularly scheduled maintenance on the heater to keep it in good working order.
- ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.

#### HEATING

- Heating for the entire building comes from two (2) natural gas fired hot water Weil McLain model LGB-8 boilers. The capacity of each boiler is 910 MBH. The boiler plant is designed to be replaced with a condensing hot water boiler plant as part of the 2022/2023 ESCO project that is currently being bid. As part of the ESCO project, all steam and condensate piping and their associated components will be replaced with a hot water hydronic system.
- The majority of the existing hot water piping throughout will remain in place as it was newly installed as part of the 1998 project and will be extended where required for the ESCO project.
- Perimeter hot water and electric finned tube radiation is installed in some exterior offices, restrooms, and corridors for supplemental heat. Hot water and electric cabinet unit heaters and suspended unit heaters provide heat for vestibules, mechanical rooms, and other similar spaces. These existing devices will remain in place with only the control valves being replaced with new automatic temperature control valves as part of the ESCO project.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### VENTILATION AND EXHAUST

- The kitchen is currently served by a grease exhaust fan, dishwasher exhaust fan and indoor AHU type makeup air unit with recirculation. These units will all be replaced as part of the ESCO project. The majority of the ductwork will remain in place and only modified to accommodate the new units.
- The gymnasium is currently served by a 5,000 CFM indoor air handling unit that will be replaced as part of the ESCO project. Ductwork within the gymnasium will remain and only the ductwork in vicinity of the AHU will be replaced as needed for installation of the new unit.
- The classrooms and office areas are all served by ducted fan coil units that are located above the ceilings. These fan coil units will all be replaced with new as part of the ESCO project. The roof hoods associated with these fan coils that provide the fresh air will be capped with using new roof mounted energy recovery units to provide fresh air from the spaces and capturing exhaust air from toilet rooms and other associated spaces as needed to balance the fresh air and exhaust airflow rates.

#### AIR CONDITIONING

- The office area currently has a split unit air conditioning system. The rest of the building is not currently provided with any means of air conditioning.
- The new 2022/2023 project will install an air cooled chiller with necessary piping components, chilled water cooling coils for fan coil units and chilled water coils for the indoor air handling units and roof mounted dedicated outdoor air units..
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#### AUTOMATIC TEMPERATURE CONTROLS

 There are not proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. All of the controls within the school are planned to be replaced with Direct Digital Controls (DDC) systems as part of a 2022/2023 project. The DDC systems will be integrated into the existing Grand Forks Public School's Building Automation System for central monitoring and control.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### **ELECTRICAL SERVICE**

- Electrical service is delivered to the facility by Xcel Energy via 208/120V pole-mounted transformer located on north side of building.
- Power is routed overhead from the transformer to a service mast at the roof of the school, down to the main service entrance switchboard.
- Peak loads on this transformer in the past 12 months was 67kW (182A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is adequate.

#### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

#### POWER DISTRIBUTION

- The service entrance switchboard is a 208/120V 600A Square D Power Style Switchboard. Power is supplied to all areas of the building from this main switchboard. This includes various distribution panels, mechanical equipment, and branch panels.
- Service entrance switchboard is scheduled to be updated as part of mechanical systems updates taking place within the next year.
- Branch panels throughout building were noted to be in fair condition. While some appear to be nearing the end of their useful life, they are still in work order. These panels are recommended to be replaced with any renovation project.

#### LIGHTING

- The large majority of the building interior consists of fluorescent and incandescent lighting. Areas such as the gym have been updated to LED lighting. Lighting within hallways was noted to be very dim.
- School is currently scheduled to undergo a lighting upgrade project that will replace all non-LED lighting within school with energy-efficient LED lighting. This should cut lighting energy usage by 50-75%.
- Lighting at exterior of building has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- Emergency egress lighting provided via battery back lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

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#### LIGHTING CONTROL SYSTEMS

- Lighting within large majority of school was noted to be controlled via manual toggle switch. Very few areas capable of dimming control.
- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via timeclock and photocell.
- All exterior lighting control is suggested to be tied into digital lighting management, as outlined in interior lighting portion above.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

#### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



#### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building, but not in classrooms. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Recessed speakers were noted to be located all throughout circulation areas and several "normally-occupied" spaces.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done via hardwiring. Clocks consist of primarily digital devices. Several simple battery-powered analog clocks were noted
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of digital displays, short-throw projectors, and classroom sound reinforcement.

#### **SAFETY & SECURITY SYSTEMS**

- A select few exterior entrance doors currently utilize electronic door hardware for entrance.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras. A buzz-in system consisting of a 2-way speaker and camera is located at the school's main entrance.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4005. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices. Frequency of notification devices was noted to be inadequate. Additional devices are required, by Code.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## **D. EXISTING DEFICIENCIES**

The analysis of the existing Wilder E.S. has been broken down into three categories: code compliance/Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- Entry hallway door needs to swing out per occupancy loads, and panic hardware is needed as well. (024)
- Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains. (025, 026)
- Traditional wire glass throughout building is no longer to code as an acceptable type of safety glass. (027, 028)
- Both girl's and boy's restrooms are not accessible. (029, 030, 031)
- Sinks in staff office, staff restroom, and music room are not accessible. (032, 033)
- Restrooms in Kindergarten classes are not accessible as they are missing grab bars. (034)
- All stairs in mechanical rooms do not have handrails on both sides, as required by code. (035, 036)
- Doors 1 and 2 are not protected with enclosed vestibules, as required by energy code. (037, 038)
- The playground is not accessible on all sides. (039)
- Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code. (040)

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The school lacks in space as larger classrooms were split into two, the gym is also used as the cafeteria, and the nurse's office is too small.



There is also a lack of storage with the mechanical room acting as a storage room.

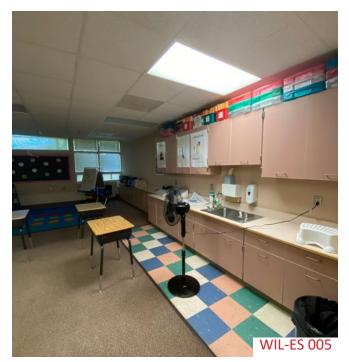


The school lacks in space as larger classrooms were split into two, the gym is also used as the cafeteria, and the nurse's office is too small.



Many elements in the school are dated including casework, tile, and classroom carpet.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Many elements in the school are dated including casework, tile, and classroom carpet.



Many elements in the school are dated including casework, tile, and classroom carpet.



Concrete and asphalt work around the school show cracking and are in bad condition.



The school's parking lot is small with current drop-off/pickup not optimal.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



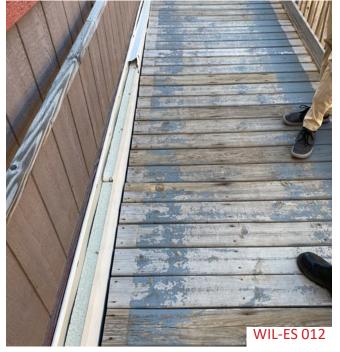
The school's parking lot is small with current drop-off/pickup not optimal.



Main entrance (Door 1) lacks security and is not ideal for accessibility.



Two portable classrooms are found on the east side of the building.



Ramps to the portable classrooms are in rough condition as some metal paneling is coming off.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Caulking is in bad condition and should be redone.



Cracking was seen along the span of the EFIS along with the caulking needing to be redone.



Cracking was seen along the span of the EFIS along with the caulking needing to be redone.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The wood paneling had no visible issues.



Wire mesh windows outside are painted shut.



Due to the age of the windows, the sealant has shrunk and no longer runs the entire width of the glass panels.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



There were several areas where the vinyl wall covering is releasing from the gypsum substrate..



New carpet was installed in the hallways but the classrooms have worn, dated carpet.



New carpet was installed in the hallways but the classrooms have worn, dated carpet.



Portions of the carpet in the library is warping.

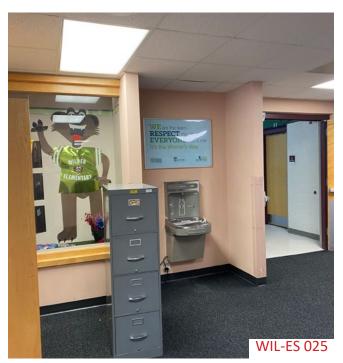
**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Some classrooms have dated tile in front of cabinetry.



Entry hallway door needs to swing out per occupancy loads, and panic hardware is needed as well.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.



Drinking fountains throughout the building do not meet the required ratio of wheelchair accessible fountains to standing person accessible fountains.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Traditional wire glass throughout building is no longer to code as an acceptable type of safety glass.



Traditional wire glass throughout building is no longer to code as an acceptable type of safety glass.



Both girl's and boy's restrooms are not accessible.



Both girl's and boy's restrooms are not accessible.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Both girl's and boy's restrooms are not accessible.



Sinks in staff office, staff restroom, and music room are not accessible.

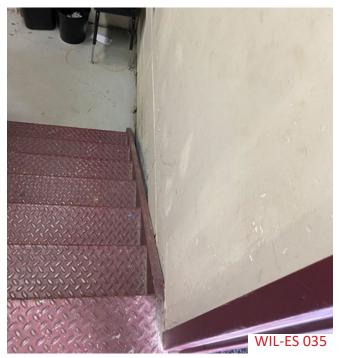


Sinks in staff office, staff restroom, and music room are not accessible.



Restrooms in Kindergarten classes are not accessible as they are missing grab bars.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



All stairs in mechanical rooms do not have handrails on both sides, as required by code.



All stairs in mechanical rooms do not have handrails on both sides, as required by code.



Doors 1 and 2 are not protected with enclosed vestibules, as required by energy code.



Doors 1 and 2 are not protected with enclosed vestibules, as required by energy code.

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The playground is not accessible on all sides.



Portions of exterior walls are covered with vinyl wall covering on the interior side, which is not to code.

# WILDER ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### EXISTING DEFICIENCIES CONTINUED

### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	1,943 SF	2,060 SF	-117
Athletics	2,667 SF	3,300 SF	-633
Circulation	3,535 SF	7,258 SF	-3,723
Classrooms	6,227 SF	11,450 SF	-5,223
Common Spaces	614 SF	1,500 SF	-886
Food Service/Cafeteria	618 SF	2,612 SF	-1,994
Library/Media Center	1,566 SF	892 SF	674
Mechanical/Electrical	1,390 SF	1,815 SF	-425
Music	691 SF	1,000 SF	-309
Restrooms	771 SF	605 SF	166
Special Education	959 SF	1,800 SF	-841

Total Missing Square Footage -13,311

# WILDER ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### EXISTING DEFICIENCIES CONTINUED

### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

### LACK OF LEARNING/COLLABORATION/SUPPORT SPACES

- Space is needed for large assemblies.
- There is not enough storage space throughout the school.
- There is not enough collaborative learning spaces.
- Specialized programs do not have rooms.
- There are no sensory rooms.
- Gymnasium is used for physical education, lunch, and assemblies.
- Social worker and counselor currently share an office.

### PARKING AND STUDENT DROP-OFF/PICK-UP

- The pick-up and drop-off area is not adequate, especially in the winter months.
- There is not enough parking to accommodate staff.

### SECURITY/SAFETY

- There are not vestibules at every door.
- There is a need for an improved secure main entrance.
- Fire alarms are hard to hear in certain areas of the school.

### **TOP PRIORITIES**

- 1. New Secure Entrance with Improved Student Drop-Off/Pick-Up
- 2. Additional Learning/Collaboration/Support Spaces
- 3. Mechanical and HVAC Upgrades

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Facility Assessment									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Code Compliance									
Change swing on entry hallway doorway for occupancy loads and add panic hardware	1	1 Ea	\$3,615.44 / Ea	a \$3,615	515				\$3,615
Replace water fountains within sinks that are not to code	2	1 Ea	\$22,055.01 / Ea	a \$22,055	355				\$22,055
Replace wire glass throughout the building that is no longer up to code (frame to remain)	ε	40 Ea	\$499.29 / Ea	a \$19,972	226				\$19,972
Remodel girls and boys restrooms to make them ADA accessible	4	2 Ea	\$50,964.43 / Ea	a \$101,929	329				\$101,929
Add ADA accessible sinks in staff office, staff restroom, and music room by replacing 10 If of base, tops, and upper cabinets in each of staff office and music room	S	3 Ea	\$15,340.23 / Ea	a \$46,021	221				\$46,021
Change faucet in the sinks throughout that have a water fountain within them which is no longer to code	9	5 Ea	\$5,671.29 / E	Ea \$28,356	356				\$28,356
Add grab bars in the kindergarten restrooms that are missing grab bars	7	2 Ea	\$478.09 / E	Ea \$5	\$956				\$956
Add handrails to the stairs in mechanical area	8	120 LF	\$131.89 / L	LF \$15,826	326				\$15,826
Add interior vestibule to doors 1 and 2	6	2 Ea	\$18,446.81 / E	Ea \$36,894	394				\$36,894
Create an ADA accessible entrance to the playground	10	1 LS	\$12,602.87 / L	LS \$12,603	503				\$12,603
Replace the sheetrock (tape and paint) on the exterior walls where moisture was trapped in side	11	4,800 SF	\$14.80 / S	SF \$71,046	346				\$71,046
Total Code Compliance		22,333 SF	\$16.09 / SF	;F \$359,273	73 \$0	\$0	¢0		<b>\$359,273</b>
Security									
Secure entrance, administration office and special education relocation remodel	12	2,720 SF	\$266.94 / SF	ц			\$726,077		\$726,077
Total Security		2,720 SF	\$266.94 / SF		\$0 \$0	\$0	\$726,077		\$726,077
Addition/Remodel (Educational Adequacy)									
Administration	13	117 SF	\$339.20 / SF	ш			\$39,686		\$39,686
Art	14	SF	\$351.74 / SF	ш			0\$		\$0
Athletics	15	633 SF	\$360.52 / SF	ц			\$228,208		\$228,208
Auditorium	16	SF	\$485.35 / SF	ш			0\$		\$0
Business Education	17	SF	\$376.82 / S	SF			0\$		\$0
Circulation	18	3,723 SF	\$376.83 / SF	ц			\$1,402,949		\$1,402,949
Classrooms	19	5,223 SF	\$376.82 / SF	Ŀ			\$1,968,126		\$1,968,126
Common Spaces	20	886 SF	\$393.12 / SF	ш			\$348,305		\$348,305
FACS	21	SF	\$393.12 / S	SF			\$0		\$0
Food Service/Cafeteria	22	1,994 SF	\$458.33 / SF	ш			\$913,905		\$913,905
Library/Media Center	23	SF	\$395.63 / S	SF			0\$		\$0
Mechanical/Electrical	24	425 SF	\$307.85 / S	SF			\$130,838		\$130,838
Music	25	309 SF	\$401.90 / S	SF			\$124,187		\$124,187
Restrooms	26	SF	\$464.61 / SF	F			\$0		\$0
Science	27	SF	/	SF			\$0		\$0
Special Education	28	841 SF	\$340.28 / SF	н			\$286,172		\$286,172
Technical Education	29	SF	\$381.83 / SF	ш			\$0		\$0

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# Wilder Elementary School Grand Forks, ND 11/2/2022



Facility Assessment									
Description	ltem Number	Takeoff Qty	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
Technology Education	30	SF	\$394.37 / SF				0\$		\$
Total Adequacy		14,151 SF	\$384.59 / \$	SF	\$0 \$0	0\$ ¢0	\$5,442,375		\$5,442,375
Capital Maintenance									
Interior Upgrades									
Repair the vinyl wall covering that is peeling up	31	1 Ea	/	e	\$13,611	1			\$13,611
Replace carpet in the classrooms	32	6,905 SF	\$10.67 / SF		\$73,670	0			\$73,670
Replace the carpet in the library (exclude moving book shelves, assumed by owner)	33	1,600 SF	\$13.15 / SF		\$21,046	9			\$21,046
Replace VCT in classrooms in front of cabinetry that is outdated (labeled as tile in report)	34	432 SF	\$8.67 / SF	L.	\$3,745	2			\$3,745
Replace aged casework in 8 classrooms	35	672 LF	\$413.58 / LF		\$277,924	4			\$277,924
Interior Upgrades Subtotal		22,333 SF	\$17.46 / SF						\$389,996
Evenine I Jameadoe									
Mill and overlay cracking asphalt parking lot (940 SY) and replace damaged concrete (600	36	1 Ea	\$52,868.98 / Ea	e		\$52,869			\$52,869
Sf) Add a ramn at main antrance (Door 1) and addreec eccurity.	27	100 CE	¢70 E0 / CE	ς ¢7 θεΩ	250				¢7 050
	/c		<b>`</b>		000				DCC'1¢
Replace ramp decking and railing (deck structure and stairs to remain) on to the portable reservence that are in rough condition and remain damaged flacking	38	600 SF	\$109.11 / SF			\$65,464			\$65,464
Replace caulking that is in bad condition on exterior traditional brick	39	11,720 SF	\$13.86 / SF		\$162,476	9			\$162,476
Caulk the cracking along the EFIS	40	1,000 LF	\$2.52 / LF	۶2,521 ¢2,521	521				\$2,521
Unstick the windows (wire mesh) that are painted shut	41	1 Ea	\$855.85 / Ea	B	\$856	9			\$856
Replace the roof when it nears the end of its useable lifetime	42	22,233 SF	\$34.46 / SF			\$766,149			\$766,149
General maintenance of the windows as needed that appear to be leaking in the frame	43	14 Ea	\$504.11 / Ea	e	\$7,058	8			\$7,058
Exterior Upgrades Subtotal		22,333 SF	\$47.70 / SF						\$1,065,343
Electrical Ilnorades									
Replace branch panels that are at end of their useful life	44	22,333 SF	\$2.94 / SF	F \$65,745	745				\$65,745
Add egress lighting to doors to exterior as is required by Building Code	45		/		222				\$4,222
Upgrade of all interior lighting controls throughout to digital lighting management	46	22,333 SF	/	SF	\$42,219	6			\$42,219
Upgrade of all exterior lighting controls throughout to digital lighting management	47	22,333 SF	\$0.19 / SF	L.	\$4,222	2			\$4,222
Update the existing intercom system with a new IP system throughout entire school	48	22,333 SF	\$1.89 / SF	ц.	\$42,219	6			\$42,219
Add additional door security all exterior doors with access control and monitoring	49	22,333 SF	\$0.85 / SF	F \$18,904	904				\$18,904
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Buildine Code	50	22,333 SF	\$0.69 / SF		\$15,480	0			\$15,480
Electrical Upgrades Subtotal		22,333 SF	\$8.64 / SF	ш					\$193,011

Wilder Elementary School Grand Forks, ND 11/2/2022								ECO	CONSTRUCTION ENGINEERS	NOL
Facility Assessment										
	ltem					5 yrs Deferred	10 yrs	Educational	Synergistic with other	
Description	Number	Takeoff Qty		Total Cost/Unit	Critical	Maint	<b>Deferred Maint</b>	Adequacy	needs	Total Cost
Mechanical Upgrades										
Modify existing sprinklers to meet NFPA standards as necessary	51	22,333 S	SF \$	\$0.63 / SF	\$14,073					\$14,073
The school has been replacing the lavatory sensor faucets with manual faucets as mixing valves and/or sensors start to fail. The sink faucets in the classrooms and break rooms are	52	22,333 S	\$ SF	\$1.26 / SF		\$28,146				\$28,146
manually operated. Add ACCE 1070 thormoretic minime vehice to mublic laurterice for reald protoction in	C 3	3 666 66		22 / CE		9CU 23				¢7 036
Add ASSE 1070 thermostatic mixing valves to public lavatories for scald protection in accordance with the uniform plumbing code.	50	2 252,22	<del>ک</del>	50.32 / Sr		05U,1¢				05U,1¢
Replace all existing pneumatic controls with a direct digital control system	54	22,333 S	SF \$1	\$12.05 / SF		\$269,076				\$269,076
Mechanical Upgrades Subtotal		22,333 S	SF \$1	\$14.25 / SF						<b>\$318,331</b>
Total Capital Maintenance		22,333 S	SF \$88	\$88.06 / SF	\$113,415	\$968,784	\$884,482	\$0		\$1,966,681
Total Construction Cost		39,204 SF	;F \$216.67	.67 / SF	\$472,688	\$968,784	\$884,482	\$6,168,452		\$8,494,405
*** All above estimated costs are total construction costs. These include general condi	itions, CM	fees, permits	conditions, CM fees, permits, insurances, bonds, taxes	bonds, tax	es.					
Contingencies & Soft Costs										
Design Contingency	55	5.0%			\$23,634.38	\$48,439.18	\$44,224.12	\$308,422.59		\$424,720
Construction Contingency	56	5.0%			\$23,634.38	\$48,439.18	\$44,224.12	\$308,422.59		\$424,720
Escalation	57	0.0%			\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	58	7.0%			\$33,088.13	\$67,814.85	\$61,913.77	\$431,791.63		\$594,608
FF & E	59	2.0%			\$9,453.75	\$19,375.67	\$17,689.65	\$123,369.04		\$169,888
Owner Contingency	60	1.5%			\$7,090.31	\$14,531.75	\$13,267.24	\$92,526.78		\$127,416
Total Contingencies & Soft Costs					\$96,901	\$198,601	\$181,319	\$1,264,533		\$1,741,353
Total Facility Assessment Cost Estimate		39,204 S	SF \$261.09	.09 / SF	\$569,589	\$1,167,384	\$1,065,801	\$7,432,984		\$10,235,758
Total Critical & Educational Adequacy		39,204 S	SF \$204.13	.13 / SF						\$8,002,573

COST ANALYSIS CONTINUED

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# **A. EXISTING BUILDING INVENTORY**

Winship Elementary School is located at 1412 5th Avenue N in Grand Forks. The original building was built in 1973 and there was a remodel in 2001 to rework the hallways in the building to allow for more emergency exits.

The school is accessible by N 15th Street to the west, 6th Avenue N to the north, N 14th Street to the east, and 5th Avenue N to the south. There is a small, staff parking lot to the southeast of the school and parent drop off/pick up happens directly on 15th St.

### FLOOR PLAN



### MAIN LEVEL

# **B. ARCHITECTURAL FINISHES**

### SUMMARY

Winship Elementary School was completed in 1973 and underwent a remodel in 2001. The school lacks smaller learning spaces to accommodate breakout sessions for a variety of needs. Many of the classrooms are split by shelves and partial walls to simulate smaller areas for individualized learning, which is not ideal (001). There are two kindergarten classrooms that have entrances directly off the building's main entryway vestibule, creating a safety and security concern. The nurse's office lacks space to accommodate both the nurse and a student. A larger room would allow for more than one student at a time to be there with the nurse (002). More storage space within the building is needed as the mechanical room is filled with surplus furniture and other materials (003). The casework in the building is dated but is functionally sound (004). The finishes on the interior of the school are in relatively good shape with flooring in the cafeteria and gymnasium being recently completed. The exterior of the building is in very poor condition and needs attention.

### SITE

The asphalt on the site has a lot of cracking and is uneven near the entrances, which creates issues for accessibility (005). Numerous downspouts do not have concrete splash blocks underneath them to reduce water damage to the site (006). Downspouts near the main entry door wash rainwater from the roof drainage over the site paving causing for ice damming in winter months. This creates a hazard for students, staff, and parents entering the school from this door as this area becomes extremely slippery. Door 4 needs a concrete stoop on the exterior (007). Several emergency exit doors have concrete stoops that need to be connected to public ways (008). Neither of the playgrounds are accessible and both have sand bases which should be swapped with a safer alternative (009). There is a parking shortage causing staff and visitors to park on the street. The current drop-off area is not ideal as it takes place directly off the street. The residential streets are narrow creating congestion and potentially unsafe drop-off and pick-up conditions. Winter months only heighten these concerns.

### MASONRY

The exterior brick is overall in good condition. There is some cracking seen near the exterior doors of the mechanical room (010). Caulking around the windows could use some attention (011).

### ADDITIONAL EXTERIOR MATERIALS

Besides the brick, the rest of the exterior is made of different types of painted wood siding. The wood on the exterior is in very poor condition and should be replaced in the coming years. The wooden baseboard does not have the appropriate flashing for water protection (012), therefore the wood is rotting and falling off in several areas (013, 014, 015). The paint is peeling off as well, further reducing the water protection of the exterior (016, 017). The plastered wood over the entrance is showing signs of age and is deteriorating (018).

### ROOF

The roof is around 12 years old, but there haven't been any major issues. There is paint flaking off certain portions of the coping and flashing (019). The gutter adjacent to Door 3 is damaged (020).

## ARCHITECTURAL FINISHES CONTINUED

### **OPENINGS**

The current windows are original from 1973 and could use replacement as they are nearing the end of their lifespan and are not energy efficient. No visible issues were noted with the doors.

### CEILINGS

The majority of the ceilings are acoustical ceiling tile (ACT) and are in great condition. There are only a few water spots seen in the resource room (021).

### WALLS

The main interior wall types are painted concrete masonry units (CMU) and painted gypsum board. There is some cracking in the CMU seen within the gymnasium (022, 023). A gypsum board wall in the gymnasium needs painting after an attached bench was removed (024). In Room 147C, the CMU paint has patches and could use some retouching (025).

### FLOORING

The floors in Winship are either carpet or various types of tile. The carpet in the hallway was recently replaced, but the classrooms still have old carpet (026). Some portions of original tile in the bathrooms, offices and support spaces are dated, but still in relatively good shape (027). The vinyl flooring in the cafeteria was recently updated. The gym floor was recently redone and is in great shape (028).

### SECURITY

Although security cameras are present at the doors, there is no direct visibility from the office to the main entrance. Ideally, all visitors should be directed into the office upon entry, before gaining access into the school.



# C. MECHANICAL/ELECTRICAL ASSESSMENT

### **FIRE PROTECTION**

There are no fire sprinkler systems currently installed anywhere in the building. Depending on the level of work performed in the building, a fire suppression sprinkler system may need to be installed throughout the building.

### PLUMBING

Plumbing piping throughout the building is concealed in the walls and above the ceilings in public areas. Piping that can be observed in mechanical spaces appears to be in good condition. Maintenance staff reported that there have not been issues with leaking pipes or other similar deficiencies.

The restroom plumbing fixtures throughout the building are white vitreous china fixtures. Student area water closets and urinals have manual operated flush valves and lavatories have manual faucets. Staff restroom water closets have sensor activated flush valves. The sinks in the classrooms and break rooms are stainless steel with manually operated faucets. Classroom sinks also have bubblers for drinking water.

Domestic hot water for the building is produced by a single 76 MBH gas fired water heaters with integral storage tanks. The water heater was built in 2017 and is in good condition.

Thermostatic mixing valves meeting ASSE 1070 requirements should be added to public lavatories for scald protection.

### HEATING

Heating for the building comes from ten (10) gas fired rooftop units and one (1) gas fired furnace. Rooftop units were installed in 2017 and are in good condition. Rooftop units have indirect fired gas burners. Two-stage gas valves are provided for some heat output modulation but have limited turndown. During shoulder seasons, when outside air is cooler, but the space heating requirements are minimal, this can lead to significant swings in discharge air temperature and reduced thermal comfort.

An existing hot water heating system was installed throughout the building but has been removed. Piping and hot water cabinet unit heaters have been abandoned and can be seen in vestibules and by exterior doors. No new supplemental heating system was provided.

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### VENTILATION AND EXHAUST

The ventilation and exhaust systems in the school comes from ten (10) rooftop units, one (1) furnace, and various exhaust fans. Rooftop units were installed in 2017 and are in good condition.

With the limited capacity and modulation for the heating and cooling of the single zone rooftop units, outside air is often limited to mitigate some comfort issues. The rooftop units did not appear to have controls or systems in place for outdoor air measuring and monitoring. Indoor Air Quality should be addressed throughout the building to meet ASHRAE 62.1 for controllable ventilation rates.

Roof mounted exhaust fans are provided for the building with the exhaust fan for the kitchen being an upblast grease exhaust time. The exhaust fans serving the restrooms in the building were not operational at the time of the walkthrough and should be replaced with new.

### **AIR CONDITIONING**

Air conditioning systems in the school consists of ten (10) packaged DX rooftop units, and one split system AC unit with associated cased indoor coil. Rooftop units were installed in 2017 and are in good condition. Compressors for the air conditioning system are either single stage or two stage depending on size. These single zone cooling units offer little dehumidification during part load cooling days when the cooling either cycles on and off, or when significant cooling is not required.

### **AUTOMATIC TEMPERATURE CONTROLS**

Standalone controls with low voltage thermostats are provided for each of the rooftop units and the furnace in the building. These offer limited control of the equipment and no capability for monitoring or alarm from the system. There is no building wide Building Automation System (BAS) currently installed in the building.

A Johnson Controls Inc. (JCI) control system was installed originally in the building but has since been abandoned.

There are not proper controls or air flow monitoring to control ventilation rates based on occupancies or to verify ASHRAE 62.1 requirements for recommended outdoor air are being met. It is recommended that all existing pneumatic controls be replaced with DDC systems. The DDC system should be integrated with the existing Grand Forks Public School's Building Automation System (BAS). The system would be integrated across the district to allow for single stop monitoring and controls of all buildings in the district.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



### **ELECTRICAL SERVICE**

- Power is delivered to facility via electrical service provided by Xcel Energy.
- The electrical service consists of a 225kVA 208/120V 3-phase padmount transformer located near southeast entrance of the building. Power is routed underground from the transformer to a CT cabinet located within the service entrance electrical room to the north. Power is then routed to the main service entrance switchboard adjacent to the CT cabinet.
- Peak load on this transformer in the past 12 months was 65kW (181A), as provided by Xcel Energy.
- Electrical service appears to be acceptable, as is. Capacity is more than adequate.

### **STANDBY POWER**

- A generator is not currently located on-site.
- No improvements are suggested for generator power. While emergency generator power is useful, it is not required.

### POWER DISTRIBUTION

- The building's main electrical service is delivered underground into a 208/120V 3-phase 1200A main fused disconnect. Power is the routed from the disconnect to a 1200A ITE FC-20 switchboard. Switchboard was installed in 1974 and is original to building. Power to all areas of the building is supplied from this main switchboard via fused disconnects. This includes various distribution panels, branch panels, and mechanical equipment.
- All electrical panels are also original to building and are at or nearing their end of useful life.
- While all electrical distribution equipment is still operating correctly, it is suggested that all equipment be replaced in the near future. All equipment is near or past its end of useful life and can, at some point in the near future, present a safety concern.
- No maintenance receptacles were observed at the roof level for the maintenance of mechanical equipment. Receptacles are required by Code.

### LIGHTING

- The large majority of the building interior consists of fluorescent lighting. Original gym light fixtures remain, but bulbs have been replaced with LED.
- An upgrade of all interior lighting to energy-efficient LED lighting is suggested. This would cut lighting energy usage by 50-75%.
- Limited exterior lighting was observed. Lighting at exterior has been upgraded to energy-efficient LED lighting with either new light fixtures, or new LED bulbs within existing light fixtures.
- It is suggested that additional exterior lighting be added for safety and security purposes. All new lighting is recommend to be LED.
- Emergency egress lighting provided via battery pack lighting. Exit signage appeared to be adequate.
- The addition of building mounted exterior emergency egress lighting at each and every exit door is suggested.

### LIGHTING CONTROL SYSTEMS

• All lighting within school was noted to be controlled via manual toggle switch. Very few areas capable of dimming control.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

## MECHANICAL/ELECTRICAL ASSESSMENT CONTINUED



- Upgrade of all lighting controls throughout to digital lighting management is suggested. This includes, but is not limited to, occupancy sensors, vacancy sensors, daylight sensors, dimming controls in majority of spaces, and digital monitoring of all controls via manufacturer provided software.
- All exterior lighting is controlled via centrally-located photocell.
- All exterior lighting control is suggested to be tied into digital lighting management, as outline in interior lighting portion above.

### COMMUNICATIONS SYSTEMS

- Majority of data cabling within school consists of Category 5 and 5e cabling, with all newly-installed cabling being Category 6. Several wireless access points were noted throughout building. Coverage seemed to be adequate for general use.
- Telecom service appears to be adequate and is being updated over time, internally.
- Intercom system consists of Simplex 5100 Series Building Communication System. Recessed speakers were noted to be located all throughout circulation areas, in all classrooms, and in almost all "normally-occupied" spaces.
- IP phones are located in all classrooms for room-to-room communication.
- Centrally-controlled clock system is manufactured by Simplex with clocks located all throughout school. All communication between clocks and central system is done via hardwiring. Clocks consist of primarily analog devices. It was stated that as clocks become unusable, they are replaced by simply battery-power clocks.
- It is suggested that the existing intercom system be updated to new IP system throughout entire school. This would provide the functionality to adjust the utilization and grouping of each individual speaker, as desired. This system would also include an upgraded wireless clock system. The intercom system and clock system would communicate with manufacturer provided software to set schedules, announcements, bells, etc.
- Classroom technology varied between classrooms. Technology observed consisted of digital displays and classroom sound reinforcement.

### SAFETY & SECURITY SYSTEMS

- Electronic door security was observed on three out of five exterior doors.
- It is suggested that additional door security is added to all exterior doors for the purposes of access control and monitoring.
- Security camera systems, at the interior and exterior, have been updated over time to IP-based cameras. A buzz-in system consisting of a 2-way speaker and camera is located at the main entrance.
- System appears to be adequate and can be easily added to by school's IT department, as necessary.
- Fire alarm control panel is Simplex 4020. Pull stations noted to be located at each exit of building. Fire detection noted to be adequate. Notification consists of strobes and horn/strobe devices. Devices were noted to have been updated within the past several years.
- It is suggested that the fire alarm system be upgraded to a voice-capable system as is currently required by the North Dakota Building Code This system would emit voice messages instructing occupants what to do in an emergency situation. This would be in lieu of a horn sounding in an emergency, as the system currently does.

# **D. EXISTING DEFICIENCIES**

The analysis of the existing Winship Elementary School has been broken down into three categories: code compliance/ Americans with Disabilities Act (ADA) compliance, educational adequacy, and capital maintenance. The facility has been assessed for deficiencies as defined below:

1. Code Compliance/Americans with Disabilities Act (ADA) Compliance

This includes evaluation of the current building codes required by the City of Grand Forks and the State of North Dakota. Non-compliant items within the building have been identified and are listed below.

- The building does not have a sprinkler system.
- Classrooms that have no sprinkler system need two ways of egress per fire codes.
- Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass. (029)
- Sinks in classrooms and offices are not accessible. (031)
- Many doors throughout the building have hardware that is not accessible. (032)
- The bathrooms accessed through Room 102D are not accessible. (033)
- Door 1, 3 and 7 are not protected with an enclosed vestibule, as required by energy code. (034, 035)
- Prep surfaces in the kitchen need to be stainless steel for food safety. (036)
- Staff restroom is not accessible. (037)
- The library is lacking a secondary exit per its' size and occupancy load requirements.
- Interior windows in the library and main office do not have safety glass as required by code. (038)
- The door into the food safety office is not fire-rated.
- Numerous doors have glass windows that are not safety glass as required by code. (039)
- Sinks outside of the student restrooms are not accessible. (040)
- The pathway to the accessible stalls in the restrooms does not meet maneuverability requirements. (041)

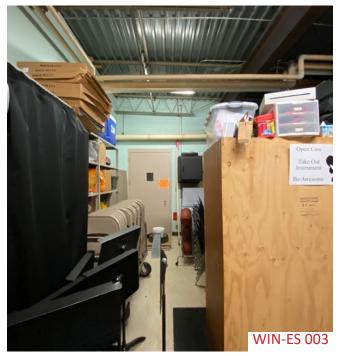
### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



 Image: Constrained state stat

Many of the classrooms are split by shelves and partial walls to simulate smaller areas for individualized learning which is not ideal.

The nurse's office has little space, and a bigger room would allow for more than one student to be in there at a time.



More storage space within the building is needed at the mechanical room is filled with objects.



The casework in the building is dated but is functionally sound.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



The asphalt on the site had lots of cracking and was uneven near the entrances which creates issues for accessibility.



Numerous downspouts did not have concrete splash blocks underneath them to reduce water damage to the site.



Door 4 needs a concrete stoop on the exterior.



Several emergency exit doors had concrete stoops that need to be connected to public ways.

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX



Both are the playgrounds are not accessible and have sand bases which should be swapped with a safer alternative.



There was some cracking seen near the exterior doors of the mechanical room



Caulking around the windows could use touching up.



The wooden baseboard does not have the appropriate flashing for water protection.

### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



The wooden baseboard does not have the appropriate flashing for water protection, therefore the wood is rotting and falling off in a number of areas.



The wooden baseboard does not have the appropriate flashing for water protection, therefore the wood is rotting and falling off in a number of areas.



The wooden baseboard does not have the appropriate flashing for water protection, therefore the wood is rotting and falling off in a number of areas.



The paint is peeling off as well, further reducing the water protection of the exterior.



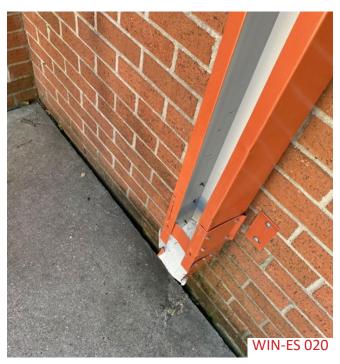
The paint is peeling off as well, further reducing the water protection of the exterior.



The plastered wood over the entrance is showing signs of age and is deteriorating.



There is paint flaking off certain portions of the flashing.



The gutter adjacent to door 3 is damaged.



There were only a few water spots seen in the resource room.



There was some cracking in the CMU seen within the gymnasium.



There was some cracking in the CMU seen within the gymnasium.

### INTERIOR AND EXTERIOR EXISTING DEFICIENCIES PHOTOS



A gypsum board wall in the gymnasium needs painting after an attached bench was removed.



In Room 147C, the CMU paint has patches and could use some retouching.



The carpeting in the hallway was recently replaced, but the classrooms still have old carpet.





Some portions of original tile in the bathrooms, offices and support spaces are dated, but still in good shape.

The gym floor was recently redone and is in great shape.



Traditional wire glass throughout the building is no longer to code as an acceptable type of safety glass.



Water fountains within sinks are no longer to code.



Sinks in classrooms and offices are not accessible.



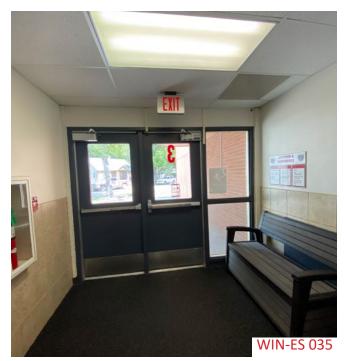
Many doors throughout the building have hardware that is not accessible.



The bathrooms accessed through Room 102D are not accessible.



Door 1, 3 and 7 are not protected with an enclosed vestibule, as required by energy code.



Door 1, 3 and 7 are not protected with an enclosed vestibule, as required by energy code.



Prep surfaces in the kitchen need to be stainless steel for food safety.



Staff restroom is not accessible.



Interior windows in the library and main office do not have safety glass as required by code.



Numerous doors have glass windows that are not safety glass as required by code.



Sinks outside of the student restrooms are not accessible.



The pathway to the accessible stalls in the restrooms does not meet maneuverability requirements.

### EXISTING DEFICIENCIES CONTINUED

### EDUCATIONAL ADEQUACY

This is a review of applicable Department of Public Instruction recommendations as they relate to Grand Forks Public Schools' curriculum. To understand educational space deficiencies, we have evaluated educational models, curriculum configurations, and quantity and quality of existing spaces in comparison to the option of a modern, purpose-built educational facility.

Area	Current Square Footage	DPI Recommended Square Footage	Difference
Administration	1,339 SF	1,990 SF	-651
Athletics	3,685 SF	3,300 SF	385
Circulation	2,874 SF	7,952 SF	-5,074
Classrooms	8,304 SF	10,900 SF	-2,596
Food Service/Cafeteria	3,142 SF	3,528 SF	-386
Library/Media	1,491 SF	1,083 SF	408
Mechanical/Electrical	2,004 SF	1,988 SF	16
Music	870 SF	1,600 SF	-730
Restrooms	617 SF	663 SF	-46
Special Education	2,029 SF	3,000 SF	-971

Total Missing Square Footage -9,645

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

### EXISTING DEFICIENCIES CONTINUED

### ADMINISTRATION/PTO COMMENTS AND FEEDBACK

### AIR QUALITY/CONTROL

- It is not consistent throughout the school. One room may be hot while the other is cold.
- It can get very humid in the school.

### LACK OF COLLABORATION/LEARNING/SUPPORT SPACES

- There are several classrooms within the same grade level that are very different sizes.
- There are not enough collaboration spaces.
- Four special education teachers share one room.
- There are not enough quiet spaces for students.
- There is a need for trauma response areas for trauma-exposed students.
- Band and orchestra shares spaces with PT and OT.

### PARKING AND STUDENT DROP-OFF/PICK-UP

- Parking lot is too small.
- The drop-off/pick-up area can get very congested.

### UPDATED FINISHES/EXTERIOR AND MORE NATURAL LIGHT

### **TOP PRIORITIES**

- 1. Additional Classroom Space
- 2. Updated Security
- 3. Improved Exterior Maintenance

# E. COST ANALYSIS

Winship Elementary School Grand Forks, ND 11/2/2022



11/2/2022								EN	GINEERS	2
Facility Assessment Estimate										
Description	ltem Number	Takeoff Qtv	Total Cost/Unit		Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
ADA and Building Code Compliance										
Replace wire glass throughout the building that is no longer up to code (frame to remain)	1	320 SF	\$33.65 /	/ SF	\$10,768					\$10,768
Replace casework (20lf of base, top, and upper) per classroom and sinks in classrooms are not accessible	2	17 Ea.	\$27,897.46 /	/ Ea.	\$474,257				×	\$474,257
Upgrade door hardware with ADA hardware	е	50 Ea.	\$983.61 /	Ea.	\$49,180					\$49,180
Remodel the restroom through 102D by expanding one toilet stall into room 102C to make it the stall accessible	4	1 Ea.	\$25,753.35 /	Ea.	\$25,753				×	\$25,753
Add interior vestibules to doors 1, 3 and 7 per the energy code	2	3 Ea.	\$29,683.02 /	/ Ea.	\$89,049					\$89,049
Replace prep surfaces in the kitchen with stainless steel for food safety	9	1 Ea.	\$98,411.76 /	/ Ea.	\$98,412					\$98,412
Remodel staff restroom to make them accessible	7	2 Ea.	\$39,915.61 /	Ea.	\$79,831				×	\$79,831
Add a secondary exit to the library per occupancy load requirements	8	1 Ea.	\$3,508.60 /	Ea.	\$3,509					\$3,509
Replace glazing in the interior windows in the library and main office with tempered glass for safery reasons.	6	96 SF	\$58.93 /	/ SF	\$5,657					\$5,657
Replace the door into the food safety office with fire rated door frame and hardware	10	1 Ea.	\$3,582.22 /	/ Еа.	\$3,582					\$3,582
Replace glazing in some doors with tempered glass	11	10 Ea.	\$516.57 <i>/</i>	Ea.	\$5,166					\$5,166
Replace sinks (4 sinks total in 2 locations) outside of the student restrooms with accessible sinks	12	2 Ea.	\$17,332.63 /	/ Ea.	\$34,665				х	\$34,665
Remodel the center bathrooms to make them accessible	13	900 SF	\$292.03 /	SF	\$262,827				×	\$262,827
Add grab bars to the lowered urinal in the boys' restroom	14	2 Ea.	\$154.22 <i>/</i>	Ea.	\$308					\$308
Total Code Compliance		28,295 SF	\$40.39 <i> </i>	SF \$	\$1,142,965	0\$	0\$	0\$		\$1,142,965
Security										
Secure entrance and administration office remodel	15	1,665 SF	\$266.94 /	/ SF				\$444,455		\$444,455
Total Security		1,665 SF	\$266.94 /	SF	\$0	\$0	\$0	\$444,455		\$444,455
Addition/Remodel (Educational Adequacy)										
Administration	16	651 SF	\$339.20 / SF	SF				\$220,819		\$220,819
Art	17	SF	\$351.74 /	SF				0\$		\$0
Athletics	18	SF	`	/ SF				0\$		\$0
Auditorium	19	SF	1	/ SF				\$0		\$0
Business Education	20	SF	\$376.82 /	SF				\$0		\$0
Circulation	21	5,078 SF	\$376.83 /	SF				\$1,913,558		\$1,913,558
Classrooms	22	2,596 SF	\$376.82 /	SF				\$978,222		\$978,222
Common Spaces	23	SF	\$393.12 /	SF				\$0		\$0
FACS	24	SF	\$393.12 /	SF				\$0		\$0
Food Service/Cafeteria	25	386 SF	/	SF				\$176,914		\$176,914
Library/Media Center	26	SF	/	SF				\$0		\$0
Mechanical/Electrical	27	SF	\$307.85 /	SF				\$0		\$0
Music	28	730 SF	1	SF				\$293,386		\$293,386
Restrooms	29	46 SF	~	' SF				\$21,372		\$21,372
Science	30	SF	\$431.99 <i>/</i>	/ SF				\$0		\$0

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# Winship Elementary School Grand Forks, ND 11/2/2022



Facility Assessment Estimate									
Description	ltem Number	Takeoff Otv	Total Cost/Unit	Critical	5 yrs Deferred Maint	10 yrs Deferred Maint	Educational Adequacy	Synergistic with other needs	Total Cost
ation	31	971 SF	\$340.28 / SF	L			\$330,408	2	\$330,408
Technical Education	32	SF	\$381.83 / SF				\$0		\$
Technology Education	33	SF	\$394.37 / SF				\$0		\$0
Total Adequacy		10,458 SF	\$376.24 / SF	<del>ب</del> \$0	0\$	\$0	\$3,934,680		\$3,934,680
Capital Maintenance									
Interior Upgrades									
Replace dated casework in the building is dated (50 If of base, top, upper)	34	150 LF	\$389.57 / LF			\$58,436		×	\$58,436
Replace water damaged ACT in the resource room	35	630 SF	\$8.65 / SF	÷ \$5,450					\$5,450
Repair cracking in the CMU within the gymnasium	36	1 Ea.	\$6,269.65 / Ea.		\$6,270				\$6,270
Patch and paint gypsum board wall in the gymnasium needs after an attached bench was removed	37	1 Ea.	\$6,269.65 / Ea.	ı. \$6,270					\$6,270
In Room 147C, patch and paint the CMU that could use some retouching	38	1 Ea.	\$6,269.65 / Ea.	ı. \$6,270					\$6,270
Replace dated carpet in the classrooms	39	15,000 SF	\$10.89 / SF		\$163,350				\$163,350
Replace original tile in the bathrooms, offices and support spaces	40	2,350 SF	\$28.27 / SF		\$66,435			×	\$66,435
Interior Upgrades Subtotal		28,295 SF	\$11.04 / SF						\$312,479
Exterior Upgrades									
Mill and overlay the asphalt to improve accessibility	41	13,696 SF	\$5.32 / SF	: \$72,863					\$72,863
Add concrete splash blocks to downspouts to reduce water damage to the site	42	20 Ea.	\$47.06 / Ea.	ı. \$941					\$941
Add a concrete stoop to Door 4	43	1 Ea.	\$18,808.95 / Ea.	ı. \$18,809					\$18,809
Connect exit doors to public sidewalks at locations where missing	44	1,000 SF	\$17.56 / SF	: \$17,560					\$17,560
Make an accessible entrance to both playgrounds and remove the sand bases, replace with word shine for a safer base	45	2 Ea.	\$24,145.50 / Ea.	ı. \$48,291					\$48,291
Remove and replace damaged pavement near the exterior doors of the mechanical room	46	200 SF	\$17.65 / SF		\$3,530				\$3,530
Touch up caulking around the windows	47	32 Ea.	\$501.57 / Ea.	-	\$16,050				\$16,050
Remove the wood siding and replace with metal panel	48	7,107 SF	\$32.25 / SF		\$229,201				\$229,201
Repair the plastered wood over the entrance that is showing signs of age	49	1 Ea.	\$5,175.45 / Ea.	ı. \$5,175					\$5,175
Touch up paint that is flaking off certain portions of the flashing	50	1 Ea.	\$2,468.32 / Ea.		\$2,468				\$2,468
Repair the damaged gutter adjacent to door 3	51	1 Ea.	\$313.48 / Ea.	ı. \$313					\$313
Replace the roof when it nears the end of its useable lifetime	52	26,908 SF	\$30.99 / SF		\$833,879				\$833,879
Replaced windows that are original from 1973 since they are nearing the end of their lifespan	53	32 Ea.	\$4,017.06 / Ea.	ı. \$128,546					\$128,546
Exterior Upgrades Subtotal		28,295 SF	\$48.69 / SF						\$1,377,627
Electrical Upgrades									
Replace switchboard that is very old and past its useful life with a new 400A distribution panel that utilizes breaker-type overcurrent protection	54	28,295 SF	\$5.96 / SF		\$168,638				\$168,638
Replace branch panels throughout building that are noted to be old that are nearing the end of their useful life	55	28,295 SF	\$3.45 / SF		\$97,618				\$97,618
Add egress lighting to doors to exterior as is required by Building Code	56	28,295 SF	\$3.32 / SF	: \$93,939					\$93,939

## COST ANALYSIS CONTINUED

# Winship Elementary School Grand Forks, ND 11/2/2022



	Facility Assessment Estimate
-	

Facility Assessment Estimate											
	ltem						5 yrs Deferred	10 yrs Deferred	Educational	Synergistic with other	
Description	Number	Takeoff Qty		Total Cost/Unit		Critical	Maint	Maint	Adequacy	needs	Total Cost
Upgrade of all interior lighting controls throughout to digital lighting management	22	28,295 SF	SF	\$2.51 / SF	SF		\$70,971				\$70,971
Upgrade of all exterior lighting controls throughout to digital lighting management	58	28,295 S	SF	\$0.25 / §	SF		\$7,097				\$7,097
Update the existing intercom system with a new IP system throughout entire school.	59	28,295 S	SF	\$3.76 / \$	SF		\$106,456				\$106,456
Add additional door security all exterior doors with access control and monitoring	60	28,295 S	SF	\$1.21 /	SF	\$34,160					\$34,160
Upgrade the fire alarm system to a voice-capable system as is currently required by the North Dakota Building Code	61	28,295 S	SF	\$0.69 /	SF	\$19,517					\$19,517
Electrical Upgrades Subtotal		28,295 5	SF	\$21.15 /	SF						\$598,396
Mechanical Upgrades			_								
Add sprinklers to the building including a new water service line	62	28,295 S	SF	\$13.05 / S	SF	\$369,308					\$369,308
ASSE 1070 thermostatic mixing valves should be added to public lavatories for scald protection in accordance with the uniform plumbing code.	63	28,295 5	SF	\$0.32 / \$	SF	\$9,054					\$9,054
The rooftop units did not appear to have controls or systems in place for outdoor air measuring and monitoring. Indoor Air Quality should be addressed throughout the building to meet ASHARE 62.1 for controllable ventilation rates.	64	28,295 5	SF	\$4.68 / \$	/ SF		\$132,421				\$132,421
Roof mounted exhaust fans are provided for the building with the exhaust fan for the kitchen being an upblast grease exhaust time. The exhaust fans serving the restrooms in the building were not operational at the time of the walkthrough and should be replaced with	65	28,295 5	SF	\$1.05 / 9	SF		\$29,710				\$29,710
Replace all existing pneumatic controls with a direct digital control system	99	28,295 SF	SF	\$12.05 / §	/ SF		\$340,955				\$340,955
Mechanical Upgrades Subtotal		28,295 SF	SF	\$31.15 /	' SF						\$881,447
Total Capital Maintenance		77,911 SF	SF	\$40.69 /	/ SF	\$836,466	\$2,275,047	\$58,436	0\$		\$3,169,949
Total Construction Cost		90,034 5	SF	\$96.54 /	/ SF \$	\$1,979,431	\$2,275,047	\$58,436	\$4,379,135		\$8,692,049
*** All above estimated costs are total construction costs. These include general conditions, CM fees, permits, insurances, bonds, taxes	ditions, CN	1 fees, permit	ts, insur	ances, bonds	, taxes						
Contingencies & Soft Costs											
Design Contingency	67	5.0%				\$98,971.54	\$113,752.37	\$2,921.80	\$218,956.74		\$434,602
Construction Contingency	68	5.0%				\$98,971.54	\$113,752.37	\$2,921.80	\$218,956.74		\$434,602
Escalation	69	0.0%				\$0.00	\$0.00	\$0.00	\$0.00		\$0
A & E Fees	70	7.0%			~	\$138,560.16	\$159,253.32	\$4,090.52	\$306,539.43		\$608,443
FF & E	71	2.0%				\$39,588.62	\$45,500.95	\$1,168.72	\$87,582.69		\$173,841
Owner Contingency	72	1.5%				\$29,691.46	\$34,125.71	\$876.54	\$65,687.02		\$130,381
Total Contingencies & Soft Costs						\$405,783	\$466,385	\$11,979	\$897,723		\$1,781,870
Total Facility Assessment Cost Estimate		90,034 SF		\$116.33 /	/ SF \$	\$2,385,214	\$2,741,432	\$70,415	\$5,276,857		\$10,473,919
Total Critical & Educational Adequacy		90,034 SF	SF	\$85.10 / SF	SF F						\$7,662,071

## APPENDIX





## GRAND FORKS CENTRAL HIGH SCHOOL

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#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 34 Skipped: 51

#	RESPONSES	DATE
		9/9/2022 7:07 AM
1	Lack of Gym Space at Red River H S. We get the gym 1 semester, 2 class periods on Fridays only. Program is required by Congress and Department of Defense to have gym usage at least 3 days per week, per class period, per school year. The lack of space causes the cadets at Red River to fall behind their counterparts at Central H S. This gives Red River cadets less chances for advancement and future leadership positions.	9/9/2022 /:07 AM
2	There is no air conditioning in the gym and it had been very hot with no air movement. The sound system in the cardio and aerobic rooms needs to be updated. The speakers aren't working properly.	9/8/2022 8:59 AM
3	Our current kitchen lab facilities are in pretty bad shape. The cabinets, counters, flooring, and ventilation hoods are from the post-flood era! Our classes are often 22-24 students and there's not enough room for kids to work in the lab spaces even standing in the same space is crowded! We need to have a new location for our washer/dryer and dishwasher as well as our extra freezer and refrigerator storage. We currently have all of those appliances in room 34, our kitchen lab, and it takes space away from the students are all seated. Room 32 is not adequately sized for our current class sizes. The room was scheduled to be remodeled for storage at one point but we needed the space for teaching so we're trying to make do with what we have.	9/7/2022 5:13 PM
4	No	9/7/2022 12:04 PM
5	We are breaking fire code in my classroom. I can hold 27 students total, and am currently sitting at 29. The square footage in the class makes it extremely difficult to fit 29 students. Activities that require movement are challenging within the room, so we often use the hallway when doing so.	9/7/2022 9:16 AM
6	For the most part, but we are in need of more classroom space for students placed in an alternative setting (SWIS)	9/6/2022 9:28 PM
7	Ok	9/6/2022 8:38 PM
8	We have a shortage of appropriate science classrooms (with lab space). We have multiple teachers currently trying to share lab space and it is a scheduling and organizational nightmare.	9/6/2022 3:23 PM
9	Counseling area is fabulous! Thank you.	9/6/2022 2:53 PM
10	Nearly all of our classroom spaces are too small to effectively learn in modern educational environment. Classrooms designed for education in the 1920's don't allow for the collaboration that is part of student learning today. Many of our science rooms lack a lab (many share a lab between two or three teachers).	9/6/2022 2:35 PM
11	It is difficult to pull students out for small group instruction because there are not many quiet places to take them.	9/6/2022 1:03 PM
12	n/a	9/6/2022 12:23 PM
13	No	9/6/2022 12:09 PM
14	Yes	9/6/2022 12:07 PM
15	Our kitchen lab space is not adequate. There are safety and sanitation issues.	9/6/2022 11:56 AM

#### GRAND FORKS CENTRAL HIGH SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

16	no	9/6/2022 11:54 AM
17	I have no working sound system. I do not hear the bell, announcements, or alarms. This is a problem.	9/6/2022 11:34 AM
18	My classroom works, but because I have computers I am not able to move my desks to have a better setup for learning.	9/6/2022 11:32 AM
19	In the woodshop, we need more space but not sure how that can happen. We also seem to have a lack of adequate ventilation. There is AC in the counselor's office on the other side of the wall but nothing on our side. Many times it seems the air handler is not functioning correctly so we don't even have air movement.	9/6/2022 11:19 AM
20	Our room is suitable for our needs	9/6/2022 11:17 AM
21	The Foreign Language Department needs an additional oven in our activities room (currently only have one). We need our activities room to be slightly enlarged to add cabinets and work surfaces as well as provide space to accommodate an additional oven. We also need to add a staff bathroom and a student bathroom to the Foreign Language wing.	9/6/2022 11:10 AM
22	My area is fine. Nice room. Nice storage room and decent office.	9/6/2022 10:46 AM
23	Air conditioning so the paper doesn't wrinkle would be great! A window that opens and no weight room next door or better insulation!!!	9/6/2022 10:43 AM
24	We have a difficult time completing CNA Tasks due to the small space that is given to us. My beds for this class are in the front of the room and do not provide any privacy needed for completing skills.	9/6/2022 10:35 AM
25	I have a class of 28 people in a very small classroom and all classes that period are full but it is not a conducive environment.	9/6/2022 10:32 AM
26	No, yes	9/6/2022 10:28 AM
27	Not to my knowledge. Yes the current location is easily accessible to students.	9/6/2022 10:28 AM
28	Storage and materials organization is lacking at the current facility.	9/6/2022 10:26 AM
29	It is often difficult to find quiet small spaces to assist students that require additional time or different locations for testing.	9/6/2022 10:22 AM
30	I would not say there are any current facility constraints that stops us from doing any specific classroom activity. Things are sustainable for the long term future.	9/6/2022 10:21 AM
31	Some classrooms are too small to hold students. My classroom size is accommodating.	9/6/2022 10:20 AM
32	Charging with devices when need to, There are only a 6 outlets and none are in a good location for students to charge their Chromebooks	9/6/2022 10:18 AM
33	My room is so hot right now that students and myself struggle to stay focused. My outlets went out the other day and were unable to be flipped back on until the district electrician came and fixed it.	9/2/2022 11:02 AM

## Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 24 Skipped: 61

#	RESPONSES	DATE
1	To have more cool air movement in a building where people move the most would be appreciated.	9/8/2022 8:59 AM
2	I enjoy being in our area of the building; however, we have had to relinquish a few of our	9/7/2022 5:13 PM

#### CRAND FORKS CENTRAL HIGH SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

spaces over the past several years which caused further storage issues. If possible, we'd like to have more space for food and equipment storage, larger kitchen labs, updated kitchen work and eating areas, improved use of technology for visual presentations, and a designated office space for the department instructors.

3	All spaces are handicapped accessible, and more classroom space for the autism classroom(s).	9/6/2022 8:38 PM
4	If/when certain classes get moved out to the new CTE building, there may be room for an additional science classrooms on the second floor of GFC.	9/6/2022 3:23 PM
5	no	9/6/2022 2:53 PM
6	It would be most effective to have common spaces for each of our larger departments to allow for student grouping.	9/6/2022 2:35 PM
7	n/a	9/6/2022 12:23 PM
8	No	9/6/2022 12:09 PM
9	No	9/6/2022 12:07 PM
10	I think they are mostly fine considering the age of our building.	9/6/2022 11:56 AM
11	no	9/6/2022 11:54 AM
12	The learning space should be appropriate for the subject matter and needs of the class.	9/6/2022 11:34 AM
13	no	9/6/2022 11:32 AM
14	I believe that the autism room should have adequate sound proofing so that the noise doesn't impact the student learning in the classrooms around it.	9/6/2022 11:26 AM
15	None that I can think of.	9/6/2022 10:46 AM
16	We are fine	9/6/2022 10:43 AM
17	no	9/6/2022 10:28 AM
18	Not at this time.	9/6/2022 10:28 AM
19	Not at this time.	9/6/2022 10:26 AM
20	It would be ideal if we had more small breakout rooms, the size of the museum or even smaller to be able to take a student or small group for tests, additional assistance, reading, etc.	9/6/2022 10:22 AM
21	I do not.	9/6/2022 10:21 AM
22	All rooms should have the same or similar desks. I currently have picnic tables that are hard for students to write on while other rooms have smooth tables.	9/6/2022 10:20 AM
23	I believe we need more classroom space to allow students to have room to move for different interactive activities.	9/2/2022 11:02 AM
24	It should be interconnected through Google classroom.	9/2/2022 10:10 AM

## Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 31 Skipped: 54

#	RESPONSES	DATE
1	NO, not at Red River, even at Central we lack storage. All uniforms are stored at RR, this causes a 2 week delay in classes beginning at Central because students are bused to RR during the first 2 weeks of the school year to get uniforms.	9/9/2022 7:07 AM
2	No. They don't work well for current needs either!	9/7/2022 5:13 PM

## GRAND FORKS CENTRAL HIGH SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

3	I am lucky enough to be isolated from other classrooms and have two locker bay areas where I can send students to work quietly if their IEPs require a safe and quiet space. However, there are many classrooms where a quiet space cannot be found due to student capacity and a busy hallway outside.	9/7/2022 9:16 AM
4	My classroom has very few outlets. As technology advances, I am not sure I have the ability to charge all of the needed devices.	9/6/2022 8:38 PM
5	If numbers continue to go up as they have been, we may need an additional two science classrooms (in addition to the one that is already planned/in progress).	9/6/2022 3:23 PM
6	IDK	9/6/2022 2:53 PM
7	They do not. Accessibility is a large issue in our building. The doors, openings, and, especially, lunch procedures (which include stairs and tight spaces) are not conducive to folks in chairs, with walkers, or crutches.	9/6/2022 2:35 PM
8	More tables instead of desks in the classroom would also be really helpful so we can more easily work in small groups.	9/6/2022 1:03 PM
9	We need more outlets! I have cords going everywhere so students can plug in. My projected needs to be ceiling mounted. This would allow me to utilize my room differently.	9/6/2022 12:56 PM
10	n/a	9/6/2022 12:23 PM
11	Yes	9/6/2022 12:09 PM
12	Somewhat	9/6/2022 12:07 PM
13	My classroom does.	9/6/2022 11:56 AM
14	yes	9/6/2022 11:54 AM
15	Not really. My room is pretty standard. I would like more alternative reading/study areas. I have spent my own money on alternate lighting and seating to make a better environment for the students. Many students, and teachers, are affected by flourescent lighting. Disk chairs, beanbags, or ball seating has been affective in many learning environments.	9/6/2022 11:34 AM
16	not all classrooms	9/6/2022 11:32 AM
17	Somewhat. It is kind of tough always teaching in an area with so much noise. Being by the alley we have trucks backing up all the time and even when garbage is hauled out it is noisy and distracting when trying to teach.	9/6/2022 11:19 AM
18	yes	9/6/2022 11:17 AM
19	That would really depend on what the future educational needs are.	9/6/2022 11:10 AM
20	My orchestra room seems to be fine. Works ok for guitar as well.	9/6/2022 10:46 AM
21	Yes	9/6/2022 10:43 AM
22	No.	9/6/2022 10:35 AM
23	No my classroom is way too small for the amount of students I have.	9/6/2022 10:32 AM
24	yes	9/6/2022 10:28 AM
25	Yes	9/6/2022 10:28 AM
26	Partially	9/6/2022 10:26 AM
27	They are pretty good most of the time, smaller group breakouts can be challenging in some areas.	9/6/2022 10:22 AM
28	Yes. A band room will probably still be a band room in the future.	9/6/2022 10:21 AM
29	Classrooms are so small that they currently cannot hold all of the students that are required to be in them.	9/6/2022 10:20 AM
30	No. My classroom still has a smart board at the front of the room. I have desks when I would like tables and with how my room is situated I am unable to have kids move around the room.	9/2/2022 11:02 AM

GRAND FORKS CENTRAL HIGH SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS **APPENDIX** 

31 I am not sure.

9/2/2022 10:10 AM

## Q6 What new types of learning spaces would you like to see in your school?

Answered: 24 Skipped: 61

#	RESPONSES	DATE
1	JROTC needs or could use more space. Storage at Central for uniforms, cut down on wasted time due to travel. Drill area to march and do Physical Fitness at Red River and increase storage area. We have out grown the space provided. The storage area is the same as 25 years ago when the program first opened. Currently we have the small supply room, 8 storage lockers outside the supply room, and lots of uniform items stored in boxes in the custodial storage area.	9/9/2022 7:07 AM
2	What will become of the pool area at GFC?	9/8/2022 8:59 AM
3	I'd like to see learning spaces that allow for student/teacher movement, collaboration opportunities, and individual workspace. We need to have multi-functional spaces with furnishings that can flex to the needs of each group using the facility.	9/7/2022 5:13 PM
4	More science labs for the science teachers! They share only one at the 9th grade level, and that teacher is displaced for the day if another one needs it.	9/7/2022 9:16 AM
5	I would like to see more CTE opportunities for students (plumbing, welding, electrical, etc)	9/6/2022 8:38 PM
6	See previous responses	9/6/2022 3:23 PM
7	Some classrooms seem very crowded. I believe teachers would appreciate some small group areas for students.	9/6/2022 2:53 PM
8	n/a	9/6/2022 12:23 PM
9	None	9/6/2022 12:09 PM
10	Maintenance of the spaces is lacking. Tiles, trim, moldings are missing!	9/6/2022 12:07 PM
11	Just updates to the kitchen lab.	9/6/2022 11:56 AM
12	Open areas where students can move to work in groups, read, and create. Currently, I use the commons for group work, but that is used to flex classes. so it's difficult to have a place to go.	9/6/2022 11:34 AM
13	adjustable seating - where students can sit or stand to work. Quiet work spaces other than the library Cell phone reception blockers	9/6/2022 11:32 AM
14	Really not sure what can be done as land locked as we are.	9/6/2022 11:19 AM
15	We could use a music classroom for things like music theory and a space for our recording gear/studio.	9/6/2022 10:46 AM
16	???	9/6/2022 10:43 AM
17	The school itself is not equipped for the number of students in the classroom. I am unable to give adequate needs of healthcare situation to students. I do believe the new Healthcare Academy will accompany this need.	9/6/2022 10:35 AM
18	none	9/6/2022 10:28 AM
19	Expanded program offerings	9/6/2022 10:26 AM
20	Small meeting areas, with tables, standing tables would sometimes be nice for some students.	9/6/2022 10:22 AM
21	It would be great to have more space for students with discipline problems so that the office staff does not need to monitor them during the day.	9/6/2022 10:21 AM
22	More collaborative areas for students to work together.	9/6/2022 10:20 AM

#### CRAND FORKS CENTRAL HIGH SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

23	Larger classrooms	9/2/2022 11:02 AM
24	A smart gym.	9/2/2022 10:10 AM

## Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 29 Skipped: 56

#	RESPONSES	DATE
1	The use of the Red River Old Pool area. If it was not repaired, it could be filled in, made in to a small gym for JROTC use and section off an area to make a larger storage area for uniforms. As is, the current location causes uniforms to get dusty, wrinkled from being stored so close together. Then we could use the small storage room we have no to secure the field gear and Marksmanship weapons and Drill Rifles.	9/9/2022 7:07 AM
2	Placing water fountains and updated sound systems in the gyms.	9/8/2022 8:59 AM
3	Teachers don't just 'present'. We need space to WORK lesson planning, research, collaboration with colleagues, etc. I need more space than just a podium to stand behind	9/7/2022 5:13 PM
1	Climate control	9/7/2022 12:04 PM
5	Our HVAC system and air conditioning need work.	9/7/2022 9:16 AM
5	Need air conditioning in our gum areas. Can be very hot for students in gym and athletics after school.	9/6/2022 9:28 PM
7	The school should meet the ADA accessibility standards	9/6/2022 8:38 PM
3	As stated previously, if the incoming freshman classes continue get bigger each year, we could ultimately need an additional science teacher/classroom in our building to accommodate all students while maintain safe class sizes for working in the lab.	9/6/2022 3:23 PM
)	I believe GFC is maintained well. I think there needs to be a space away from the main office for in school suspension students.	9/6/2022 2:53 PM
LO	We lack a secured entrance. The first referendum would have included an addition to the GFC to the north of Door 22 (near city hall) that would fixed many issues related to security and a major lack of space in our office (including bathrooms).	9/6/2022 2:35 PM
1	More open rooms for small group instruction.	9/6/2022 1:03 PM
2	We need storage space in classrooms and we need infrastructure in place so technology can be integrated into the classroom the way it's meant to be.	9/6/2022 12:56 PM
.3	N/A	9/6/2022 12:09 PM
.4	Number of students in classes	9/6/2022 12:07 PM
15	Making sure teachers still have office space if they need it. (in the case of shared classrooms or teachers who teach in multiple classrooms.)	9/6/2022 11:56 AM
.6	Seating, lighting, and group spaces are the big ones that I can think of.	9/6/2022 11:34 AM
.7	Windows that open and stay open and dont weigh 50 pounds.	9/6/2022 11:32 AM
18	Better school security. There are so many entrances and seems to be to easy for people to access our building.	9/6/2022 11:19 AM
9	There need to be more staff bathrooms throughout the building for easier and faster access for staff.	9/6/2022 11:10 AM
20	We need a staff and student restroom in the basement level of the music building. Consistent heat/air/HUMIDITY control in a space with wood instruments that are quite sensitive to	9/6/2022 10:46 AM

### CRAND FORKS CENTRAL HIGH SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

changes in those levels would be amazing and should have been part of the original construction. It would be nice to hear announcements and lockdown alarms and instructions.

21	Location to other classesinsulation and proper ventalation	9/6/2022 10:43 AM
22	Fixing the heating and air situation.	9/6/2022 10:35 AM
23	none	9/6/2022 10:28 AM
24	I think considerations need to be made for the kids that need breakout quiet spaces.	9/6/2022 10:22 AM
25	I do not know if this is within the scope of this survey, but because of the loud nature of our band room, if there are any announcements during the class period, there is no guarantee that we can hear them, especially if it is an emergency. It would be great to have a light that lights up when the announcements are happening to have a visual reference that an announcement is happening, so I can stop the band and hear it.	9/6/2022 10:21 AM
26	Working bathrooms, we currently have two stalls that have been out of order for the last three weeks.	9/6/2022 10:20 AM
27	Another athletic field - Football/Soccer/Track & Field for Central HS	9/6/2022 10:17 AM
28	New Technology	9/2/2022 11:02 AM
29	Future expansion and technological needs.	9/2/2022 10:10 AM



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#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 48 Skipped: 41

#	RESPONSES	DATE
1	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
2	My classroom works for the classes that I teach.	9/9/2022 10:50 AM
3	Lack of Gym Space at Red River H S. We get the gym 1 semester, 2 class periods on Fridays only. Program is required by Congress and Department of Defense to have gym usage at least 3 days per week, per class period, per school year. The lack of space causes the cadets at Red River to fall behind their counterparts at Central H S. This gives Red River cadets less chances for advancement and future leadership positions.	9/9/2022 7:07 AM
4	The loss of our swimming pool has greatly impacted our classes and what we can do as a PE department. Our weightroom area in the basement is not really sustainable. No bathrooms, no water fountains, low ceilings. Not ideal for our PE classes or any of the other MANY entities that use it after school.	9/8/2022 9:41 PM
5	Nothing needed, Our space is fine	9/8/2022 8:30 AM
6	The counseling office gets pretty crowded. It could use more space.	9/8/2022 8:18 AM
7	The space to form collaborative and differentiated groups is limited. We have space to complete lab activities but the space is not well organized and no longer fit the needs of inquiry based learning	9/7/2022 9:32 PM
8	No	9/7/2022 7:03 PM
9	Yes	9/7/2022 6:00 PM
10	No	9/7/2022 5:08 PM
11	Yes, I believe our classrooms are sustainable where they are loacted.	9/7/2022 4:36 PM
12	Yes	9/7/2022 4:27 PM
13	No problems.	9/7/2022 4:01 PM
14	No Yes	9/7/2022 3:54 PM
15	No Yes	9/7/2022 3:54 PM
16	At this time, there are no specific classroom requirements that are not currently being met do to facility constraints.	9/7/2022 3:53 PM
17	Sounds systems that are needed for IEPs. They are "supposed to be" coming.	9/7/2022 3:49 PM
18	Food labs are challenging to implement with the crowded design of the kitchens and high class sizes. These conditions cause unsafe circumstances that do not allow for proper food preparation practices to always take place.	9/7/2022 3:45 PM
19	no yes	9/7/2022 3:11 PM
20	I would like a room designated for the green screen for the Video Production class.	9/7/2022 2:38 PM
21	No, Yes	9/7/2022 2:16 PM

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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

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One of our teaching facilities, class "advanced aquatics" & our "aquatics" units was eliminated due to our pool requiring repairs that have not been addressed & space is currently used as a large storage facility.

9/7/2022 2:14 PM

	large storage facility.	
23	Yes. However upgrades could be made to the lab spaces to provide better experiences.	9/7/2022 1:54 PM
24	Yes; Yes.	9/7/2022 1:53 PM
25	Adequate	9/7/2022 1:44 PM
26	Physics labs are difficult to perform in the small space the chemistry labs provide	9/7/2022 1:12 PM
27	Yes, mine is	9/7/2022 1:01 PM
28	Lack of electrical infrastructure (outlets, charging stations, etc.) and internet bandwidth limits activities (especially with with classes over twenty students).	9/7/2022 12:54 PM
29	I believe that our classrooms don't have any constraints on learning and that spaces are sustainable.	9/7/2022 12:44 PM
30	Classroom and other learning spaces are sustainable in current location.	9/7/2022 12:30 PM
31	Some of our science classrooms have a safety shower and eye wash station but no drain to go along with them should they ever be needed. Some of our chemical storage areas need some updating for some of the chemicals we use.	9/7/2022 12:24 PM
32	NA	9/7/2022 12:00 PM
33	No	9/7/2022 11:55 AM
34	The Autism room is across the hall from the multihandicapped room. There is only one bathroom to share for 12 students. It would be nice to have one more bathroom that is easily accessible for both rooms.	9/7/2022 11:54 AM
35	Not currently	9/7/2022 11:52 AM
36	nope	9/7/2022 11:49 AM
37	NO	9/7/2022 11:48 AM
38	I do not have a classroom to teach in at Viking Elementary because all other spaces are taken by other classes. Because of the lunch schedule and clean up time, I only have two hours available to teach out of a seven hour day. This would not be an issue if I had a classroom. The situation is not sustainable. At Winship, I am teaching in a closet that is meant for gym equipment. The program is growing there and I do not have room for more than me and four other students in the space. The space is not sustainable for growth.	9/7/2022 11:44 AM
39	None, my classroom is adequate.	9/7/2022 11:40 AM
40	We currently have 4 casemanagers based out of one room. There are about 80+ students that flow in and out of this room throughout the day. We need another classroom.	9/7/2022 11:39 AM
41	yes but one change we would all prefer is the platform of the front desk in the room be shortened by 3' on the closet side of the room so we have a space to operate with a large desk and are not propped up on a platform. We still have access to the board and have a raised area to be visible during teaching moments	9/7/2022 11:39 AM
42	my office works pretty well to address students needs	9/7/2022 11:38 AM
43	My room does not have a thermostat (it is in another room, but controls that room and mine), so there are often days when it is very cold or very warm in our room. With these circumstances it makes it harder for my students to focus when they are too cold or too hot.	9/7/2022 11:34 AM
44	Our kitchen labs are basically falling apart and very "space inefficient".	9/7/2022 11:33 AM
45	No constraints. Classroom is sustainable in current location.	9/7/2022 11:33 AM
46	Not crucial, but it would be nice if we could have tvs with cable access in our classrooms so that we can keep up in current issues.	9/7/2022 11:31 AM
47	Yes	9/7/2022 11:29 AM

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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

Somewhat. I think there should be a projector in the gyms in most schools.

9/2/2022 10:10 AM

## Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 38 Skipped: 51

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	No	9/9/2022 10:50 AM
3	Losing the pool was a huge hit, as that leaves us with only two gym spaces. The gyms are used constantly by not only our department, but also other school groups throughout the day. We are often forced out of one of the gyms due to this fact (ROTC, assemblies, tetsting, etc.). We can certainly coexist with athletics and other after-school groups, but we need more facilities. Our building and facilities are used nonstop all day by groups in and outside of school.	9/8/2022 9:41 PM
4	More places for students to go work with paras when they leave the classroom	9/8/2022 8:30 AM
5	No preference	9/8/2022 8:18 AM
6	I truly love how our science rooms are connected by a common supply hallway	9/7/2022 9:32 PM
7	Something needs to be done with the pool. As a kid, I loved to swim and it was wonderful exercise. Now kids won't have the skill set to swim, pretty dicey when they hit the lake.	9/7/2022 7:03 PM
8	No	9/7/2022 5:08 PM
9	No	9/7/2022 4:36 PM
10	Yes learning spaces is very inportant in enhancing students enthusiasm in going to school and develop theirselves .	9/7/2022 4:27 PM
11	None	9/7/2022 4:01 PM
12	No	9/7/2022 3:54 PM
13	It would be better if CTE classrooms where not separated from core curricular classrooms.	9/7/2022 3:54 PM
14	Not at this time.	9/7/2022 3:53 PM
15	It would be really nice for students and teachers to have continuous access to natural light.	9/7/2022 3:49 PM
16	no	9/7/2022 3:11 PM
17	none	9/7/2022 2:38 PM
18	Consistent setting/environment	9/7/2022 2:16 PM
19	No	9/7/2022 2:14 PM
20	general learning communities between departments and within.	9/7/2022 1:54 PM
21	Yes.	9/7/2022 1:53 PM
22	My area is adequate.	9/7/2022 1:44 PM
23	Classes without windows have a disadvantage	9/7/2022 1:01 PM
24	Traditional learning activities (lecture, small activities. video, etc.) possible in current space. Capacity for meaningful group work limited at times (especially with larger classes).	9/7/2022 12:54 PM
25	NA	9/7/2022 12:00 PM
26	No	9/7/2022 11:55 AM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

27	It would be nice to have a "homeroom" space with mixed ID, Autism and the gen ed students.	9/7/2022 11:54 AM
28	nope	9/7/2022 11:49 AM
29	NO	9/7/2022 11:48 AM
30	A band room should be soundproof so our playing will not disturb other classes. No area in any of my elementary schools is soundproof.	9/7/2022 11:44 AM
31	I do wish we had spaces for collaboration, tables and spaces so that students could move about.	9/7/2022 11:40 AM
32	Special Education classrooms should be located near each other so they can share resources.	9/7/2022 11:39 AM
33	no comment/care	9/7/2022 11:39 AM
34	no	9/7/2022 11:38 AM
35	No preferences	9/7/2022 11:33 AM
36	No	9/7/2022 11:31 AM
37	No	9/7/2022 11:29 AM
38	It should be interconnected through Google classroom.	9/2/2022 10:10 AM

## Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 43 Skipped: 46

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	Yes	9/9/2022 10:50 AM
3	NO, not at Red River, even at Central we lack storage. All uniforms are stored at RR, this causes a 2 week delay in classes beginning at Central because students are bused to RR during the first 2 weeks of the school year to get uniforms.	9/9/2022 7:07 AM
4	They are making due at the moment, but updates are needed. Locker rooms, bathrooms, training room, and equipment storage areas are quite dated and scattered throughout the building.	9/8/2022 9:41 PM
5	Classroom is great, more places for small group instruction/work	9/8/2022 8:30 AM
6	Probably not. They're pretty old.	9/8/2022 8:18 AM
7	In its current design the space is limited	9/7/2022 9:32 PM
8	yes to some degree	9/7/2022 7:03 PM
9	Yes	9/7/2022 5:08 PM
10	Yes	9/7/2022 4:36 PM
11	Yes	9/7/2022 4:27 PM
12	My space is fine.	9/7/2022 4:01 PM
13	Yes	9/7/2022 3:54 PM
14	Yes	9/7/2022 3:54 PM
15	Yes.	9/7/2022 3:53 PM
16	No	9/7/2022 3:49 PM

#### FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

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17	yes, but could use my 2 large tables back to allow for group work.	9/7/2022 3:11 PM
18	The computer desks cannot be moved or modified due to how the power is connected to them.	9/7/2022 2:38 PM
19	Yes	9/7/2022 2:16 PM
20	Some flexibility, yes.	9/7/2022 2:14 PM
21	They do not. collaboration is tricky due to constraints on classroom side of classroom vs. lab side.	9/7/2022 1:54 PM
22	Yes.	9/7/2022 1:53 PM
23	My area is adequate.	9/7/2022 1:44 PM
24	Not really	9/7/2022 1:12 PM
25	Limited flexibility due to electrical and internet limitations and the relative inability to shift drywall barriers to significantly reconfigure learning spaces.	9/7/2022 12:54 PM
26	Minimal flexibility in our department due to restricted classroom space and our fixed lab tables.	9/7/2022 12:24 PM
27	NA	9/7/2022 12:00 PM
28	my tables make it challenging for me	9/7/2022 11:55 AM
29	Not sure. Things are working, but each year special ed gets shuffled around.	9/7/2022 11:54 AM
30	Yes	9/7/2022 11:52 AM
31	not sure	9/7/2022 11:49 AM
32	Our counseling office is very small - We are seeing huge increases with mental health concerns/behaviors and we have no place to put students if they need a spot to deescalate, breathe, etc.	9/7/2022 11:49 AM
33	YES	9/7/2022 11:48 AM
34	Not at all. The spaces that are available in the elementary schools are often too small for our group lessons.	9/7/2022 11:44 AM
35	My curriculum area does not require special places necessarily, but sometimes charging devices gets tricky. That is inadequate	9/7/2022 11:40 AM
36	No	9/7/2022 11:39 AM
37	see #3	9/7/2022 11:39 AM
38	not sure	9/7/2022 11:38 AM
39	Students in my room have bathrooming needs, so an adult sized, private bathroom would be beneficial, especially as I continue to get more students.	9/7/2022 11:34 AM
40	Could use more electrical outlets due to increasing technology needs	9/7/2022 11:33 AM
41	Yes	9/7/2022 11:31 AM
42	Yes	9/7/2022 11:29 AM
43	I am not sure.	9/2/2022 10:10 AM

## Q6 What new types of learning spaces would you like to see in your school?

Answered: 42 Skipped: 47

#	RESPONSES	DATE
1	A designated room for both Physical Therapy & Occupational Therapy at each school that	9/10/2022 12:43 PM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

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allows students to move around, play, do different tasks in different settings such as table, floor, swing, etc.

	nool, swing, etc.	
2	I think we have great learning spaces for students currently.	9/9/2022 10:50 AM
3	JROTC needs or could use more space. Storage at Central for uniforms, cut down on wasted time due to travel. Drill area to march and do Physical Fitness at Red River and increase storage area. We have out grown the space provided. The storage area is the same as 25 years ago when the program first opened. Currently we have the small supply room, 8 storage lockers outside the supply room, and lots of uniform items stored in boxes in the custodial storage area.	9/9/2022 7:07 AM
4	If the pool can't be replaced, we need to revitalize that space as a new learning area for PE. We have MANY ideas for that area, some of which include a turf area, new fitness/weight room area, and multi-court area with options for multiple activities. The benefit of this is the area can also be used for after-school athletics or other entities that need facilities.	9/8/2022 9:41 PM
5	More places for students to work in a quiet environment out of the classroom	9/8/2022 8:30 AM
6	No ideas.	9/8/2022 8:18 AM
7	I would LOVE LOVE to have outdoor learning spaces, a greenhouse, and every classroom to have windows	9/7/2022 9:32 PM
3	Get rid of one of the locker bays - they aren't even used and take up space	9/7/2022 7:03 PM
Э	None	9/7/2022 5:08 PM
10	N/A	9/7/2022 4:36 PM
11	Friends and family board	9/7/2022 4:27 PM
12	Good so far !	9/7/2022 3:54 PM
13	More modern colors and materials with flexible seating.	9/7/2022 3:54 PM
14	Less locker bays and more work space for students closer to windows. Outdoor seating areas to enjoy the vitamin d when we have nice weather.	9/7/2022 3:53 PM
15	A shared kitchen area for learning about different cultures' food.	9/7/2022 3:49 PM
16	Updated FACS kitchens to accommodate class sizes.	9/7/2022 3:45 PM
17	Break out rooms (small meeting rooms) in the same area where we can practice interviews and presentations.	9/7/2022 2:38 PM
18	Pods of some sort at times.	9/7/2022 2:16 PM
19	None	9/7/2022 2:14 PM
20	Community areas and outdoor learning spaces	9/7/2022 1:54 PM
21	I would like to see a "Fab Lab" or something similar, with 3D printing, CNC, and other machines be accessible to classes and/or individual students.	9/7/2022 1:53 PM
22	My area is adequate	9/7/2022 1:44 PM
23	All season (like a greenhouse) and communal learning spaces	9/7/2022 1:12 PM
24	More flexible seating options and collaborative workspaces	9/7/2022 1:01 PM
25	Reconfigurable and/ or modular spaces that can be repurposed more easily as needed.	9/7/2022 12:54 PM
26	More ways to utilize the outdoors of the school such as picnic tables or wi-fi accessibility in the outdoor parts of the school	9/7/2022 12:24 PM
27	NA	9/7/2022 12:00 PM
28	Moveable fixtures in the classroom	9/7/2022 11:55 AM
29	A space for special ed to hang out and "blend in" with gen ed kids.	9/7/2022 11:54 AM
30	Spaces for student collaboration	9/7/2022 11:52 AM

#### FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

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31	not sure, maybe a commons area to do work not in the commons	9/7/2022 11:49 AM
32	It would be nice to have a few more small rooms in our office or even cubicles. We are also responsible for lots of online test proctoring. It's hard to have students use our office to take an hour long test. We need our offices to see students, make phone calls which are most of the time very confidential.	9/7/2022 11:49 AM
33	NA	9/7/2022 11:48 AM
34	Soundproof rooms that are dedicated only to the performing arts such as band and orchestra in the elementary schools. These sound isolation rooms are an excellent option. They are soundproof and modular. They can be changed based on future needs. Here is the link: https://shop.wengercorp.com/education/soundlokr-sound-isolation-rooms.html	9/7/2022 11:44 AM
35	Makerspaces, recording rooms/studios, more study spaces. I feel like we could utilize outdoor spaces more effectively (as weather permits), indoor/outdoor spaces is important.	9/7/2022 11:40 AM
36	Flexible classroom with easy movement between classroom. Additional learning spaces for small groups and test taking.	9/7/2022 11:39 AM
37	It would make more sense if our rooms were flipped, the lab area is by the entrance to the room and the classroom area is closer to our lab supplies, seems backwards	9/7/2022 11:39 AM
38	not sure at this time.	9/7/2022 11:38 AM
39	Sitting areas where teachers can collaborate together after school or can use with students for small groups.	9/7/2022 11:34 AM
40	I believe that there should be designated study halls built. These spaces can be used to hold those that are doing detention hours.	9/7/2022 11:31 AM
41	More students in the library. Visible weight room on main level	9/7/2022 11:29 AM
42	A smart gym.	9/2/2022 10:10 AM

## Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 37 Skipped: 52

#	RESPONSES	DATE
1	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
2	Continue with the updates/improvements that we are currently doing.	9/9/2022 10:50 AM
3	The use of the Red River Old Pool area. If it was not repaired, it could be filled in, made in to a small gym for JROTC use and section off an area to make a larger storage area for uniforms. As is, the current location causes uniforms to get dusty, wrinkled from being stored so close together. Then we could use the small storage room we have no to secure the field gear and Marksmanship weapons and Drill Rifles.	9/9/2022 7:07 AM
4	Grand Forks desperately needs another turf athletics facility. Cushman Field can certainly serve RR, but GFC truly needs a home for their sports. Cushman Field is also absurdly overbooked for sporting events, most notably during the spring. To think that Cushman Field plays host to four high school track and field teams, two soccer teams, and all middle school track meets is utterly outrageous. Each of these teams rarely, if ever, gets to practice at this facility. When you fill in every team's track meets and soccer games, there just aren't open dates. Each public high school in Fargo and West Fargo has a track or is building one. Fargo Shanley is doing the same. At least two of their middle schools have tracks. This needs to be addressed.	9/8/2022 9:41 PM

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Pool

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

5 Weightroom with a higher ceiling. 9/8/2022 8:30 AM 6 9/8/2022 8:18 AM n/a 7 9/7/2022 9:32 PM Classrooms need natural lighting/windows. 8 I don't have any 9/7/2022 5:08 PM 9 Lighting in the building 9/7/2022 4:36 PM 9/7/2022 4·27 PM 10 I think the unity as a team, the goal, budget , determine outcomes and objectives and determine risks, constraints and assumptions. 11 Good so far ! Thank you 9/7/2022 3:54 PM 12 Functionality of space. 9/7/2022 3:54 PM 13 Sunlight, lighting, heating/cooling, sound systems, easy of navigating, hallway lengths, table 9/7/2022 3:53 PM spacing, matching seating... How much is maintenance going to cost? Who is going to pay for upgrades in the future? What 9/7/2022 3:49 PM 14 is the schedule for upgrades in the future? 15 Our office at RR needs to be update better suited for the school. It needs to be in the front of 9/7/2022 3:48 PM the building were students enter. 9/7/2022 3:11 PM 16 We could use better lighting in interior rooms at RRHS. 17 A functioning swimming pool & surroundings. 9/7/2022 2:14 PM 9/7/2022 1:53 PM 18 Providing sunlight to the many rooms that don't have any. 19 None. 9/7/2022 1:44 PM 20 The lack of natural light and bathrooms in Red River. 9/7/2022 1:12 PM 21 The locker bays are a waste of space. An outdoor seating area would be great. 9/7/2022 1:01 PM 22 Lack of toilet facilities a problem in the academic areas of the building (primarily the SE 9/7/2022 12:54 PM corner). Only two adult lavatories on that end of the building and none in the basement. 23 Getting rid of the teal and maroon color scheme at RRHS and replacing it with more neutral 9/7/2022 12:25 PM colors, or more school colors (red and black). 24 9/7/2022 12:24 PM There are no close accessible bathrooms in the basement of the building 25 We need a main office model. Room for in school suspension & supervision 9/7/2022 12:00 PM 26 none 9/7/2022 11:55 AM 27 9/7/2022 11:54 AM Sound and lighting should be considered in the design and improvement projects. 28 bathroom/water access in the basement for classes and athletes 9/7/2022 11:49 AM 29 NA 9/7/2022 11:48 AM 30 Instrument storage. At Viking Elementary, the band and orchestra inventory is out in the open 9/7/2022 11:44 AM in the lunch room. These are expensive instruments that need to be in a secure location. 31 Air exchange/air quality should be emphasized. Sometimes it feels like there is no air 9/7/2022 11:40 AM exchange, it's stuffy, and the humidity is not being controlled. 32 We need additional spaces for meetings with parents. 9/7/2022 11:39 AM 33 not sure at this time 9/7/2022 11:38 AM 34 Some way to bring natural light to classrooms with no windows. 9/7/2022 11:33 AM 35 See question 6. I believe that Freshmen should have closed campus and placed in study hall 9/7/2022 11:31 AM rooms. It would be much better to have teachers placed in study halls than doing commons duty.

9/7/2022 11:29 AM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

37 Future expansion and technological needs.

9/2/2022 10:10 AM



ELROY H SCHROEDER MIDDLE SCHOOL

#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 38 Skipped: 17

#	RESPONSES	DATE
1	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
2	*In the foods lab there is not a ceiling mounted projectorI'm not aware if our school library still has portable overhead projectors. *In the foods lab there are six kitchens however I only have five ovens due to space limitations. *In the foods lab there are six kitchens however I only have able to teach in the area for the final six weeks of school last year. There has been a temporary support placed. I hope that what has been done to support the roof will last through the coming seasons. *My classroom and foods lab are sustainable but not ideal. This is my 27th year teaching at Schroeder. I have been grateful to have the rooms that I have. However, they are quite dated. I believe the metal kitchen cabinets were stellar in the 1960s and I love antiques but the they are worn and rusted in places. I have multiple handles that are broken. Last year I pulled a drawer open and the handle snapped. My hand was deeply cut. I did not get stitches, but probably could have. That situation would have been terrible if it happened to a student. Another issue my classroom is the lights. I have been told it is older technology and the light bulbs. The custodians need to put in a work order to B&G to replace them. In turn, I am teaching and my students are learning in an environment that should be better lit. My rooms do not have air conditioning. The foods lab does not have any fans. If there is an issue with smoke or fumes from food I can only open the windows to get some ventilation. Underneath the FACS rooms are the tunnels. Although I have never climbed below the musty smell of my rooms leads me to believe that it is not fresh and clean.	9/6/2022 6:42 PM
3	Yes	9/5/2022 10:51 AM
4	I am currently teaching in the lunchroom at Viking this year due to lack of space. This is not a sustainable option as it does not allow me to teach during the school lunch times (when including set-up and clean-up this means that the lunchroom is unavailable from 10:30-1:30). Therefore I am needing to do two things - 1) travel back to Schroeder during that time to teach lessons, which takes away from my teaching time as the school "periods" or "class times" at elementary and middle school do not line up; and 2) I am having to teach an additional half day at Viking (in addition to the partial one day), which takes away from my teaching time at Schroeder. In addition, I am not able to hold full group rehearsals at Viking (all 4th grade and all 5th grade together) due to teaching in the lunchroom, so I am using the music room after school instead with no time for set-up, taking away from the kid's rehearsal time.	9/5/2022 9:56 AM
5	My classroom is fine. However, our 6th grade and main or older areas are unsatisfactory. Our FACS room is unacceptable as well. It's dangerous and reflects how disconnected everyone is in regards to learning environments.	9/4/2022 11:31 AM
6	My classroom location is fine. My smartboard has issues and I use it daily for all my classes.	9/2/2022 12:42 PM
7	My room is not ADA compliant and I have a student in a wheelchair. My room does not have air conditioning	9/2/2022 12:03 PM
8	No.	9/2/2022 11:17 AM
9	No. Yes.	9/2/2022 11:10 AM
10	A. No B. Yes	9/2/2022 11:05 AM
11	Some classrooms are small and very hot with little space to provide movement.	9/2/2022 11:03 AM

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12 My classroom is sustainable depending on the day. It ties with temperature, as my classroom does not have air or air circulation. My the temperature in my room rises throughout the day making it VERY stuffy by 7th period.

9/2/2022 11:00 AM

	making it VERY stuffy by 7th period.	
13	No, Yes	9/2/2022 10:57 AM
L4	I don't have any sort of issues with my current setting.	9/2/2022 10:57 AM
15	Our building (Schroeder) has 50% of the building that is adequate (the 1997 addition) and 50% that is severely inadequate (the original portion of the junior high). Those spaces are too small, have inefficient HVAC systems, no AC, inadequate wiring/outlets, and many have no windows.	9/2/2022 10:56 AM
.6	Not sufficient room to run groups.	9/2/2022 10:47 AM
17	*Technology is older (currently have a Smartboard that doesn't always work) *Not enough outlets to safely use for student devices and other technologies *Air control - temps are either too hot or too cold, students & staff are uncomfortable and it is difficult to work	9/2/2022 10:39 AM
18	The 6th-grade wing of Schroeder does not have A/C, or even moving air in some classrooms. This leads to inequitable learning environments, especially in the summer and fall months. Lack of storage space is an issue. Classroom teachers are storing vast amounts of curriculum resources, kits, books, etc. within their classroom cupboards, where there is often not enough room. The science resources are especially difficult to store due to their size and overall quantity. A storage room designated for these resources would be helpful. 6th-grade science classrooms, throughout the district, do not have lab set-ups. Our rooms have only one sink each and do not allow for efficient labratory investigations. Completing labs proves difficult, especially during the set-up and clean-up portions.	9/2/2022 10:36 AM
19	As it pertains to the sixth grade wing here at Schroeder, we don't have A/C. The heat is stifling and I genuinely believe it affects the learning that takes place with our sixth graders. We also have a lack of storage and lack of electrical outlets. I have 3 in my room, with one being by the sink and another by an access hatch where I have to limit access to students. Also, sixth grade does not have access to any sort of science lab area. I have one small sink in my room and when I run water through it in any volume, it makes my room and the entire sixth grade wing smell like rotten eggs.	9/2/2022 10:34 AM
20	Kelly - We need lines painted in the gym. Sue Lund asked for this to be done prior to the beginning of school and was told there is not enough man power. Schroeder - We need air flow in the gym and locker room. Fans would be wonderful.	9/2/2022 10:26 AM
21	NA	9/2/2022 10:18 AM
2	No. I believe my classroom is sustainable.	9/2/2022 10:18 AM
3	My classroom is fine, but without climate control it is difficult to maintain a lively environment (re: too hot!)	9/2/2022 10:01 AM
4	Yes	9/2/2022 10:00 AM
5	My room is great, I need wiring in order for a projector to be mounted.	9/2/2022 9:54 AM
6	We have fantastic learning areas but would love flexible seating, wobble chairs, standing student desk options	9/2/2022 9:46 AM
27	Students with physical disabilities (like wheelchairs or crutches) are unable to use my room because we have tiered seating. We only have four electrical outlets in the room so we are unable to utilize technology as we should. We have no air circulation or air conditioning, with hit-or-miss heating in the winter. My room was 'only' 84 degrees yesterday, which isn't as bad as it has been in past years.	9/2/2022 9:43 AM
28	Our medically fragile and ID students do not have a proper place to feed or be changed. There are also students who need temperature controlled environments, there are parts of the building that are not air conditioned.	9/2/2022 9:37 AM
29	I teach in a room with no windows and no air. Natural light and temperature regulation are the two most important learning environment settings that impact learning. Our 6th grade wing does not have enough outlets to support our technology.	9/2/2022 9:35 AM
30	Air filtration system installed in the shop.	9/2/2022 9:35 AM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

31	Some rooms in our school have no air conditioning which makes learning impossible. My room has air conditioning.	9/2/2022 9:31 AM
32	The networking in my lab needs substantial maintenance and reworking in several areas.	9/2/2022 9:23 AM
33	Temperature control (excessive heat some days and cold others)	9/2/2022 9:19 AM
34	The drains not properly working. Doors do not shut unless pulled shut. Not enough restrooms.	9/2/2022 9:12 AM
35	Small space for our Raider Time due to no other classrooms so using the nurses office.	9/2/2022 8:57 AM
36	Some of my classes are too big to effectively teach all the things in my curriculum. Not enough space, not enough resources, and my room wouldn't be able to handle the all the resources I need.	9/2/2022 8:55 AM
37	Suitable locations for classrooms but not enough paras for support	9/2/2022 8:53 AM
38	Sorry, yes and no. I can get through what I need to but working with clay would be great.	9/2/2022 8:52 AM

## Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 30 Skipped: 25

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	At Schroeder I believe we need a better entry for our main office. I think it would be terrific to have the main office house the counselors, social worker, and perhaps the school nurse. Parking and entering the building is confusing to folks who are new to Schroeder. The commons at Schroeder is too small for the amount of students we have. The bathrooms in the older section of the school are very old. The toilet stools are low to the floor and some doors to the stalls do not stay closed even though they are latched. There are only two adult bathrooms that offer privacy.	9/6/2022 6:42 PM
3	No	9/5/2022 10:51 AM
4	A music wing with a performance space would be best	9/2/2022 12:03 PM
5	The 8th-grade wing at Schroeder works well in terms of flexibility between learning spaces.	9/2/2022 11:17 AM
6	No.	9/2/2022 11:10 AM
7	A. Allied Arts and/or CTE grouped together	9/2/2022 11:05 AM
8	Natural lighting and circulation	9/2/2022 11:03 AM
9	Current plan is having those who don't have air to "visit" other rooms to hold classes.	9/2/2022 11:00 AM
10	I don't have any issues with my current setting.	9/2/2022 10:57 AM
11	Not at the moment.	9/2/2022 10:57 AM
12	They should all be equivalent in their standard of environment provided. All of our district's buildings and classrooms should be relatively equal in size, HVAC quality, heating, cooling, air quality and access to power (outlets, etc.). Air quality and heating and cooling should take priority first.	9/2/2022 10:56 AM
13	No	9/2/2022 10:47 AM
14	Team teachers should have an area/wing with rooms next to each other so that students have easy access and teachers have a greater opportunity for collaboration.	9/2/2022 10:36 AM
15	Being able to organize our rooms by teams would make more sense for student travel.	9/2/2022 10:34 AM
16	NA	9/2/2022 10:18 AM

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17	I have no preferences.	9/2/2022 10:18 AM
18	There is talk of moving some tech spaces to my wing of the building. I think that we need to involve all of the educators actually using these spaces in the discussion, as the solutions being provided are not sustainable.	9/2/2022 10:01 AM
19	No	9/2/2022 10:00 AM
20	We do have a movable wall that separates English/Social Studies rooms. These were a great idea, but don't work well and transfer sound too well. Fixed or replaced soon?	9/2/2022 9:46 AM
21	A music wing with performance space would be ideal.	9/2/2022 9:43 AM
22	We need more ADA compliant bathrooms.	9/2/2022 9:37 AM
23	All classroom need to have air, or at the bare minimum, fresh air circulation. Having classrooms that have no windows seems absolutely absurd.	9/2/2022 9:35 AM
24	A common CTE wing	9/2/2022 9:35 AM
25	Turn our courtyard into classroom. Get a better space for Austism.	9/2/2022 9:31 AM
26	It would be beneficial if department's were clustered together.	9/2/2022 9:23 AM
27	No	9/2/2022 9:19 AM
28	The school needs an upgrade.	9/2/2022 9:12 AM
29	NA	9/2/2022 8:53 AM
30	no	9/2/2022 8:52 AM

## Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 36 Skipped: 19

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	No. We have "made do" for a long time. The physical environment of our building could be better.	9/6/2022 6:42 PM
3	Yes	9/5/2022 10:51 AM
4	Not currently at all buildings, but just because I do not have a classroom at Viking.	9/5/2022 9:56 AM
5	No, the smartboard is not reliable and there seems to be no upgrades for them. I use this daily and need a functioning smartboard.	9/2/2022 12:42 PM
6	No. I have built-in permanent risers that don't allow for flexibility	9/2/2022 12:03 PM
7	Yes, although it is difficult to accommodate some of our students with special needs.	9/2/2022 11:17 AM
8	Yes.	9/2/2022 11:10 AM
9	A. Limited in space and classrooms, temperature regulation	9/2/2022 11:05 AM
10	We are completely full and do not have hardly any spaces to provide more space for the changing population.	9/2/2022 11:03 AM
11	Yes.	9/2/2022 11:00 AM
12	Yes	9/2/2022 10:57 AM
13	I feel that my space is fine right now, but it does not necessarily lend itself to being flexible in the future.	9/2/2022 10:57 AM

#### FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

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14	Only 50% of our building does (Schroeder). We also could use more flexible desks/furniture to accommodate modern learners with devices.	9/2/2022 10:56 AM
15	It's a small space so we are limited in our ability to run groups.	9/2/2022 10:47 AM
16	Some classrooms are placed where ever there is an open room, rather than where the location fits the needs of the students and teachers.	9/2/2022 10:39 AM
17	Many do not. Some classrooms are too small to accommodate increasing class sizes, as well as students with disabilities. Bathrooms are also not up to code.	9/2/2022 10:36 AM
18	No. We are not ADA compliant.	9/2/2022 10:34 AM
19	Yes	9/2/2022 10:26 AM
20	YES	9/2/2022 10:18 AM
21	I believe it is flexible.	9/2/2022 10:18 AM
22	No. There are too few outlets to meet current technology needs, the space is too small to allow for movement.	9/2/2022 10:01 AM
23	Yes	9/2/2022 10:00 AM
24	I need to have wiring done in order to get an updated overhead projector hung so I am not using an Elmo.	9/2/2022 9:54 AM
25	Yes	9/2/2022 9:46 AM
26	Absolutely not, haha.	9/2/2022 9:43 AM
27	No	9/2/2022 9:37 AM
28	Nope	9/2/2022 9:35 AM
29	No	9/2/2022 9:35 AM
30	No.	9/2/2022 9:31 AM
31	No, my lab is retrofitted as it is. There is not enough power outlets, network drops or ventilation.	9/2/2022 9:23 AM
32	Size restraints depending on class size. Not enough classrooms for Special Education Department or to work with students in small groups.	9/2/2022 9:19 AM
33	Yes	9/2/2022 9:12 AM
34	Depends on the changes. I have issues with outlets and blowing fuses.	9/2/2022 8:55 AM
35	Yes	9/2/2022 8:53 AM
36	Ves	9/2/2022 8:52 AM

## Q6 What new types of learning spaces would you like to see in your school?

Answered: 36 Skipped: 19

#	RESPONSES	DATE
1	A designated room for both Physical Therapy & Occupational Therapy at each school that allows students to move around, play, do different tasks in different settings such as table, floor, swing, etc.	9/10/2022 12:43 PM
2	Learning spaces that have better temperature control and ventilation. Learning spaces with updated equipment.	9/6/2022 6:42 PM
3	A room where students can collaborate or take tests in etc.	9/5/2022 10:51 AM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

4	I would love to see a dedicated orchestra/band room in each school across the district.	9/5/2022 9:56 AM
5	places for collaboration	9/2/2022 12:03 PM
6	More space for larger projects would be helpful but it isn't a requirement for efficient learning.	9/2/2022 11:17 AM
7	?	9/2/2022 11:10 AM
8	Special Ed/Handicap Accessible, breakout rooms for small groups, more bathrooms, update office area & locker rooms	9/2/2022 11:05 AM
9	Incubation learning centers, modular exploration	9/2/2022 11:03 AM
10	I would like to see consistent air handling throughout the building.	9/2/2022 11:00 AM
11	More space for small group work besides in the hallway would help reduce noise distractions.	9/2/2022 10:57 AM
12	Breakout area for students to work collaboratively for different types of assessments.	9/2/2022 10:57 AM
13	More flexible desks with power available and storage for devices. They also need more workspace for texts and devices.	9/2/2022 10:56 AM
14	I would like a bigger space to run groups and a bigger closet space for supplies for students in need.	9/2/2022 10:47 AM
15	Common areas where teams could meet with more than 30 students at a time. Larger area for students to enjoy their lunch Every space that will hold students, should have windows to allow natural light and air flow	9/2/2022 10:39 AM
16	A community work area where students from each team can work together and collaborate during interdisciplinary units or co-teaching between teams	9/2/2022 10:36 AM
17	An adequate work space to take students whose IEP's call for a quiet or need an alternative spot to work.	9/2/2022 10:34 AM
18	An indoor jungle gym/play ground is desperately needed for ALL Elementary schools for 7 months out of the year. Separate from the gym where PE classes are taking place.	9/2/2022 10:26 AM
19	NEW GYM	9/2/2022 10:18 AM
20	I have no suggestions.	9/2/2022 10:18 AM
21	More updated classroom spaces; I don't know that lounge-y learning areas meet the current teaching strategies that we use.	9/2/2022 10:01 AM
22	New gym	9/2/2022 10:00 AM
23	Having an outdoor classroom.	9/2/2022 9:54 AM
24	Outdoor classroom options, storage for student chrome books and materials for classes, lockers, band room, etc	9/2/2022 9:46 AM
25	Kind of like Discovery with common work spaces.	9/2/2022 9:43 AM
26	Updated special education rooms with more space and adequate bathroom facilities.	9/2/2022 9:37 AM
27	Common areas for grade levels to work. Display (classroom boards) that are current to technology. Smart boards are obsolete.	9/2/2022 9:35 AM
28	Pod style wings for each team with common work areas.	9/2/2022 9:35 AM
29	A real team room, a stage.	9/2/2022 9:31 AM
30	Air conditioned spaces and classrooms that support the student technology initiatives.	9/2/2022 9:23 AM
31	See above.	9/2/2022 9:19 AM
32	An air-conditioned space for 6th-grade classes	9/2/2022 9:12 AM
33	Grade level commons area/work space (outside of the classroom).	9/2/2022 8:57 AM
34	Bigger spaces, more flexible seating, more rooms so we don't have to share so many classrooms.	9/2/2022 8:55 AM

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35	An interactive whiteboard in 806	9/2/2022 8:53 AM
36	More space	9/2/2022 8:52 AM

## Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 33 Skipped: 22

#	RESPONSES	DATE
1	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
2	Schroeder is one of many schools in the GF district that needs updating. I believe the general public is under the impression that things are pretty good. If the general public came through the schools for a tour I think that they would be quite shocked that much is the same as perhaps when they were a student. "Out of sightout of mind". Many people take their working conditions for granted. It is assumed that there is air conditioning or at least a workable temperature at our schools. My husband did not have air conditioning at his office downtown for two days. His employees wanted to work from home. The community needs to know that teachers are trying to teach in conditions that are less than ideal. If GFPS hopes to retain their educators and attract new educators they need to improve the school buildings.	9/6/2022 6:42 PM
3	More teaching space for music classes, equity across the district, and air conditioning.	9/5/2022 9:56 AM
4	Flow	9/2/2022 12:03 PM
5	The 6th-grade wing needs to be completely redone. It is hardly functioning and feels disconnected from the rest of Schroeder. The office should be moved to door 6 where it would offer increased security and eliminate multiple inconveniences for staff, students, and visitors. The courtyard is unusable and wasted space, it should be changed to allow more room for our commons area (too small) and would create more flexibility in our school. The roof is also being held up by a temporary beam so that's not great.	9/2/2022 11:17 AM
6	?	9/2/2022 11:10 AM
7	Temperature Regulation, safety, handicap accessible, ergonomics	9/2/2022 11:05 AM
8	Updates on facilities, more parking, air conditioning, better air quality (HVAC), Ergonomics for better teaching and learning	9/2/2022 11:03 AM
9	The issues are making sure buildings are brought up to code.	9/2/2022 11:00 AM
10	The level of noise	9/2/2022 10:57 AM
11	Fixing major issues such as roofing repairs and A/C in all utilized portions of buildings.	9/2/2022 10:57 AM
12	HVAC, power, air quality, heating, cooling, 20th century education furniture.	9/2/2022 10:56 AM
13	If we had a bigger space to operate, we would have more space for supplies with our students in need and group work.	9/2/2022 10:47 AM
14	All classrooms should be big enough to accommodate all students, with additional space provided for group work. Each grade should have access to a storage room for all resources and materials that would take up too much space in the classroom. Teacher and staff input should be highly valued.	9/2/2022 10:36 AM
15	We desperately need new locker room facilities. They haven't updated in decades.	9/2/2022 10:34 AM
16	Air flow needs to be taken into consideration as well as an indoor playground for Elementary	9/2/2022 10:26 AM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

for the winter month.

17	NA	9/2/2022 10:18 AM
18	I would like the basketball court lines in the small gym.	9/2/2022 10:18 AM
19	When it comes to specific building projects, it would be helpful if we could have input or the ability to provide ideas or solutions. This has been a common theme as we've had teachers shuffling through various classrooms without having a say in any aspect of the process.	9/2/2022 10:01 AM
20	Need new gym	9/2/2022 10:00 AM
21	Enough outlets.	9/2/2022 9:54 AM
22	Older part of school needs to be brought up to code or replaced. Another ful gymnasium is needed, as well as a media center closer to student classrooms. Lunchroom is not easily accessible to service doors, counseling and main office and front door are in bad shape and poorly located.	9/2/2022 9:46 AM
23	A music performance space.	9/2/2022 9:43 AM
24	There needs to be equality in our district. If somebody was moving here and they were to tour our schools, imagine having them tour Discovery and then take them to Lewis and Clark or Wilder. The inequality of facilities in our district is embarassing.	9/2/2022 9:35 AM
25	The Schroeder courtyard, lunchroom extension, classroom/office/SRO/and counselor room relocation and renovation ideas presented to us last spring were well thought out and would benefit many areas. Locker rooms need to be renovated as well.	9/2/2022 9:35 AM
26	AC, better gym.	9/2/2022 9:31 AM
27	The teachers need to meet with the engineer or project manager so the space will actually work for the class that will occupy it.	9/2/2022 9:23 AM
28	Larger lunch space.	9/2/2022 9:19 AM
29	New gym facilities.	9/2/2022 9:12 AM
30	Size of classrooms, hallway space, location of library and lunchroom.	9/2/2022 8:57 AM
31	We need more classrooms. We should not have to share rooms or teach in hallways, locker rooms, doorways, etc.	9/2/2022 8:55 AM
32	NA	9/2/2022 8:53 AM
33	AC	9/2/2022 8:52 AM



#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 20 Skipped: 8

#	RESPONSES	DATE
1	The classrooms I am in are all fine.	9/6/2022 11:45 AM
2	We could use more fob entrances.	9/4/2022 8:33 AM
3	Everything is working out well so far.	9/2/2022 11:03 AM
4	1. No. 2. Yes.	9/2/2022 11:02 AM
5	Classrooms are sustainable in their current locations	9/2/2022 11:01 AM
6	Yes	9/2/2022 10:58 AM
7	No, Yes	9/2/2022 10:58 AM
8	no, yes	9/2/2022 10:58 AM
9	No - Yes	9/2/2022 10:50 AM
10	I feel that my classroom at South is very suitable to learning.	9/2/2022 10:45 AM
11	I feel that the space is suitable and sustainable.	9/2/2022 10:45 AM
12	As a science teacher, having one sink and no lab makes doing hands-on activities challenging. There is also insufficient countertop space for what is required with the new science curriculum.	9/2/2022 10:36 AM
13	6th grade teachers do not have a science lab. This makes doing a lot of experiments very challenging and does not allow for efficient use of time and space.	9/2/2022 10:23 AM
14	yes	9/2/2022 10:16 AM
15	My classroom meets requirements. Our school does need additional spaces for small group work.	9/2/2022 10:15 AM
16	Storage for items so my office isnt a catch all for random donations.	9/2/2022 10:14 AM
17	As a health teacher in the middle schools, I am not aware of any sort of budget that we have available to us. Discussing with cohorts from this year and last, the ability to bring speakers in or funds for activities is not available.	9/2/2022 9:43 AM
18	The air conditioning/boiler system at South Middle School is not working consistently in all parts of the building. From what I understand, this is a brand new system. But since we have had a lot of turnover in administration and custodians at our school, the system is not being run and utilized properly. Some areas of the school are extremely hot and some are extremely cold. Since we have this new system in place, it is a shame that it isn't being run properly.	9/2/2022 9:13 AM
19	NA	9/2/2022 9:08 AM
20	At south, yes to a point. Our part time art teacher has a room with carpet which limits the use of certain materials if students are clumsy. Also, the number of people that share that room is very high.	9/2/2022 9:00 AM

## Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 17 Skipped: 11

#	RESPONSES	DATE
1	I wish all the allied arts classes were clustered together so students didn't have to wander all over the school the first few days trying to find art, languages, or tech ed.	9/6/2022 11:45 AM
2	We could use more Natural light	9/4/2022 8:33 AM
3	Sharing a lab is very beneficial.	9/2/2022 11:03 AM
4	No.	9/2/2022 11:02 AM
5	not at this time	9/2/2022 11:01 AM
6	I wish I had permanent walls in my room so I didn't hear noise from the connecting classroom.	9/2/2022 10:58 AM
7	I wish I had a permanent wall in my classroom.	9/2/2022 10:58 AM
8	No	9/2/2022 10:50 AM
9	I like how our school is set up for middle school. The classrooms down one hallway and having a team room are very conducive to learning.	9/2/2022 10:45 AM
10	I feel like our school's middle school design is working for team building.	9/2/2022 10:45 AM
11	I believe flexible seating should be more available among teams.	9/2/2022 10:36 AM
12	no	9/2/2022 10:16 AM
13	No	9/2/2022 10:14 AM
14	There should be a correlation when it comes to the progression of the curriculum from core classes, but classrooms and the way content is delivered should be more adjusted to the individual teaching style, not to match what other classrooms are doing. You could have common school-wide goals or community style statements that are found throughout the building. "Above the line, below the line" posters is an example that South does.	9/2/2022 9:43 AM
15	no	9/2/2022 9:13 AM
16	NA	9/2/2022 9:08 AM
17	The art rooms used to be near each other, and now they are not. It would be nice if the rooms could be near each other again.	9/2/2022 9:00 AM

## Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 18 Skipped: 10

#	RESPONSES	DATE
1	I think so.	9/6/2022 11:45 AM
2	The Smartboard in the science room is not in the center of the board, so students on one half can't see.	9/2/2022 11:03 AM
3	No. I teach Computer Applications. My room has all PCs, which are tethered to electrical	9/2/2022 11:02 AM

SOUTH MIDDLE SCHOOL

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outlets in the wall. I cannot rearrange my room the way I'd like.

4	My classrooms meet these needs	9/2/2022 11:01 AM
5	Yes	9/2/2022 10:58 AM
6	Yes	9/2/2022 10:58 AM
7	yes	9/2/2022 10:58 AM
8	Yes	9/2/2022 10:50 AM
9	Yes	9/2/2022 10:45 AM
10	Yes	9/2/2022 10:45 AM
11	No. There are not enough outlets for prolonged chromebook use in my classroom. And, as mentioned before, I have insufficient space/facilities for performing science labs.	9/2/2022 10:36 AM
12	yes	9/2/2022 10:16 AM
13	We need more small group spaces.	9/2/2022 10:15 AM
14	Unsure. the space is small and the temp isnt able to be changed. There are a lot of items in the room so it feels cramped. I havent met with students in here but those might be restrictions on being able to allow for flexibility.	9/2/2022 10:14 AM
15	In the classroom I am in, yes.	9/2/2022 9:43 AM
16	yes	9/2/2022 9:13 AM
17	yes	9/2/2022 9:08 AM
18	My room does. There is a lot of space and a lot of storage, but there is minimal space and storage in the smaller art room.	9/2/2022 9:00 AM

## Q6 What new types of learning spaces would you like to see in your school?

Answered: 17 Skipped: 11

#	RESPONSES	DATE
1	It would be neat if there were areas where multiple classes could go to collaborate.	9/6/2022 11:45 AM
2	Small areas for group work or individual spaces.	9/2/2022 11:03 AM
3	I would like to have the ability to arrange my room to optimize visibility and range of motion. Currently, I feel like I'm tripping over my students. My room size isn't a problem, the ability to arrange my room is a limitation.	9/2/2022 11:02 AM
4	not at this time	9/2/2022 11:01 AM
5	Small group options would be helpful to provide for students needing a quiet space to work.	9/2/2022 10:58 AM
6	Small group option if students need to be pulled.	9/2/2022 10:58 AM
7		9/2/2022 10:50 AM
8	More small group spaces	9/2/2022 10:45 AM
9	More small group space availability to meet needs of individual and small groups of students,	9/2/2022 10:45 AM
10	More white boards to allow for group collaboration.	9/2/2022 10:36 AM
11	Science labs for 6th grade teachers.	9/2/2022 10:23 AM
12	I think our school is short on space	9/2/2022 10:16 AM

SOUTH MIDDLE SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

13	safe, flexible, enough room, temperature regulated, adequate resources provided.	9/2/2022 10:14 AM
14	I would like to see playground equipment or more activities for students outside. Doing activities or classes like gardening would be an idea as well.	9/2/2022 9:43 AM
15	none	9/2/2022 9:13 AM
16	None	9/2/2022 9:08 AM
17	A dedicated maker space. Better spaces for hanging student artwork at school functions to celebrate success.	9/2/2022 9:00 AM

## Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 16 Skipped: 12

#	RESPONSES	DATE
1	I think South is pretty good. Please concentrate resources at schools that are in bad shape!	9/6/2022 11:45 AM
2	Keeping in mind that science is a mobile subject, so there should be space for moving.	9/2/2022 11:03 AM
3	I'm a new teacher so I don't feel that I am familiar enough to comment.	9/2/2022 11:02 AM
4	none at this time	9/2/2022 11:01 AM
5	More sets of classroom books	9/2/2022 10:58 AM
6	More natural light would always be helpful when building new facilities or rooms.	9/2/2022 10:58 AM
7	none	9/2/2022 10:58 AM
8		9/2/2022 10:50 AM
9	Valley and Schroeder need functional air conditioning	9/2/2022 10:45 AM
10	Valley Middle School and Schroeder need functional AC throughout buildings.	9/2/2022 10:45 AM
11	Having spaces within classrooms where kids can go to reset/limit distractions. Windows that open (thinking of temperature control and lockdowns, etc.)	9/2/2022 10:36 AM
12	Funding for resources so professionals arent paying for items needed out of pocket.	9/2/2022 10:14 AM
13	We need a better tie with the community. Spaces need to be designed to have gatherings and design it in a way that will bring people to that space.	9/2/2022 9:43 AM
14	Functioning air conditioning in all buildings.	9/2/2022 9:13 AM
15	none	9/2/2022 9:08 AM
16	More access for alternate seating in classrooms. Access to iPads for students rather than chrome books. More versatile for various subjects.	9/2/2022 9:00 AM

## VALLEY MIDDLE SCHOOL

SCHOOL

7

Middle

Valley

School

#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 37 Skipped: 29

#	RESPONSES	DATE
1	We do not have any practice rooms available for small groups to utilize. We do not have appropriate humidity or temperature controls to keep our instruments in a consistent climate.	9/12/2022 3:17 PM
2	I cannot facilitate group work with desks that are old, falling apart, and not level. The windows in the classroom make it difficult to keep heat/cool air in which creates a classroom that is hot/cold throughout the year. The large science lab table in the room takes away from creating more student spaces. None of the cabinets in the room lock which is not conducive for keeping team supplies or personal supplies out of reach. The windows between classrooms, do not help with sound traveling and is a distraction for students in both classrooms trying to see into the other. The old SMART Board is not used because of its old programming which reduces the interactivity with presentations.	9/7/2022 10:14 AM
3	No - the library should be centally located for easy access for all grade levels. Our current location is at the end of the building away from 6th & 7th grade classrooms.	9/5/2022 8:11 PM
4	Yes. Last year a guitar class was taught in an entryway. Many teachers are room hopping from class to class to teach their classes. Our gyms are nice, but very hot for activity at the beginning and end of each school year. Our weight room is subpar, but most of the equipment has been purchased through teacher fundraising/grant writing	9/5/2022 11:22 AM
5	The locker rooms are in tough shape at Valley. We don't have enough lockers in one of the locker rooms and they are old, rusty and don't work properly. Our 7th grade football team doesn't have adequate lockers for their equipment.	9/5/2022 9:05 AM
6	AC - the building is often over 100 degrees thus extremely difficult for learning to occur.	9/2/2022 6:20 PM
7	We at Valley are great at adapting. We take what we get and through mental gymnastics make it work. This however is not sustainable. It burns teachers out and causes a lot of turnovers every year. My room specifically is a small corner of the building that is shared with the other grade-level specialist. It would be wonderful to have more space in our room to be able to spread out more and even a separate space to be able to bring students to work and test.	9/2/2022 3:01 PM
8	Absolutely not. Library is located on one end of the school, far away form all classrooms. Building is 90+ degrees in fall and spring. Most classrooms have a limited amount of outlets. My classroom last year only had 4 total outlets, one covered by a cabinet that could not be reached or moved. Teams are split on 2 separate levels for 6th graders.	9/2/2022 2:57 PM
9	Currently, Valley has two music rooms, and zero practice rooms. Other middle schools have at least three music dedicated spaces, as well as extra small spaces for practice rooms.	9/2/2022 2:30 PM
10	Yes, it is an old old building that is not conducive to education. It is not sustainable.	9/2/2022 2:17 PM
11	Literally everything!	9/2/2022 1:56 PM
12	Yes, learning is not being fulfilled due to no A/C on 90 degree days.	9/2/2022 1:44 PM
13	Office space is VERY limited. Many spaces are shared & not conducive to small groups (proactive & reactive circles, restorative practices, Resiliency) nor are there spaces available for services (individual therapy, skills integration, DIVERT) brought to school to eliminate transportation barriers.	9/2/2022 1:24 PM
14	N/A	9/2/2022 1:17 PM
15	Music department does not have enough space. Special ed does not have nearly enough	9/2/2022 1:13 PM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

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space. Spaces are shared, and when more space is needed for other things like interventions, special education spaces are taken.

	special cudulion spaces are taken.	
16	We don't have a large group meeting space to meet as a team with our students. We also don't have small group meeting / testing spaces.	9/2/2022 12:49 PM
17	Air Conditioning - especially for a computer lab with 20+ computers	9/2/2022 12:42 PM
18	There are a million things we cannot do for our students as teachers at Valley. Our technology is severely limited. Our students do not have access to science labs because those spaces have been repurposed. We cannot adequately deliver small group instruction because our only options for spaces are hallways or entryways. Our building is in no way built for what our students need it to be. Nothing about our classrooms or learning spaces is sustainable.	9/2/2022 11:56 AM
19	The number of students is very big in my classroom, it is so crowded in my room—minimal space for the Four Corners activity. Our classroom is packed. Students have no way to move around. Also, the chairs are not flexible in moving and forming groups. Height cannot be adjusted. Students did not feel comfortable sitting. The building does not have AC, very hot on a warm day. Not enough electrical sockets around the classroom, not just a single side of the wall. Not enough bathrooms	9/2/2022 11:12 AM
20	Air in the fall, adequate heat in the winter. Never stable temps. Window screens fall out.	9/2/2022 11:07 AM
21	without having a designated lab area it is very difficult to find/do labs that are safe and educational	9/2/2022 11:05 AM
22	The size of my room is not sufficient for the size of my classes or to do proper labs/work.	9/2/2022 11:05 AM
23	My room is so hot right now that students and myself struggle to stay focused. My outlets went out the other day and were unable to be flipped back on until the district electrician came and fixed it.	9/2/2022 11:02 AM
24	Lack of Electrical outlets, air exchange is in crawlspace, usually have standing water down there, room smells like a wet basement most of the year, air quality study showed issues with cognitive problems with prolonged exposure.	9/2/2022 11:01 AM
25	Absolutely not sustainable. We have no ac and our classrooms top out at 90+ degrees at times during the year. We have 6 bathrooms for 500+ students and these bathrooms are failing and small in size. Staff bathroom options are not much better. 2 for all of our staff. Most rooms do not have enough outlets to provide tech support.	9/2/2022 11:01 AM
26	With the students I serve being close to a door or having a door in my room is nice to have.	9/2/2022 10:58 AM
27	My classroom is very small. With no air conditioning, it is also very difficult to teach at times. I also, don't have speakers installed in my room, which means there is no way to wear a mic, which is required to fulfill many IEPs.	9/2/2022 10:58 AM
28	My classroom is located at the far end of the building from the library, and a trip from a student necessitates a 5 minute walk, past many classrooms and distractions.	9/2/2022 10:58 AM
29	My classroom is too small for my pre-algebra class due to the number of students. Also, due to the heat I have to have fans blowing throughout the entire day, and that make learning/teaching difficult due to how loud it is.	9/2/2022 10:58 AM
30	Admin offices need more opportunities to technology. (Printers, Cell Phones, Wifi)	9/2/2022 10:57 AM
31	no	9/2/2022 10:54 AM
32	The classrooms are not big enough for the class sizes and the different grade level classrooms are too close to each other and the student traffic is horrible.	9/2/2022 10:51 AM
33	My smart board is not connected and missing the green pen. My personal amplifier is not working and the lanyard is not long enough.	9/2/2022 10:23 AM
34	Smartboard needs to work at all times	9/2/2022 10:20 AM
35	It is very hot in my classroom.	9/2/2022 9:55 AM
36	Similar, to most schools across the district and nation, there is a lack of space. Our building and its age is not viable for our 21st century learners. The 60 year-old brick and mortar building have road blocks to today's learners of collaboration and innovations.	9/2/2022 9:51 AM

37

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

Way too hot in most of the classrooms during the early part of the year.

9/2/2022 9:30 AM

#### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 32 Skipped: 34

#	RESPONSES	DATE
1	The CTE department should be in close proximity to each other.	9/22/2022 2:44 PM
2	Teams should be away from others. Students shouldn't have to cross the school for core classes. Special education classrooms are small and shared spaces which puts multiple teachers and students in these spaces.	9/7/2022 10:14 AM
3	It would be more functional if all the locker rooms were closer to the gyms. It has been very functional for us to have 2 different gymnasiums.	9/5/2022 9:05 AM
4	The grades should be in separate wings that are able to be closed off.	9/2/2022 6:20 PM
5	It would be beneficial to have separate smaller areas in the room that are connected to have students work, and then bring them in a bigger communal space for lessons.	9/2/2022 3:01 PM
6	The library should be located in the center and built like a community center. Teams should be placed together and have a common space. I think of Discovery Elementary when I think of an effective space for a team (one team in the area, one common space, a common meeting space).	9/2/2022 2:57 PM
7	There should be a music wing with at least 3 or possibly even 4 music classrooms. In addition, a music performance space should be available. A gymnasium does not qualify as an adequate performance space.	9/2/2022 2:30 PM
8	There are so many things	9/2/2022 2:17 PM
9	Larges spaces, A/C, smaller class sizes, etc.	9/2/2022 1:44 PM
10	Closer proximity where like service providers can more readily communicate shared needs & gaps in service.	9/2/2022 1:24 PM
11	N/A	9/2/2022 1:17 PM
12	More space in general. Our building is way too small.	9/2/2022 1:13 PM
13	History/English rooms should be able to open up for co-teaching purposes. Same with Science/Math rooms. We should not have full windows out to the hallways because of distractions. It would be great if the building had natural light that wasn't also blinding to students. Teams should have separate wings so that behavior management issues between teams can more easily be mediated.	9/2/2022 12:49 PM
14	CTE course classes should be grouped together in the same wing Windows to the outdoors - ventilation, outdoor lighting, students being able to see the green spaces Special Eduction wing	9/2/2022 12:42 PM
15	Of course. Ideally our cafeteria, gyms, and library would be centrally located. Our teams would be separated into their own hallways or, at the VERY least, separated into grade levels. We should have areas for classes to come together and do cross-curricular activities.	9/2/2022 11:56 AM
16	NO	9/2/2022 11:12 AM
17	Adjoining classrooms to support middle school philosophy and cohesive learning.	9/2/2022 11:07 AM
18	unsure on what is actually being asked	9/2/2022 11:05 AM
19	Each grade in the middle school (science) should have a lab to be shared between teachers. Also, each teacher should have a classroom that is appropriate in size.	9/2/2022 11:05 AM

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20	I believe we need more classroom space to allow students to have room to move for different interactive activities.	9/2/2022 11:02 AM
21	Grade levels, CTE may need to be more centrally located to grades depending on level.	9/2/2022 11:01 AM
22	At the middle school we need common team space and support space (ed rooms, etc). Grades and teams need to be in their own area. Common areas (library, bathroom, counseling, dean space, office) need to be easy to get to for all teams in the school	9/2/2022 11:01 AM
23	I believe that we are currently in a state that it doesn't make any sense to spend any funds on our current school, unless it is to build a new school.	9/2/2022 10:58 AM
24	Not at the moment since I am just getting started in the district.	9/2/2022 10:58 AM
25	NA	9/2/2022 10:57 AM
26	I would like all English classes to be closer together.	9/2/2022 10:54 AM
27	Have separate areas for each grade level and teams.	9/2/2022 10:51 AM
28	real world learning centers to apply each core area.	9/2/2022 10:23 AM
29	NA	9/2/2022 10:20 AM
30	It would be awesome to have our team classes in close proximity to each other. Very helpful for student movement between spaces as well as helping keep students safe and on task.	9/2/2022 9:55 AM
31	A new floor plan with open spaces, collaborative work areas, and cross-curricular design would be ideal for an innovative school.	9/2/2022 9:51 AM
32	N/A	9/2/2022 9:30 AM

## Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 37 Skipped: 29

#	RESPONSES	DATE
1	Yes and no. We have projectors and smart boards. Lights cannot be dimmed, seating is rigid due to restraints from sewing machine placement and outlets,	9/22/2022 2:44 PM
2	No, because our class schedule is dictated by the availability of shared classrooms.	9/12/2022 3:17 PM
3	No. Absolutely not.	9/7/2022 10:14 AM
4	No	9/5/2022 8:11 PM
5	No	9/5/2022 11:22 AM
6	Having 2 separate gyms has been very beneficial for us. The weight room that is used for classes is a little small and can be a distraction for the classes in the large gym. The weight room doesn't have much flexibility for changing needs. Our outdoor space for PE classes has been good for our needs.	9/5/2022 9:05 AM
7	no - VERY few electrical plug-insspaces are too small for the number of students.	9/2/2022 6:20 PM
8	At this moment they function, but that can easily change with students' needs in our space.	9/2/2022 3:01 PM
9	Not even close. We are constrained to our building as it is and it doesn't allow for flexibility in new needs and the changing world.	9/2/2022 2:57 PM
10	NO	9/2/2022 2:30 PM
11	No	9/2/2022 2:17 PM
12	No, not enough space	9/2/2022 1:44 PM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

13	They do not.	9/2/2022 1:24 PM
14	N/A	9/2/2022 1:17 PM
15	Special education spaces need to be thoroughly researched so we have effective sped space.	9/2/2022 1:13 PM
16	No. There's very little ease with which we can group students within our rooms. There's also minimal interactive technology capabilities.	9/2/2022 12:49 PM
17	Limited spacing - especially if there was a sudden influx of students More bathroom spaces (unisex bathrooms especially with LGBT+)	9/2/2022 12:42 PM
18	Not at all.	9/2/2022 11:56 AM
19	NO	9/2/2022 11:12 AM
20	No.	9/2/2022 11:07 AM
21	no	9/2/2022 11:05 AM
22	No.	9/2/2022 11:05 AM
23	No. My classroom still has a smart board at the front of the room. I have desks when I would like tables and with how my room is situated I am unable to have kids move around the room.	9/2/2022 11:02 AM
24	100% Not. My room is probably the most flexible due to the rolling benches but the wiring everywhere on table and floor.	9/2/2022 11:01 AM
25	No. Our classrooms are small and uncomfortable. Not enough outlets to charge devices or to plug in fans on 90+ degree days.	9/2/2022 11:01 AM
26	yes	9/2/2022 10:58 AM
27	No.	9/2/2022 10:58 AM
28	I think the older desks are not as flexible as tables or modular desks that fit together for modifying learning spaces.	9/2/2022 10:58 AM
29	No because the size and warmth of the room is not conducive to learning.	9/2/2022 10:58 AM
30	No,	9/2/2022 10:57 AM
31	Not a lot of room for group projects	9/2/2022 10:54 AM
32	No	9/2/2022 10:51 AM
33	yes	9/2/2022 10:23 AM
34	Depending on roster side	9/2/2022 10:20 AM
35	Absolutely not	9/2/2022 9:55 AM
36	Current reality does not facilitate equitable learning. The building temp, lack of air flow, and space makes it difficult for teachers to teach and students to learn.	9/2/2022 9:51 AM
37	Yes	9/2/2022 9:30 AM

# Q6 What new types of learning spaces would you like to see in your school?

Answered: 35 Skipped: 31

#	RESPONSES	DATE
1	The FACS lab needs a pantry and cupboard that can be securely locked to store food and sharps.	9/22/2022 2:44 PM
2	Collaborative spaces for grade levels or grade level teams to utilize for collaborative curriculum	9/12/2022 3:17 PM

**VALLEY MIDDLE SCHOOL** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

	projects.	
3	Computer labs. Collaborative work spaces. Learning spaces where core team teachers are together. Team rooms for teachers and to house team supplies.	9/7/2022 10:14 AM
4	I would like to see an actual music performance space, science labs, a more functional weight room, a more comfortable library for students to be excited to read in.	9/5/2022 11:22 AM
5	I would like to see 2 separate gymnasiums that are similar in size. Locker rooms and storage rooms near the gymnasiums. A larger weight room that is accessible would be nice. I would like to see the outdoor facilities stay similar with an upgrade to the grass.	9/5/2022 9:05 AM
6	Team Office space for each team to meetself contained rooms for each grade level.	9/2/2022 6:20 PM
7	The ones I have mentioned above are all I can think of at the moment.	9/2/2022 3:01 PM
8	Makerspaces, labs or science teachers, but also that can be used by all teachers, common spaces for kids and teams, tech center, restorative justice space (calming room, think therapy office with tools to calm down/solve problems)	9/2/2022 2:57 PM
9	Sound proof rooms, that are acoustically sound for music making.	9/2/2022 2:30 PM
10	Flexible and climate controlled	9/2/2022 2:17 PM
11	Larger classrooms, smaller group of students.	9/2/2022 1:44 PM
12	Small group rooms.	9/2/2022 1:24 PM
13	Air Conditioned	9/2/2022 1:17 PM
14	Small rooms to take small groups.	9/2/2022 1:13 PM
15	It would be great to have collaborative meeting spaces that are easy to monitor. Perhaps small group work rooms that are located close together. A better laid out library with easy access to resources.	9/2/2022 12:49 PM
16	Pod learning or incubator spaces for special projects (AR/VR type learning) Modular learning spaces Greenhouse Ergonomic learning facilities, tools, facilities, etc	9/2/2022 12:42 PM
17	Again, I would like to see areas for cross-curricular activities to occur. I would like to see a makerspace. We NEED science labs. We need areas for small group instruction. We need specialized areas for students with special needs that adequately meet their physical and emotional needs.	9/2/2022 11:56 AM
18	More flexible spaces to use in the classroom, rather than blocked by the chair sets.	9/2/2022 11:12 AM
19	Innovative, modern	9/2/2022 11:07 AM
20	a new building because we don't even have enough rooms for the classes we have now	9/2/2022 11:05 AM
21	Valley needs a new school.	9/2/2022 11:05 AM
22	Larger classrooms	9/2/2022 11:02 AM
23	Flexible to be traditional or provide space/movement. Ability to charge things, group work and individual spaces.	9/2/2022 11:01 AM
24	We just need SPACE period. We are bursting. Classes have been taught in the hallway. Specialists share classrooms during the same class time. We have nowhere to put kids who are legally required to have reset spaces.	9/2/2022 11:01 AM
25	All flex seating.	9/2/2022 10:58 AM
26	Larger classrooms, air conditioning, updated technology	9/2/2022 10:58 AM
27	Bigger class size, AC in all the rooms, standing desks as an option for those who prefer to be standing, and more whiteboard space on the walls. Also, the ability to dim the lights in the room.	9/2/2022 10:58 AM
28	More opportunities to teach proper behavior, reset opportunities.	9/2/2022 10:57 AM
29	Bigger classrooms	9/2/2022 10:54 AM

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

30 Have separate areas for each grade level and teams so all the students don't mingle. Areas for small groups to be pulled and areas for testing. A common space that each team could use for

9/2/2022 10:51 AM

	their students.	
31	real world application centers.	9/2/2022 10:23 AM
32	Space for kids that need quit work areas and for pull outs to get extra support.	9/2/2022 10:20 AM
33	It would be beneficial for our team to have a set up similar to Discovery Elementary. Keeping teams together in a separated area from other teams would help with many behavior issues we tend to have in hallways. Also having a bathroom in close proximity to our team would allow students to take quicker bathroom breaks between classes. At a bare minimum, grade levels need to be more segregated to help reduce student traffic in areas and help separate out students. Currently our 6th and 7th graders share a hallway and there are constantly behavior issues.	9/2/2022 9:55 AM
34	Ideally, a collaborative open space and with larger-sized classrooms would be a start. More windows and larger ceilings.	9/2/2022 9:51 AM
35	Ones with AC	9/2/2022 9:30 AM

## Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 32 Skipped: 34

#	RESPONSES	DATE
1	The FACS lab should run independently as a lab and not be used as a classroom. It is unsafe for students to be around sharps and hot appliances without proper supervision and skill knowledge.	9/22/2022 2:44 PM
2	Where bathrooms are located. Multiple stalls for all genders. Bathrooms for staff. AC. Air filtration systems. Cabinets that lock. Coat/closets. Windows with proper blinds that close all the way. Safety measures for lockdowns. Flexible seating options for growing students. Teacher desks that have locks for personal items. Storage for posters.	9/7/2022 10:14 AM
3	Air conditioning, functional bathrooms, larger cafeteria, better drop off pick up location, more storage space.	9/5/2022 11:22 AM
4	The amount of extra curricular practices and games that we have in our facility. Both of our gyms are used for PE classes all day and the same for after school activities. We also have a high demand of groups from outside the district that request to use our facilities. That includes gyms and outdoor fields.	9/5/2022 9:05 AM
5	Lunchroom is way to hot and environment is hurt to work in without worrying about someone passing out.	9/3/2022 11:49 AM
6	More PE space to allow students to have PE daily not every other day.	9/2/2022 6:20 PM
7	SPACE! we are very overcrowded and this in itself causes so many issues.	9/2/2022 3:01 PM
8	The main office right now is not the point of entry. Once a person is in the building, they don't immediately enter the office. They could walk anywhere around the school.	9/2/2022 2:57 PM
9	Music serves all grade levels so it would be ideal if it were somewhat centrally located.	9/2/2022 2:30 PM
10	A/C	9/2/2022 1:44 PM
11	Air conditioning with natural lighting, open plans with flexible seating.	9/2/2022 1:24 PM
12	Designated training when there is new Admin.	9/2/2022 1:17 PM
13	Wings separating grades.	9/2/2022 1:13 PM
14	Proximity to common spaces (library, lunch room, semester/quarter classes, etc)	9/2/2022 12:49 PM

**VALLEY MIDDLE SCHOOL** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

15	ADA compliance Audio-Visual needs for students	9/2/2022 12:42 PM
16	Equity. Stop fixing the air conditioning and "chillers" at some buildings while others don't even have access to such a thing.	9/2/2022 11:56 AM
17	More Bathrooms, please, consider the ratio of bathrooms to students and staff.	9/2/2022 11:12 AM
18	a hybrid classroom with lab and classroom elements	9/2/2022 11:05 AM
19	Enough electrical outlets in the classrooms for chromebook charging. (Put in practical areas.) Hybrid classrooms for labs and lectures.	9/2/2022 11:05 AM
20	New Technology	9/2/2022 11:02 AM
21	Keeping grades away from each other, not crossing common spaces like gym and lunch. No sharing hallways for any reason, the overlap causes major issues at times. No central kitchen at a school. Larger eating areas, 3 gym spaces, proper air flow/air quality.	9/2/2022 11:01 AM
22	Secure outdoor space.	9/2/2022 11:01 AM
23	When I walk by the bathrooms, you can currently see most of the stalls by simply walking by. This is not acceptable.	9/2/2022 10:58 AM
24	-Air conditioning -better access to bathrooms, water fountain, coper machine -more outlets in the wall -more closet space -updated calculators -better supply room (included with more supplies)	9/2/2022 10:58 AM
25	AC	9/2/2022 10:57 AM
26	Air conditioning!	9/2/2022 10:54 AM
27	Air conditioning for Valley. All the schools should be consistent in with their buildings and grounds.	9/2/2022 10:51 AM
28	The classroom temperature to be comfortably regulated. It is way to hot.	9/2/2022 10:23 AM
29	Temperature regulated rooms.	9/2/2022 10:20 AM
30	Separating grade levels and teams Bathroom readily available (for teachers too!!) Air Conditioning is essential	9/2/2022 9:55 AM
31	Green space, open classrooms, flexible seating, large gyms and common areas.	9/2/2022 9:51 AM
32	Better suited fitness rooms for all schools in the district.	9/2/2022 9:30 AM



# BEN FRANKLIN ELEMENTARY SCHOOL

SCHOOL

#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 17 Skipped: 15

#	RESPONSES	DATE
1	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
2	At times connectivity to the internet can be spotty within the building. Having half of the building without air circulated makes it tough for staff and students. Classroom walls are not the thickest that you can hear neighboring teachers in their classroom. Would also be beneficial to have a space dedicated to have students take movement breaks throughout the day and not just in a hallway.	9/7/2022 11:50 AM
3	We need to make our space more user friendly. Once we get the new windows, we should move our fiction to one end and non fiction to the other with the classroom/lesson area in the middle by the desk.	9/7/2022 9:58 AM
4	We are in need of ECSE offices so we can use our classrooms for their intended use instead of offices.	9/6/2022 9:15 AM
5	There are not enough spaces in our building some of our important programs cannot even start because there is not enough space. Some of our staff is working out of storage rooms	9/5/2022 6:15 PM
6	No AC - very hot	9/4/2022 11:03 AM
7	No	9/3/2022 9:06 AM
8	I don't have an updated smart board that I can use. I also don't have a room that isn't a communal space. No, my classroom isn't sustainable.	9/2/2022 3:31 PM
9	It is TOO HOT in our building. Kids can't make it through the school day without complaining that it is too hot or that they don't feel well. I have been sending lots of kids to the nurse or home sick.	9/2/2022 2:24 PM
10	My room gets too hot to concentrate on learning in. Having AC would help students sustain their attention. The learning tables/desks are not the most ideal for multi uses. A+ tables provide for both independent and collaborative learning.	9/2/2022 2:14 PM
11	There is no A/C in my classroom, which makes sustaining attention very difficult.	9/2/2022 2:11 PM
12	тоо нот	9/2/2022 2:05 PM
13	No. Yes.	9/2/2022 2:04 PM
14	My smart board is crammed into a corner so it's hard for the farthest tables to see it clearly. It needs to be centered on a wall but the whole wall except that one small spot is windows.	9/2/2022 11:17 AM
15	We need more space for small group learning and collaboration. We don't have enough space. We don't have enough classroom space for our specialists. We also need spaces for teacher collaboration (small group and whole staff). Limited staff bathrooms. Not enough parking spaces for the amount of staff at our building.	9/2/2022 9:56 AM
16	No windows that open	9/2/2022 9:47 AM
17	Yes office space is limited. I am out of my office at least 2 days week so outside therapists have a confidential place to meet with students. That leaves me making phone calls in my car as there are no other places to make those confidential cars. Speech space is not sufficient.	9/2/2022 9:22 AM

#### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 13 Skipped: 19

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	Space is always at a premium. Teachers have their students working in hallways when needing to work in pairs or teams. Dedicated meeting spaces. Often we have outside therapists or agencies come in to meet with students and no where for them to meet confidentially. Having space to grow into and not just have what is needed right now.	9/7/2022 11:50 AM
3	no	9/7/2022 9:58 AM
4	Keep grade levels together	9/6/2022 9:15 AM
5	Having entire building with AC, not just certain areas or just the office	9/4/2022 11:03 AM
6	A better design to the school to make it more of a community	9/3/2022 9:06 AM
7	I think that we should be able to have a room to call our own that we don't have to move into the teacher classroom to teach because my room is occupied.	9/2/2022 3:31 PM
8	N/A	9/2/2022 2:24 PM
9	I'm interpreting this question different ways and am not sure how to answer.	9/2/2022 2:14 PM
10	Not any spaces to hold small groups outside of classroom	9/2/2022 2:05 PM
11	No	9/2/2022 2:04 PM
12	Each grade level should have collaboration areas for students/teachers.	9/2/2022 9:56 AM
13	Shared learning spaces	9/2/2022 9:47 AM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 16 Skipped: 16

#	RESPONSES	DATE
#	RESP 01/3E3	DATE
1	No	9/10/2022 12:43 PM
2	No, part of the building has an open concept that walls can be taken out, while the other is 1960's building. Can only put so many things inside the box without adding on or up.	9/7/2022 11:50 AM
3	we do.	9/7/2022 9:58 AM
4	We need more offices and then the answer would be yes.	9/6/2022 9:15 AM
5	Not all of them	9/5/2022 6:15 PM
6	NA	9/4/2022 11:03 AM
7	I'm not in a designated classroombut there is not room to hold groups	9/3/2022 9:06 AM
8	I believe so, yes.	9/2/2022 3:31 PM
9	Yes	9/2/2022 2:24 PM

#### **V** BEN FRANKLIN ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS **APPENDIX** 

10	Not completely.	9/2/2022 2:14 PM
11	My room space, along with the tables for students and cabinets, doesn't allow for room for carpet/movement space. It makes showing different learning material difficult.	9/2/2022 2:11 PM
12	na	9/2/2022 2:05 PM
13	Yes.	9/2/2022 2:04 PM
14	No. Fixed shelving does not allow for creating bigger or smaller spaces as needed.	9/2/2022 11:17 AM
15	NO - as stated above we are spilling out into halls and entryways. We really don't have any options in our current set up.	9/2/2022 9:56 AM
16	No	9/2/2022 9:47 AM

## Q6 What new types of learning spaces would you like to see in your school?

Answered: 15 Skipped: 17

#	RESPONSES	DATE
1	A designated room for both Physical Therapy & Occupational Therapy at each school that allows students to move around, play, do different tasks in different settings such as table, floor, swing, etc.	9/10/2022 12:43 PM
2	Open areas for teachers to do group learning, area that all sections of a grade can be in for a presentation.	9/7/2022 11:50 AM
3	reading for the kids who come to breakfast- a specific room/rooms as it gets very loud and congested having everyone in the same room. Our lunchroom is too small.	9/7/2022 9:58 AM
4	More functional rooms. Our staff should not have to work out of storage rooms.	9/5/2022 6:15 PM
5	All air conditioned ones	9/4/2022 11:03 AM
6	More open spaces	9/3/2022 9:06 AM
7	I would like to see more open spaces for small groups to do learning away from other small groups that are private enough that the kids are comfortable enough to be open and actually be able to learn in the best way.	9/2/2022 3:31 PM
8	small group rooms to work with students or 1:1. Rooms that could be comfortable to be in during all times of the school year.	9/2/2022 2:24 PM
9	More sensory and collaborative spaces. STEAM labs?	9/2/2022 2:14 PM
10	I would like to see a collaborative space that is strictly for meetings/IEPs/small group teaching.	9/2/2022 2:11 PM
11	small group learning spaces, regulated temperatures so all students and teachers can learn in warm and cold weather	9/2/2022 2:05 PM
12	Sensory Area for Elementary School. STEM lab space.	9/2/2022 2:04 PM
13	Small group learning areas and a large area for groups to meet too. Grade level wings or pods would be helpful.	9/2/2022 9:56 AM
14	Community learning areas, shared spaces	9/2/2022 9:47 AM
15	Sensory area. Specific area for breaks with students who need a place to get out energy, etc.	9/2/2022 9:22 AM

# Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 15 Skipped: 17

#	RESPONSES	DATE
1	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
2	We only have 4 staff bathrooms in the whole school. Student who need special accommodations use staff restrooms as well. Having the office at the entrance of the school, currently visitors have to walk through the school to get to the office. Space for students to move within the school (activity space). Dimable lighting.	9/7/2022 11:50 AM
3	We need good heat and air conditioning (which I know is coming). We need different tables in the library for lesson time as the round ones are hard to work with in our space. Our lunchroom needs expanding.	9/7/2022 9:58 AM
4	Turn make shift offices and lounge into the intended spaces.	9/6/2022 9:15 AM
5	NA	9/4/2022 11:03 AM
6	ACa must and an area designed for staff	9/3/2022 9:06 AM
7	Air conditioning in the entire building. I also think every room should have windows of some kind, if not an alternate source of natural lighting. ie Happy Lamps.	9/2/2022 3:31 PM
8	We always talk about improving things and getting things done, however it seems like nothing ever happens and our schools just keep getting more worn down and worse.	9/2/2022 2:24 PM
9	Air quality ventilation systems & allergen filters, LED lights instead of florescent lighting or more natural light without overheating the rooms.	9/2/2022 2:14 PM
10	Our teacher's lounge is being reconstructed (?) to be in a cooler area in the school. We are currently using makeshift walls which makes it not closed off. It is also by one of the very few phob doors to enter the school. The fluorescent lighting in classrooms cause headaches to students and teachers. There are no other options besides purchasing your own lighting strips to add to your classroom. Any options for natural lighting would help our students.	9/2/2022 2:11 PM
11	na	9/2/2022 2:05 PM
12	Security. Ventilation and Air Quality. Floor Surfaces that are cleanable.	9/2/2022 2:04 PM
13	Air conditioning and effective air flow in the entire building! We have water issues with heavy rain and classrooms get wet. We have a large tube for the pump that runs across in front of a door now. Tripping hazard and looks bad.	9/2/2022 9:56 AM
14	A/C, windows that allow fresh air in	9/2/2022 9:47 AM
15	Heat/air consistency throughout.	9/2/2022 9:22 AM



# CENTURY ELEMENTARY SCHOOL

#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 22 Skipped: 34

#	RESPONSES	DATE
1	I believe children's needs are adequately met.	9/12/2022 10:47 AM
2	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
3	I am able to teach in my space with no difficulty	9/6/2022 12:25 PM
4	N/A	9/4/2022 9:45 AM
5	yes	9/4/2022 8:44 AM
6	no	9/2/2022 3:52 PM
7	Not that I know of.	9/2/2022 3:12 PM
8	I'm fine	9/2/2022 3:00 PM
9	No. Rooms are sustainable.	9/2/2022 2:59 PM
10	I am concerned that my building has so many "extra" programs that put strain/stress on staff, students, space issues - such as an ED program, Health Impaired Sped, EL, Autism Room, Head Start.	9/2/2022 2:15 PM
11	A few spaces are too small for special education to fit larger groups of 5-8 students; or a combination small group and a student or two needing breaks. Most are functional.	9/2/2022 1:43 PM
12	An extra room would help, so we wouldn't have to share.	9/2/2022 1:41 PM
13	When we have adequate class sizes (22 or under), we are able to move around the room.	9/2/2022 1:34 PM
14	As long as our class sizes stay under 22, our classrooms have enough space for learning activities. We have lots of extra programs in our buildings so as sections of grades get added we are going to run out of space.	9/2/2022 1:34 PM
15	Concerts and programs are very difficult. We have to use the gym which is in use all day. It's hard to find rehearsal times and gyms do not allow for the best musical experience.	9/2/2022 10:33 AM
16	Having to share gym space with other colleagues Having not enough funding.	9/2/2022 10:23 AM
17	no	9/2/2022 10:21 AM
18	Not that I'm aware of	9/2/2022 10:18 AM
19	Somewhat. I think there should be a projector in the gyms in most schools.	9/2/2022 10:10 AM
20	Yes it is sustainable	9/2/2022 8:57 AM
21	No/Yes	9/1/2022 5:24 PM
22	The room is tolerable, but we could use a bit more space to share more of our teaching ideas	9/1/2022 4:40 PM

#### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 18 Skipped: 38

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	no preferences	9/6/2022 12:25 PM
3	no	9/4/2022 8:44 AM
4	possibly more organized by grade level (first grade is split)	9/2/2022 3:52 PM
5	No.	9/2/2022 3:12 PM
6	Not yet	9/2/2022 3:00 PM
7	Not at this time.	9/2/2022 2:59 PM
8	n/a	9/2/2022 1:43 PM
9	Not really.	9/2/2022 1:41 PM
10	No	9/2/2022 1:34 PM
11	As sections are added they need to look at housing these extra programs in different buildings.	9/2/2022 1:34 PM
12	I wish we had a proper performance space.	9/2/2022 10:33 AM
13	no	9/2/2022 10:21 AM
14	No	9/2/2022 10:18 AM
15	It should be interconnected through Google classroom.	9/2/2022 10:10 AM
16	No	9/2/2022 8:57 AM
17	No	9/1/2022 5:24 PM
18	None at this time	9/1/2022 4:40 PM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 20 Skipped: 36

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	i think so	9/6/2022 12:25 PM
3	yes	9/4/2022 8:44 AM
4	yes	9/2/2022 3:52 PM
5	No.	9/2/2022 3:12 PM
6	Yes	9/2/2022 3:00 PM
7	Yes	9/2/2022 2:59 PM

CENTURY ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

8	We could use space for small intervention groups	9/2/2022 2:15 PM
9	Not all are large enough to accommodate more than 4 students.	9/2/2022 1:43 PM
10	Not quite. We are sharing the room with another teacher and two paras, and although we are making it work, it would be nice to have a separate room with a whiteboard for each group.	9/2/2022 1:41 PM
11	Maybe a behavior room where students can go to calm down so they aren't left in our classrooms while they are dysregulated and tear down our items? Even the sped rooms sometimes get wrecked.	9/2/2022 1:34 PM
12	Yes, as long as class sizes stay lower.	9/2/2022 1:34 PM
13	Yes.	9/2/2022 10:33 AM
14	Not Fully	9/2/2022 10:23 AM
15	yes	9/2/2022 10:21 AM
16	A bigger classroom would be nice with the larger class sizes	9/2/2022 10:18 AM
17	I am not sure.	9/2/2022 10:10 AM
18	Yes	9/2/2022 8:57 AM
19	Not sure	9/1/2022 5:24 PM
20	I don't believe so	9/1/2022 4:40 PM

## Q6 What new types of learning spaces would you like to see in your school?

Answered: 19 Skipped: 37

#	RESPONSES	DATE
1	A designated room for both Physical Therapy & Occupational Therapy at each school that allows students to move around, play, do different tasks in different settings such as table, floor, swing, etc.	9/10/2022 12:43 PM
2	More common areas	9/6/2022 12:25 PM
3	at the moment, nothing	9/4/2022 8:44 AM
4	Grade level "learning commons" areas similar to what Discovery has	9/2/2022 3:52 PM
5	Collaboration spaces for classes to get together. More adult bathrooms.	9/2/2022 3:12 PM
6	I'm fine	9/2/2022 3:00 PM
7	None at this time	9/2/2022 2:59 PM
8	n/a	9/2/2022 1:43 PM
9	More space in general, more flexible seating for kids, some outdoor learning spaces?	9/2/2022 1:41 PM
10	Not sure	9/2/2022 1:34 PM
11	A dedicated performance space.	9/2/2022 10:33 AM
12	More gym space.	9/2/2022 10:23 AM
13	gyms separated by movable wall. Curtain does not allow for effective communication when two classes are being taught at the same time.	9/2/2022 10:21 AM
14	What discovery has would be nice	9/2/2022 10:18 AM
15	A smart gym.	9/2/2022 10:10 AM

#### CENTURY ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS **APPENDIX** 

16	More individual/distraction free student work areas	9/2/2022 9:25 AM
17	Small group spaces	9/2/2022 8:57 AM
18	Bigger classrooms	9/1/2022 5:24 PM
19	A science center	9/1/2022 4:40 PM

## Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 18 Skipped: 38

	DE DOUISEO	DATE
#	RESPONSES	DATE
1	There could be more office space for staff/private spaces for children with behavioral concerns/issues.	9/12/2022 10:47 AM
2	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
3	Offices for staff that are not classroom teachers. Nurse, social worker, and counselor should have private spaces.	9/6/2022 12:25 PM
4	none that I'm aware of	9/4/2022 8:44 AM
5	Updating wallpaper in classrooms.	9/2/2022 5:31 PM
6	-	9/2/2022 3:52 PM
7	storage in classrooms, height of students to allow them to grab materials,	9/2/2022 3:12 PM
8	I'm fine	9/2/2022 3:00 PM
9	Flow of the school. Connectivity - different grades feel more connected to feel more like a community.	9/2/2022 2:59 PM
10	Is the space age appropriate and will it have longevity	9/2/2022 2:15 PM
11	n/a	9/2/2022 1:43 PM
12	Bathrooms in every classroom, and more adult bathrooms in the building.	9/2/2022 1:41 PM
13	Bathrooms, water fountains, exits.	9/2/2022 10:33 AM
14	matts on the walls for safety	9/2/2022 10:21 AM
15	Not sure	9/2/2022 10:18 AM
16	Future expansion and technological needs.	9/2/2022 10:10 AM
17	None	9/2/2022 8:57 AM
18	Air conditioner in every classroom and gym	9/1/2022 5:24 PM



## DISCOVERY ELEMENTARY SCHOOL



#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 2 Skipped: 5

#	RESPONSES	DATE
1	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
2	Appropriate performance spaces for students in elementary; common learning spaces for all schools	9/2/2022 3:04 PM

## Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 2 Skipped: 5

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	none	9/2/2022 3:04 PM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 2 Skipped: 5

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	larger private meeting spaces for student groups	9/2/2022 3:04 PM

#### Q6 What new types of learning spaces would you like to see in your school?

Answered: 3 Skipped: 4

#	RESPONSES	DATE
1	A designated room for both Physical Therapy & Occupational Therapy at each school that allows students to move around, play, do different tasks in different settings such as table,	9/10/2022 12:43 PM

#### DISCOVERY ELEMENTARY SCHOOL

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS **APPENDIX** 

	floor, swing, etc.	
2	none	9/2/2022 3:04 PM
3	An outdoor learning space would be neat. A performing space/auditorium separate from the gym would be ideal. There would be less interruption to the physical education schedule with a separate, designated space for performances.	9/2/2022 3:03 PM

#### Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 3 Skipped: 4

#	RESPONSES	DATE
1	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
2	Updating school boundary lines	9/2/2022 3:04 PM
3	Sound proof music rooms! Storage space for performance equipment (risers, staging) that is not within the actual music room.	9/2/2022 3:03 PM



J. NELSON KELLY

ELEMENTARY

SCHOOL

KTA

## KELLY ELEMENTARY SCHOOL

3000

#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 28 Skipped: 25

#	RESPONSES	DATE
1	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
2	I do not have a classroom to teach in at Viking Elementary because all other spaces are taken by other classes. Because of the lunch schedule and clean up time, I only have two hours available to teach out of a seven hour day. This would not be an issue if I had a classroom. The situation is not sustainable. At Winship, I am teaching in a closet that is meant for gym equipment. The program is growing there and I do not have room for more than me and four other students in the space. The space is not sustainable for growth.	9/7/2022 11:44 AM
3	Kelly Elementary is currently under construction to complete my special education classroom. We are in an alternate space for the time being.	9/2/2022 6:42 PM
4	My room is not as long as the other rooms in my grade but it is sustainable for learning.	9/2/2022 4:05 PM
5	No specific classroom concerns.	9/2/2022 3:45 PM
6	Not that I can think of	9/2/2022 3:43 PM
7	Not that I know of.	9/2/2022 3:33 PM
8	N/A	9/2/2022 3:23 PM
9	n/a	9/2/2022 3:20 PM
10	My classroom has a minor inconvenience as well as a major flaw at the moment. The flaw at the moment is my room is currently not receiving adequate AC and is located at the edge of the building with many windows. The comfort level in the room is disturbing the work and performance of our students and will need to be addressed soon. This is my first year teaching in Grand Forks as well as elementary music. My current room size is adequate and I'm excited to see how I can make it work with my class sizes. I do believe in the future it would be nice to have another expanded music room to fit the range and flexibility of movement for my students as we try new activities involving dance, improvisation, and performance.	9/2/2022 3:11 PM
11	My classroom is on the smaller size and my air conditioner does not always work properly, thus making learning difficult at times.	9/2/2022 2:27 PM
12	The classroom is a nice size and has lots of room for learning. The air conditioning does not work, and it gets quite hot in the afternoons. It is hard for myself and for the students to stay focused with being so hot.	9/2/2022 2:25 PM
13	My classroom is large and is conducive to large group and small groups. My classroom is sustainable.	9/2/2022 2:25 PM
14	N/A	9/2/2022 1:38 PM
15	NA	9/2/2022 1:38 PM
16	No air—hot rooms make it VERY hard for everyone to learn. Constantly having kids come tell me they are hot/don't feel good. The airblower in my classroom has been broken for several years. I have been told it is too old to get replacement parts to fix. Because of this, classroom is hot all year long. I have 4 fans in my classroom that I have purchased with my own money. When they are on, it's hard to hear.	9/2/2022 1:13 PM

**KELLY ELEMENTARY SCHOOL** 

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

17	Two of our special education classrooms remain under construction so a lot of shifting has had to take place until they are finished. About half of the building does not have a/c so it's been an ongoing issue.	9/2/2022 11:55 AM
18	Amber and autism have NO classroom due to ongoing construction	9/2/2022 11:40 AM
19	My classroom does not have a/c so it is miserable for the students and myself in these hot temps. Kids feel sick and lethargic and it makes teaching difficult and impossible at times. I also leave each day feeling exhausted and with a headache.	9/2/2022 11:30 AM
20	At Viking, there's not enough classrooms to accomodate a Spanish classroom. Spanish/keyboarding class is currently doing push-in teaching which displaces classroom teachers during their prep time.	9/2/2022 11:25 AM
21	Current classroom works for instruction and learning.	9/2/2022 11:11 AM
22	Kelly - We need lines painted in the gym. Sue Lund asked for this to be done prior to the beginning of school and was told there is not enough man power. Schroeder - We need air flow in the gym and locker room. Fans would be wonderful.	9/2/2022 10:26 AM
23	Storage for items so my office isnt a catch all for random donations.	9/2/2022 10:14 AM
24	Somewhat. I think there should be a projector in the gyms in most schools.	9/2/2022 10:10 AM
25	No	9/2/2022 9:43 AM
26	Noisy, sound system from room that shares a wall comes through quite loudly which makes it difficult to conduct testing and keep student attention. Room shares light switch with printing room so lights are shut off during lessons at times.	9/2/2022 9:42 AM
27	My classroom is currently being used for another classroom while construction is being completed for their classrooms.	9/2/2022 9:33 AM
28	All of my educational requirements are able to be met and the spaces that I have been given (i.e. lunchroom and gym) are enough space for those requirements to be met.	9/2/2022 9:32 AM

## Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 25 Skipped: 28

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	A band room should be soundproof so our playing will not disturb other classes. No area in any of my elementary schools is soundproof.	9/7/2022 11:44 AM
3	No.	9/2/2022 6:42 PM
4	N/A	9/2/2022 4:05 PM
5	None at this time	9/2/2022 3:45 PM
6	We would love to have a small space for each grade level to help store shared supplies and to conference with students for small groups or one-on-one lessons for a distraction-free space.	9/2/2022 3:43 PM
7	It would be nice for para's to be able to pull small groups of students to a space other than the hallways. We would love to have a grade level workroom to store shareable materials.	9/2/2022 3:33 PM
8	Additional small group work space would be so helpful. Also - shared grade level storage/work space would be welcome.	9/2/2022 3:23 PM
9	The same grade levels should be in the same space. There should be more spaces available to work with small groups of students.	9/2/2022 3:20 PM

KELLY ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

10	Different learning spaces should be able to cater to all types of students and all types of learning styles. Having space for movement and accessible technology for visuals and audio lessons is important for most if not all rooms in a school building.	9/2/2022 3:11 PM
11	Our grade level is always spread apart and it would be nice to all be close together.	9/2/2022 2:27 PM
12	My grade level has always had to be separated within the school. We are on opposite ends of the school and it is difficult to all collaborate together. Every other grade level is near their team.	9/2/2022 2:25 PM
13	4th grade has always been separated from each other. Two on one end of the building. Two on the other end. IT would be nice if all grade levels could be grouped together.	9/2/2022 2:25 PM
14	N/A	9/2/2022 1:38 PM
15	NA	9/2/2022 1:38 PM
16	Bigger lunchroom—conflicts with schedules for large schools. Same with playground	9/2/2022 1:13 PM
17	This question is fairly unclear. Should they all be the same? No. Teachers and grade levels need to have some voice in their space. Should all students have equitable access to quality learning spaces? Absolutely. Is this happening in our district right now? No.	9/2/2022 11:55 AM
18	Nope	9/2/2022 11:40 AM
19	NA	9/2/2022 11:11 AM
20	No	9/2/2022 10:14 AM
21	It should be interconnected through Google classroom.	9/2/2022 10:10 AM
22	No	9/2/2022 9:43 AM
23	Designated speech rooms in buildings- not closets or make shift rooms. Not necessarily Kelly specific, but many buildings in our district put speech in small closets or even custodial rooms and expect effective testing and group lessons to take place in these areas.	9/2/2022 9:42 AM
24	I feel like the classrooms with older children that have bathrooms located inside them should be shifted and used for the younger classrooms. Example 3rd and 1st grade should be swapped.	9/2/2022 9:33 AM
25	I do not have any ideas or preferences!	9/2/2022 9:32 AM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 29 Skipped: 24

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	Not at all. The spaces that are available in the elementary schools are often too small for our group lessons.	9/7/2022 11:44 AM
3	Our library is extremely flexible. It is used by multiple teachers and paras for small group instruction throughout the day. This takes place even while I am teaching and both are able to function together. I have long said the Kelly Library should be a model if we are to build another school because so many things can be happening in this one space at the same time. The only tweak I would make would be adding small individual rooms (like study rooms) so students receiving one-on-one instruction could have a more private area to work. We have created several areas for staff and students to work together but they are in very public areas and I would love to provide a more secluded area for better focusing.	9/5/2022 11:41 PM
4	N/A	9/2/2022 6:42 PM

#### S KELLY ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

5	Most of the time yes, the room I am in is not as long as the other rooms therefore there isn't enough room to do certain things.	9/2/2022 4:05 PM
6	Yes	9/2/2022 3:45 PM
7	Most likely not.	9/2/2022 3:43 PM
8	Yes, I feel okay.	9/2/2022 3:33 PM
9	Somewhat. But limited due to square footage constraints.	9/2/2022 3:23 PM
10	No. I wish there were more flexible seating options for students.	9/2/2022 3:20 PM
11	I believe as I continue to craft and expand upon my lessons as a elementary music teacher I will need a bigger space along with more storage options for manipulatives and instruments.	9/2/2022 3:11 PM
12	yes	9/2/2022 2:27 PM
13	Yes.	9/2/2022 2:25 PM
14	Yes	9/2/2022 2:25 PM
15	N/A	9/2/2022 1:38 PM
16	NA	9/2/2022 1:38 PM
17	Newer desks/tables that are modular and easy to move.	9/2/2022 1:30 PM
18	We are making progress with the addition of the sped suite.	9/2/2022 11:55 AM
19	Nope	9/2/2022 11:40 AM
20	We don't have any "extra" space at Kelly so it's very difficult at times to provide any pull out type interventions or group our students between classrooms. Last year we had to be very creative when we worked to come up with a RISE model to best serve our at risk kids. It worked, but it wasn't ideal.	9/2/2022 11:30 AM
21	Classrooms meet requirements.	9/2/2022 11:11 AM
22	Yes	9/2/2022 10:26 AM
23	Unsure. the space is small and the temp isnt able to be changed. There are a lot of items in the room so it feels cramped. I havent met with students in here but those might be restrictions on being able to allow for flexibility.	9/2/2022 10:14 AM
24	I am not sure.	9/2/2022 10:10 AM
25	Probably not. There are some very spread out grade levels in our building. This makes collaboration and grouping students by differentiation needs difficult.	9/2/2022 9:50 AM
26	Yes	9/2/2022 9:43 AM
27	With the development of educational and interactive websites such as edpuzzle and boom cards, smartboards in special ed and speech/language rooms would be extremely beneficial.	9/2/2022 9:42 AM
28	Sub and instructional computers loaned from the district aren't compatible to the teacher boards.	9/2/2022 9:33 AM
29	My spaces do allow for flexibility to meet any changes in the future. It is enough space to always have room for the students.	9/2/2022 9:32 AM

# Q6 What new types of learning spaces would you like to see in your school?

Answered: 28 Skipped: 25

RESPONSES

#

DATE

**KELLY ELEMENTARY SCHOOL** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

1	A designated room for both Physical Therapy & Occupational Therapy at each school that allows students to move around, play, do different tasks in different settings such as table, floor, swing, etc.	9/10/2022 12:43 PM
2	Soundproof rooms that are dedicated only to the performing arts such as band and orchestra in the elementary schools. These sound isolation rooms are an excellent option. They are soundproof and modular. They can be changed based on future needs. Here is the link: https://shop.wengercorp.com/education/soundlokr-sound-isolation-rooms.html	9/7/2022 11:44 AM
3	Some schools have tech labs. Kelly could use more classroom space so all grade level teachers classrooms could be close to each other.	9/5/2022 11:41 PM
4	I am looking forward to the construction of our sensory room to be completed.	9/2/2022 6:42 PM
5	An area for each grade level to have in their wing or hallway to have a nice space with more room to collaborate with others and work at a different area instead of just in the classroom.	9/2/2022 4:05 PM
6	More common areas or common spaces to use for learning.	9/2/2022 3:45 PM
7	Makerspace/Robotics location. (Vex clubs are currently trying to work in a classroom, but the large competition board, 6 ft by 8ft, has to lean against the wall during the day and hopefully not fall on students until it's used at the end of the day.	9/2/2022 3:43 PM
8	Maker-space/ Robotics area needed and small group work rooms.	9/2/2022 3:33 PM
9	Common grade level meeting/multipurpose space. Small group work space other than hallways.	9/2/2022 3:23 PM
10	Better spaces for special education.	9/2/2022 3:20 PM
11	Apart from the gym, it would be nice to have another larger location for staff to either schedule or share time for large group and movement activities.	9/2/2022 3:11 PM
12	stem lab	9/2/2022 2:27 PM
13	A STEM lab would be a dream.	9/2/2022 2:25 PM
14	STEM Lab, MakerSpace	9/2/2022 2:25 PM
15	N/A	9/2/2022 1:38 PM
16	NA	9/2/2022 1:38 PM
17	Modular- collaborative spaces	9/2/2022 1:30 PM
18	Intervention rooms	9/2/2022 1:13 PM
19	Flexible learning areas where students from different classes are able to meet and work together.	9/2/2022 11:55 AM
20	Flexible learning spaces like common areas at Discovery	9/2/2022 11:40 AM
21	I know Kelly is undergoing construction right now for a special Ed suite. That is great! I don't know how, but more extra classroom space for our interventionists would be ideal instead of trying to hold interventions and do CBMs in noisy hallways.	9/2/2022 11:30 AM
22	Would like an area in the school that is big enough for grade levels to meet with all students if needed.	9/2/2022 11:11 AM
23	An indoor jungle gym/play ground is desperately needed for ALL Elementary schools for 7 months out of the year. Separate from the gym where PE classes are taking place.	9/2/2022 10:26 AM
24	safe, flexible, enough room, temperature regulated, adequate resources provided.	9/2/2022 10:14 AM
25	A smart gym.	9/2/2022 10:10 AM
26	A multipurpose room dedicated to after-school clubs/ activities.	9/2/2022 9:43 AM
27	Quiet, test and lesson friendly space. A space in which testing does not need to be planned around when the students in the classroom with the adjoining wall are out of the classroom, due to the sound system coming through and distracting students preventing from accurate testing results.	9/2/2022 9:42 AM

28

I feel like the learning spaces in my school are good but in the warmer months it can get hot and uncomfortable for the students which makes learning and absorbing the information being taught difficult.

9/2/2022 9:33 AM

#### Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 32 Skipped: 21

#	RESPONSES	DATE
1	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
2	Instrument storage. At Viking Elementary, the band and orchestra inventory is out in the open in the lunch room. These are expensive instruments that need to be in a secure location.	9/7/2022 11:44 AM
3	Staff input should always be considered when making changes. We are the ones who work in these spaces and we probably have some great ideas about how they could function better.	9/5/2022 11:41 PM
4	N/A	9/2/2022 6:42 PM
5	Working AC in all parts of the buildings.	9/2/2022 4:05 PM
6	Every school NEEDS proper air conditioning. It is not okay that students and staff work in buildings that reach 90 degrees. It is also not okay that in the same building, some rooms are trying to learn at 60 degrees with sweatshirts and gloves. It should be essential to get a reliable temperature for students to learn. No one can focus on their learning at either temperature.	9/2/2022 3:43 PM
7	Equity of heating/ cooling in schools.	9/2/2022 3:33 PM
8	Building equity regarding heat/ac	9/2/2022 3:23 PM
9	Air conditioning provided in all rooms. Kids cannot learn under these conditions.	9/2/2022 3:20 PM
10	Other spaces with updated theater, audio, and light capabilities to service performance groups (elementary chorus, secondary chorus, band, choir, orchestra, etc.)	9/2/2022 3:11 PM
11	Air Conditioning!	9/2/2022 2:59 PM
12	Making sure all classrooms have air conditioning.	9/2/2022 2:27 PM
13	Above all, I think everyone needs air conditioning. It is brutal to work in such hot conditions for students and teachers.	9/2/2022 2:25 PM
14	Making sure there is air conditioning in every room.	9/2/2022 2:25 PM
15	N/A	9/2/2022 1:38 PM
16	NA	9/2/2022 1:38 PM
17	New desks and chairs that help collaborate work happen	9/2/2022 1:30 PM
18	designated pumping area, not enough fridge space-difficult to find space to store breast milk	9/2/2022 1:13 PM
19	Accessibility for all in all areas, A/C, flexible learning spaces, the unique needs of students with disabilities	9/2/2022 11:55 AM
20	Air conditioning	9/2/2022 11:40 AM
21	Air Condition in all buildings	9/2/2022 11:36 AM
22	None	9/2/2022 11:11 AM

**KELLY ELEMENTARY SCHOOL** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

23	Make sure that the AC works!!	9/2/2022 10:38 AM
24	Air flow needs to be taken into consideration as well as an indoor playground for Elementary for the winter month.	9/2/2022 10:26 AM
25	Funding for resources so professionals arent paying for items needed out of pocket.	9/2/2022 10:14 AM
26	Future expansion and technological needs.	9/2/2022 10:10 AM
27	I have no air conditioning and it is miserable all year round. My system in my classroom is broken and has been for years so even in the middle of winter I am needing to open my windows to get cool air in. Because of this it is hard in the early fall and spring to be in our classrooms to long periods of time. We often take our work outside and find shade. Updating the condition of older buildings and making them comfortable for learning. It is so hard to learn and teach in these conditions. Also windows that actually open!	9/2/2022 9:50 AM
28	Air conditioning, we have inconsistent temperature and recently it has been VERY warm in some classrooms. Parents made comments about these conditions during Open House and students complain during school days.	9/2/2022 9:43 AM
29	When designing new buildings, incorporating multiple special ed rooms and at least 2 designated speech rooms as we are seeing an increase in students needing direct speech/language services many of our building need at least two SLPs. As well as making sure rooms are adequate size as many of our students are seen in groups and many special ed teachers need to section off parts of their rooms to allow students to come in for breaks while conducting lessons with other students.	9/2/2022 9:42 AM
30	Just to make the environments comfortable for students such as adding AC in the schools that are lacking it.	9/2/2022 9:33 AM
31	N/A	9/2/2022 9:32 AM
32	Air conditioning in all classrooms!	9/2/2022 9:10 AM



LAKE AGASSIZ SCHOOL

#### LAKE AGASSIZ ELEMENTARY SCHOOL + HEAD START

#### Q3 Are there any specific classroom or educational activity requirements that are not currently able to be fulfilled due to existing facility constraints? Are your classrooms or learning spaces sustainable in their current locations?

Answered: 29 Skipped: 31

#	RESPONSES	DATE
1	I believe children's needs are adequately met.	9/12/2022 10:47 AM
2	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
3	Limited space for after school tutoring because of the need for a quiet space.	9/8/2022 11:01 AM
4	We do not have sound barriers between a music room and classroom. We do not have a space for a calm down area for students.	9/7/2022 10:11 AM
5	There is limited office space for special education staff and staff who don't work directly with students	9/7/2022 9:53 AM
6	3 sped teachers in one room is a lot. Many specialist are having to share rooms, which is not always conducive to the best learning environment for students.	9/7/2022 9:11 AM
7	There needs to be more space for educators who are actually seeing students within the building. Those that have desk jobs should be the ones with shared spaces. The ones seeing the students and are trying to do explicit teaching of skills should not be sharing confined spaces that don't allow learning of students.	9/7/2022 8:47 AM
8	Need a dedicated space for children to receive OT and PT services. Currently, there is no designated space to where items can be stored between visits and children are being seen in a hallway.	9/7/2022 8:22 AM
9	We are short a room 3 times a week for teaching the K-2 special (opposite of Spanish). However I have heard that when a new counselor is hired, the room that is used for Spanish and Mustang Time will get taken away and they will teach on carts.	9/7/2022 8:18 AM
10	We are currently sharing a small room for two speech pathologists to have groups simultaneously.	9/7/2022 7:49 AM
11	No-we do not have enough space. We have outside therapists that come on a daily basis and someone has to give up their office for them. We have people sharing offices that need their own space. If we get another counselor, like we are supposed to have, she will not have an office, which will send our spanish and IP on a cart, which is crazy hard. Our speech teachers are also sharing an office.	9/7/2022 7:28 AM
12	We need more spaces for support staff. (OT, counselors, speech, social work, student work spaces)	9/6/2022 8:32 PM
13	My classroom is just fine for teaching 1st grade. All 4 1st grades are in the same wing with a bathroom in each of our classrooms. We all have mismatched furniture (shelving and tables.) I really dislike the new windows they put in a few years. We are unable to open them for fresh air.	9/6/2022 7:46 PM
14	Not that I am aware of	9/6/2022 6:50 PM
15	My space is small, but adequate for a resource setting. It would be too small for a self- contained type program.	9/6/2022 6:32 PM
16	We have a storage room door that hasn't been put back on since before the start of the year.	9/6/2022 6:19 PM

**LAKE AGASSIZ ELEMENTARY SCHOOL + HEAD START** 

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

17	N/A	9/6/2022 6:08 PM
18	Yes	9/6/2022 6:07 PM
19	I can do all of my curriculum activities, but VEX Robotics is something we are trying to promote. We need a room or a shared room for this. Currently we drag everything out of a closet in the music teachers room every time we meet.	9/6/2022 5:50 PM
20	As a school social worker, we need space constantly to help dysregulated students or to provide in house therapy for them. We are always scrambling to find spaces to help students.	9/6/2022 5:35 PM
21	none that I can think of	9/6/2022 5:26 PM
22	I wish room had windows and ones that opened. White board has issues because it is older. Wish we had common areas to work one on one with student. Lunchroom too small and crowded. Noise levels get too high.	9/6/2022 5:23 PM
23	Sustainable	9/6/2022 5:12 PM
24	All is well.	9/6/2022 4:55 PM
25	the classrooms are very organized and cleaned.	9/5/2022 6:20 PM
26	Movable risers for our choir and grade-level performances so practice can take place in the music room. A performance space that isn't in the gym so gym classes aren't interrupted.	9/2/2022 3:04 PM
27	My classroom is sustainable, some furniture has been ordered to make learning easier so it is on the way.	9/2/2022 2:59 PM
28	NA	9/1/2022 5:14 PM
29	Good space	9/1/2022 4:59 PM

#### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 21 Skipped: 39

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	Extended space within the classroom/connected to the classroom for mental breaks for the students who are having difficulty focusing for long periods of time.	9/8/2022 11:01 AM
3	cooperative learning spaces would be very useful for all students and teachers	9/7/2022 10:11 AM
4	There needs to be more space for educators who are actually seeing students within the building. Those that have desk jobs should be the ones with shared spaces. The ones seeing the students and are trying to do explicit teaching of skills should not be sharing confined spaces that don't allow learning of students.	9/7/2022 8:47 AM
5	Special education rooms and therapy spaces should be within the same wing. A sensory space that can be set up with the help of an OT and utilized by paras and staff throughout the week would be extremely beneficial.	9/7/2022 8:22 AM
6	It would be nice if there were connected but yet still have separate space (door in between) for noise level and HIPPA compliance especially with ECSE drop in students.	9/7/2022 7:49 AM
7	Move the office to the front of the building, it would have to be built out, and it should be in the front of the building no matter what. The current office space could then be made into 4 offices.	9/7/2022 7:28 AM
8	No preferences.	9/6/2022 7:46 PM
9	Special Education areas would benefit from reconfiguration.	9/6/2022 6:50 PM

PRIDE LAKE AGASSIZ ELEMENTARY SCHOOL + HEAD START

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

10	I think our planning teams do a good job delegating our spaces adequately.	9/6/2022 6:32 PM
11	N/A	9/6/2022 6:08 PM
12	No	9/6/2022 6:07 PM
13	We tried for years to get walls and doors. We got them and the teaching conditions/noise level etc. improved dramatically.	9/6/2022 5:50 PM
14	We need more private areas for our students in order to support them effectively. When they're out of sorts, it's such a trigger to have other students watching them. They need space and time to themselves or with a support staff member in order to quickly calm, and return to the classroom.	9/6/2022 5:35 PM
15	none that I can think of	9/6/2022 5:26 PM
16	All is well.	9/6/2022 4:55 PM
17	i think learning spaces should just have items that help children learn in their own ways using hands on activities.	9/5/2022 6:20 PM
18	no	9/2/2022 3:04 PM
19	no	9/2/2022 2:59 PM
20	NA	9/1/2022 5:14 PM
21	No	9/1/2022 4:59 PM

## Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 26 Skipped: 34

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	Yes	9/8/2022 11:01 AM
3	no	9/7/2022 10:11 AM
4	No. There is not enough space to teach and deal with behaviors at the same time.	9/7/2022 9:11 AM
5	No	9/7/2022 8:47 AM
6	No, there is a lack of space. Speech services are sharing tight office space and OT and PT are treating students in the hallway.	9/7/2022 8:22 AM
7	I believe our spaces are adequate with the exception of being short a space for Spanish/Mustang Time.	9/7/2022 8:18 AM
8	No	9/7/2022 7:49 AM
9	Not at all	9/7/2022 7:28 AM
10	Would like to see small rooms between rooms	9/6/2022 8:32 PM
11	I feel my classroom is adequate for the future unless there is a student with a wheelchair.	9/6/2022 7:46 PM
12	Space is tight and there isn't much room for growth.	9/6/2022 6:50 PM
13	My space is pretty much maxed out, with little flexibility. I think the regular classrooms allow for more flexibility due to their size.	9/6/2022 6:32 PM
14	Yes	9/6/2022 6:19 PM
15	N/A	9/6/2022 6:08 PM

PRIDE LAKE AGASSIZ ELEMENTARY SCHOOL + HEAD START

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

16	Difficult to say without knowing what the future will bring.	9/6/2022 6:07 PM
17	I don't think we need to change building structures, we just need to be flexible and work with what we have. There is never going to be a perfect space. However, it is great to not have relocatables any longer.	9/6/2022 5:50 PM
18	No	9/6/2022 5:35 PM
19	my classroom does	9/6/2022 5:26 PM
20	No. No common areas to facilitate small groups. No windows.	9/6/2022 5:23 PM
21	All is well.	9/6/2022 4:55 PM
22	yes we offer our students a great learning experience and teach them how to handle situations by using alot of redirection.	9/5/2022 6:20 PM
23	I think so, but I can only speak for my classroom.	9/2/2022 3:04 PM
24	yes	9/2/2022 2:59 PM
25	Yes	9/1/2022 5:14 PM
26	Yes	9/1/2022 4:59 PM

# Q6 What new types of learning spaces would you like to see in your school?

Answered: 24 Skipped: 36

#	RESPONSES	DATE
#	RESPONSES	DATE
1	A designated room for both Physical Therapy & Occupational Therapy at each school that allows students to move around, play, do different tasks in different settings such as table, floor, swing, etc.	9/10/2022 12:43 PM
2	Computer lab/specified space for tutoring/interventions.	9/8/2022 11:01 AM
3	more space for student and staff to work. Smaller offices for outside services (therapy, OT, PT and speech, etc) are absolutely needed. OT and PT currently see kids in the hallway	9/7/2022 10:11 AM
4	More common space to allow for grade-level students to collaborate would be awesome.	9/7/2022 9:53 AM
5	More rooms. Maybe a few relocatable for specials so that would open up more rooms and the smaller rooms could be used for testing or offices.	9/7/2022 9:11 AM
6	An OT/PT room with sensory and larger motor equipment	9/7/2022 8:22 AM
7	I would love to see grade level common spaces (like at Discovery), but I do not see that as being an option at Lake Agassiz.	9/7/2022 8:18 AM
8	Individual speech rooms.	9/7/2022 7:49 AM
9	Places in the school that promote collaboration	9/7/2022 7:28 AM
10	Bigger lunch room	9/6/2022 8:32 PM
11	We need a "community" room that could hold a grade level for a special activity. We have every inch of our school used. Several people (OT/PT) are working in the hallway.	9/6/2022 7:46 PM
12	Special education and have all kindergarten rooms together	9/6/2022 6:50 PM
13	Spaces that would allow for team teaching with collaboration areas	9/6/2022 6:32 PM
14	Sensory room	9/6/2022 6:07 PM
15	If life were perfect, I would like to see a STEM space which could house the VEX robotics activities and promote science.	9/6/2022 5:50 PM

**EXAMPLE AGASSIZ ELEMENTARY SCHOOL + HEAD START** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

16	Smaller, private rooms to help students.	9/6/2022 5:35 PM
17	no ideas at this time	9/6/2022 5:26 PM
18	Common areas. Larger lunchroom. Larger office. Basketball and tennis courts outside. Larger playground and one for younger grades.	9/6/2022 5:23 PM
19	I would love to see a playground space that does not need to be shared with Head Start.	9/6/2022 4:55 PM
20	i think they are doing a great job with all rooms and facilities and love the little gym and restrooms for children which are appropriate levels for them and safe.	9/5/2022 6:20 PM
21	Learning commons or grade level wings would be great for students. Due to the number of sections, some classes in the same grade level aren't near each other.	9/2/2022 3:04 PM
22	n/a	9/2/2022 2:59 PM
23	I have no clue yet.	9/1/2022 5:14 PM
24	Nothing	9/1/2022 4:59 PM

#### Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 25 Skipped: 35

#	RESPONSES	DATE
1	Windows that open.	9/17/2022 10:19 AM
2	There could be more office space for staff/private spaces for children with behavioral concerns/issues.	9/12/2022 10:47 AM
3	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
4	Enhanced security at entrances for the safety of the students and staff.	9/8/2022 11:01 AM
5	we need an office by the main door. our nurse needs a space. we need another office for a counselor and	9/7/2022 10:11 AM
6	There needs to be more space for educators who are actually seeing students within the building. Those that have desk jobs should be the ones with shared spaces. The ones seeing the students and are trying to do explicit teaching of skills should not be sharing confined spaces that don't allow learning of students.	9/7/2022 8:47 AM
7	Calming and sensory spaces for students to utilize daily that does not interfere with other students learning spaces.	9/7/2022 8:22 AM
8	It would be very helpful to have fob access doors at door #11 as well as our current fobs. With the size of our school, we end up with a lot of "traffic jams" as classes use door #10 to come back into the building after recess. There are also 2 gym classes and library specials trying to get where they need to go. It is definitely affecting transitions when there are so many classes in the hallway at once.	9/7/2022 8:18 AM
9	I'm new to the building so I'm not 100% aware of the current needs.	9/7/2022 7:49 AM
10	The safety. Currently parents are buzzed in and the office is quite a ways from the door. They can turn down hallways and get to anywhere in the school	9/7/2022 7:28 AM
11	Common spaces for meetings, afterschool programs etc	9/6/2022 8:32 PM
12	Equity between the south and north schools. HVAC people have not been able to figure out the	9/6/2022 7:46 PM

**EXAMPLE AGASSIZ ELEMENTARY SCHOOL + HEAD START** FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

1st grade wing's heat/AC problems. The air handler is constantly not working and it's humid and hot in the fall. It was 78 degrees in my room supposedly we have AC. It's freezing in other wings.

	5	
13	Lunch room space, a more secure entrance to the building	9/6/2022 6:50 PM
14	Heating and air conditioning systems that work efficiently, keeping a constant temp from area to area.	9/6/2022 6:32 PM
15	A green house where science could be taught, relaxation could take place, health could have classes here and it could be a spot for students to get a break from the loudness that the school building sometimes bring.	9/6/2022 6:08 PM
16	Better air conditioning.	9/6/2022 6:07 PM
17	Places for paras and others to meet with small groups or individuals would be nice.	9/6/2022 5:50 PM
18	Open area not specifically for any set class. An area where if we need to have a room clear, classes can go and continue to learn.	9/6/2022 5:35 PM
19	HVAC- there are classrooms that do not maintain a healthy temperature. It is often too hot or too cold in a classroom.	9/6/2022 5:26 PM
20	Maintenence and upkeep of these facilities.	9/6/2022 5:23 PM
21	I would love to see better water fountains, bathrooms and hand washing facilities in the kindergarten rooms.	9/6/2022 4:55 PM
22	I think all in all safety is the only thing to thing about when it comes to putting rooms or building other facilities.	9/5/2022 6:20 PM
23	Lots of dated buildings, many upgrades needed	9/2/2022 2:59 PM
24	NA	9/1/2022 5:14 PM
25	None	9/1/2022 4:59 PM



Answered: 11 Skipped: 15

#	RESPONSES	DATE
1	I believe children's needs are adequately met.	9/12/2022 10:47 AM
2	Due to lack of air conditioning at Lewis and Clark, noon dismissal times for students are happening this week of Sept. 5-9th. Students are missing out on an afternoon of learning and the heat has made it hard for students to focus during instruction due to the lack of air conditioning. We will be blessed once Lewis and Clark has air conditioning.	9/6/2022 2:39 PM
3	Due to lack of air conditioning at Lewis and Clark, noon dismissal times for students are happening this week of September 5th-9th. Students are missing out on an afternoon of learning, but the extreme heat makes it hard for students and staff to focus and learn/teach at their very best! We will be blessed once Lewis and Clark has air conditioning. :)	9/6/2022 2:39 PM
4	They are not well-equipped to handle the extreme temperatures. They also have an huge lack of electrical outlets.	9/6/2022 1:34 PM
5	For Pre-K, one of our classrooms does not have a bathroom located in it. Makes it difficult for potty training kids. Also no air conditioning has made it hard in high heat these first couple weeks.	9/6/2022 9:55 AM
6	The building is too hot, no air in rooms!	9/3/2022 11:10 PM
7	At Lewis & Clark there is no air conditioning of any sort. It makes hot days unbearable and learning is diminished greatly. We also have too few outlets to support our devices.	9/3/2022 9:27 AM
8	YES	9/2/2022 3:04 PM
9	Lewis & Clark- too hot. There is not air conditioning and it is not adequate to learning. It is also not very accessible for diversity and inclusion. There is inadequate space for students to de- escalate. Counselor and Social Worker share office. Nurse does not have an office. There is not adequate privacy for students. Winship-the holes in the brick leads mice to come into the building. It is not handicap accessible for students needing mobility aids. Space is very limited. OT/Band/Orchestra are in a storage room. All 3 special ed and SLP share a room. Classrooms are bursting at the seams.	9/2/2022 2:37 PM
10	The gym is too small.	9/2/2022 10:09 AM
11	No and yes	9/2/2022 8:58 AM

#### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 7 Skipped: 19

#	RESPONSES	DATE
1	Could portable air conditioners or blackout curtains be used to help cool parts of the building, so multiple classes could use these areas for a cooler learning space.	9/6/2022 2:39 PM
2	Could portable air conditioners or blackout curtains be used to help cool parts of the building?	9/6/2022 2:39 PM

EEWIS AND CLARK ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

Then, multiple classes could use these areas to have a cooler learning opportunity and ideal learning.

	icarinity.	
3	Not really	9/6/2022 9:55 AM
4	Having group learning spaces outside of the classroom is a great way to collaborate and add community within the student body.	9/3/2022 9:27 AM
5	No	9/2/2022 3:04 PM
6	Both schools should have more spaces for differently abled students. Such as quiet spaces, sensory swings, flexible seating.	9/2/2022 2:37 PM
7	No	9/2/2022 8:58 AM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 8 Skipped: 18

#	RESPONSES	DATE
1	Yes.	9/6/2022 2:39 PM
2	Yes, they do at this time.	9/6/2022 2:39 PM
3	?	9/6/2022 9:55 AM
4	No. Our shelves in the library are fixed, and meeting space is limited.	9/3/2022 9:27 AM
5	Yes	9/2/2022 3:04 PM
6	Lewis & Clark- those classrooms are all outdated and need updates to the structure for flexibility in student needs.	9/2/2022 2:37 PM
7	No	9/2/2022 10:09 AM
8	Yes	9/2/2022 8:58 AM

#### Q6 What new types of learning spaces would you like to see in your school?

Answered: 9 Skipped: 17

#	RESPONSES	DATE
1	A STEAM (or IDEA) lab for students to be able to explore technology and other STEM activities to create hands-on projects enhance creativity.	9/6/2022 2:39 PM
2	A STEAM (An Idea Lab) for K-5 students to explore in as part of their day learning at school. Our vision states that Lewis & Clark is a place where all students reach their potential through exploration, creativity, and solving problems with a real-world focus. What a wonderful way for students to learn through exploration! Our Lewis and Clark Library has many technology resources to use from when tech partners used to come into the classrooms. That would be a good start!	9/6/2022 2:39 PM
3	Classrooms with USB ports, electrical outlets, and temperature controlled.	9/6/2022 1:34 PM
4	?	9/6/2022 9:55 AM
5	Pods for flexible groupings, furniture that is easily moved to create learning spaces.	9/3/2022 9:27 AM

LEWIS AND CLARK ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

6	It would be amazing to have a bigger gym space. It would also be beneficial to have a commons space or some small group learning pods for classes to use during lessons to help facilitate small group success.	9/2/2022 3:04 PM
7	more flexible seating options and flexible schedules for students. Hygiene and washer and dryer stations. Kids have dirty clothes or need to freshen up at school because they are not available at home.	9/2/2022 2:37 PM
8	Larger gym	9/2/2022 10:09 AM
9	I think we do well with what we have	9/2/2022 8:58 AM

#### Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 10 Skipped: 16

#	RESPONSES	DATE
1	There could be more office space for staff/private spaces for children with behavioral concerns/issues.	9/12/2022 10:47 AM
2	Carpets bubbling in classroom. Air conditioning. Cupboards installed on back wall to help with storing curriculum and other school supplies	9/6/2022 2:39 PM
3	Buckling of carpet in classroom air conditioning :) cupboards installed along back wall to help with storing curriculum and other school supplies.	9/6/2022 2:39 PM
4	Think about early childhood in planning future projects. I think our district will have to get on board and provide some Pre-K general ed. in the future.	9/6/2022 9:55 AM
5	Windows that open completely, instead of our current design. Lots of areas for device charging and displaying lessons.	9/3/2022 9:27 AM
6	All schools should have air conditioning if we are to start before Labor Day.	9/2/2022 3:04 PM
7	Ensure equity to the schools that are newer to the older schools. Update playgrounds, outside structures, lighting, technology.	9/2/2022 2:37 PM
8	A/C for the whole building	9/2/2022 10:09 AM
9	An air conditioner would be pretty sweet	9/2/2022 8:58 AM
10	AC in buildings	9/1/2022 9:07 PM



Answered: 2 Skipped: 3

#	RESPONSES	DATE
1	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
2	We do not have adequate resources/training/staff to provided adapted music content for SLP/autism students that require serious accomodations.	9/2/2022 3:06 PM

### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 2 Skipped: 3

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	There should be a variety of self-contained and communal spaces to learn and work that students feel comfortable in.`	9/2/2022 3:06 PM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 2 Skipped: 3

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	They have had to! I attribute most of that to staff flexibility and ingenuity, but I suppose the space itself must allow it to some degree.	9/2/2022 3:06 PM

#### Q6 What new types of learning spaces would you like to see in your school?

Answered: 2 Skipped: 3

# RESPONSES DATE

PHOENIX ELEMENTARY SCHOOL     FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES     MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX		
1	A designated room for both Physical Therapy & Occupational Therapy at each school that allows students to move around, play, do different tasks in different settings such as table, floor, swing, etc.	9/10/2022 12:43 PM
2	I would like for us to reintroduce a computer lab/room, where students can do digital school work individually, with access to assistance, supervision, and an expectation of calm environment.	9/2/2022 3:06 PM

#### Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 3 Skipped: 2

#	RESPONSES	DATE
1	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
2	I think we need to keep in mind that neighborhood schools benefit families who have to walk to get their children to and from school because of lack of transportation. Relying on the bus isn't always an option for lower income families because it there is a fee to ride the bus.	9/2/2022 8:52 PM
3	Thoughtful accommodation of students with sensory needs that doesn't include shoving adaptive equipment into an out-of-the-way corner.	9/2/2022 3:06 PM



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# VIKING ELEMENTARY SCHOOL

SCHOOL

Viking Voyagers

Answered: 25 Skipped: 9

#	RESPONSES	DATE
1	Consistently don't have a place to work with students. Normally have to do Physical Therapy in hallways. There is only so much you can do there. It makes it very hard to do job sometimes. When ask for a room, they all say it's a lack of space in each building.	9/10/2022 12:43 PM
2	I do not have a classroom to teach in at Viking Elementary because all other spaces are taken by other classes. Because of the lunch schedule and clean up time, I only have two hours available to teach out of a seven hour day. This would not be an issue if I had a classroom. The situation is not sustainable. At Winship, I am teaching in a closet that is meant for gym equipment. The program is growing there and I do not have room for more than me and four other students in the space. The space is not sustainable for growth.	9/7/2022 11:44 AM
3	Absolutely, we are in the special ed suite downstairs and there is simply not room for everyone. The counselor and Social worker on currently sharing a small office space	9/6/2022 7:38 PM
4	Our restraint is lack of air conditioning.	9/6/2022 3:59 PM
5	The space for support staff is very tight. We are almost on top of us and share spaces. It is hard to find space to teach lessons and distractions for students is a regular thing.	9/2/2022 9:26 PM
6	No Yes	9/2/2022 3:15 PM
7	Space in 4th and 5th grade relocatables is limited and doesn't allow for working in small groups. Not a lot of storage options around room to put learning materials in a way that is easy for students to use.	9/2/2022 3:11 PM
8	Currently my counselor and I are sharing an office space. It is very difficult to fit students or parents in for meetings while dealing with confidential topics.	9/2/2022 2:31 PM
9	Our classroom is very hot. It makes any activity difficult for students. We are crowded and cramped for space to pull small groups of kids.	9/2/2022 2:18 PM
10	No	9/2/2022 2:18 PM
11	None	9/2/2022 2:07 PM
12	You can't teach/learn when it is 80 plus degrees in a classroom/gym. We do not have any room for small groups to work. Relocatables do not have plumbing which can make some science activities/art an issue.	9/2/2022 2:02 PM
13	We have no air, so on hot days it is extremely hard for students and teachers to learn/teach.	9/2/2022 1:41 PM
14	The lack of air conditioning makes this an unhealthy learning environment! Our building is lacking learning space. We have too many students and not enough classrooms to service all of the required classes. Having band taught in a doorway landing space is a distraction to classrooms nearby and a fire hazard. We have four classrooms currently using relocatables for their classrooms which do not have running water. We do not have enough bathrooms throughout the building.	9/2/2022 1:28 PM
15	Lack of air conditioning does not place the students or teachers in a healthy learning environment. We do not have enough learning space for the amount of students in our school. Specialist are stacked on top of each other in their classrooms. Band is not able to conduct their lessons in a room so they are teaching lessons on a landing in the school disrupting classrooms.	9/2/2022 1:27 PM

VIKING ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

16	I would say that the lack of A/C limits us with activities that we can do throughout the summer days. Students and staff struggle to get through the day. We also don't have enough rooms to support the amount of students that we have. I would like to get out of the classroom and explore or move our activities to promote engagement but we don't have any space.	9/2/2022 1:23 PM
17	Could use more space but we're making it work!	9/2/2022 1:23 PM
18	We have no space! We are all on top of each other. The spaces outsides of the special room are created as workspaces for students and we have to walk through the room and which is a distraction for all kids. Also when kids are working in that space they think they can enter my room at all times, and that distracts the student I work with. Yes, I lock my door but then he is knocking on my door. ALSO THE HEAT!!!	9/2/2022 1:22 PM
19	I am currently located in one of the relocatable classrooms. These classrooms sit outside the physical school building. While they have air-conditioning, they do not have running water or rest room facilities. Because we are located outside the physical structure we must go in and out, through the elements, an average of 6 times a day. This means we have to go quickly through the rain and put on jackets during the cold.	9/2/2022 1:11 PM
20	At Viking, there's not enough classrooms to accomodate a Spanish classroom. Spanish/keyboarding class is currently doing push-in teaching which displaces classroom teachers during their prep time.	9/2/2022 11:25 AM
21	Not every student who needs/deserves a para has one	9/2/2022 10:52 AM
22	Having to share gym space with other colleagues Having not enough funding.	9/2/2022 10:23 AM
23	Small gym size	9/2/2022 10:20 AM
24	Yes	9/2/2022 9:45 AM
25	Yes, there is no space! We are all packed into one area. I have my own room but to get to my room I have to go through a behavior/learning area.	9/2/2022 8:58 AM

#### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 23 Skipped: 11

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	A band room should be soundproof so our playing will not disturb other classes. No area in any of my elementary schools is soundproof.	9/7/2022 11:44 AM
3	Special ed should be together with spaces for our therapist such as OT and PT. Speech, sped teachers each need their own rooms. Social worker should be close to the team as we work closely together. The reading team is another team we work closely with.	9/6/2022 7:38 PM
4	It would be nice to have the library as the "heart" of the school building.	9/6/2022 3:59 PM
5	Support staff need designated places to store items and have places to instruct away from others.	9/2/2022 9:26 PM
6	No preferences.	9/2/2022 3:15 PM
7	No	9/2/2022 3:11 PM
8	Really more space is so needed. Quiet space to hold meetings, storage is so needed to hold items for students, etc.	9/2/2022 2:31 PM
9	N/A	9/2/2022 2:18 PM
10	No	9/2/2022 2:18 PM

VIKING ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

11	None	9/2/2022 2:07 PM
12	I am not a fan of the totally "open" designs being able to close a door for a quiet learning experience is important.	9/2/2022 2:02 PM
13	Our special education department is all on top of one another and would benefit from more space. On some days we will have 4 speech/language teachers along with 3 reading teachers and one math interventionist.	9/2/2022 1:41 PM
14	If all of the grade levels could have their classrooms together it would be better for all. It makes it hard to have the grades dispersed throughout the school.	9/2/2022 1:28 PM
15	It would be nice to have all grade levels together rather than scattered around the school and in different buildings.	9/2/2022 1:27 PM
16	I would like to be near all my grade level classrooms so that it's easier to connect with them during prep and during lessons. I think adding on or getting more relocatables would help create a different learning space in the school.	9/2/2022 1:23 PM
17	Continue to try to carry over	9/2/2022 1:23 PM
18	More space and equal resources across the district.	9/2/2022 1:22 PM
19	All classrooms should be housed, adequately heated, and air-conditioned inside one physical structure.	9/2/2022 1:11 PM
20	Group students	9/2/2022 10:52 AM
21	Larger gym space	9/2/2022 10:20 AM
22	No	9/2/2022 9:45 AM
23	I think we should have work areas for kids to work in a quiet spot alone or with a peer, teacher, or para.	9/2/2022 8:58 AM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 23 Skipped: 11

#	RESPONSES	DATE
1	No	9/10/2022 12:43 PM
2	Not at all. The spaces that are available in the elementary schools are often too small for our group lessons.	9/7/2022 11:44 AM
3	No	9/6/2022 7:38 PM
4	Yes, our current learning spaces do allow for flexibility. One could always advocate for new spaces, however, the loss of a neighborhood school is more significant than the gains from a new school in another location.	9/6/2022 3:59 PM
5	No	9/2/2022 9:26 PM
6	Yes	9/2/2022 3:15 PM
7	No	9/2/2022 3:11 PM
8	No	9/2/2022 2:31 PM
9	we need quiet spaces for students to work and not be distracted.	9/2/2022 2:18 PM
10	Yes	9/2/2022 2:18 PM
11	Yes	9/2/2022 2:07 PM
12	no	9/2/2022 2:02 PM

SUKING ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

13	Some classrooms do, some don't.	9/2/2022 1:41 PM
14	No, we are lacking space. Teachers are often having to work in the hallways with small groups of students which makes it a very distracting learning environment.	9/2/2022 1:28 PM
15	No, teachers are teaching small groups all over the school. We are in the hallways, in the lunchroom, in the libraries, the teachers lounge, and in the teacher supply room at times. The school needs more space to meet the needs of all the teachers and the students.	9/2/2022 1:27 PM
16	It could if we made sure to upgrade the school. (the school needs space!)	9/2/2022 1:23 PM
17	Not very well due to lack of space	9/2/2022 1:23 PM
18	No due to lack of space, and currently I share a room with another special education teacher. We have a removable wall that would work to create two different spaces but you can still hear and get distracted by what is going on on the other side.	9/2/2022 1:22 PM
19	The classroom is very confined in size. My classroom has seating for 24 students, but when I have 24 students, I am not able to have areas for small group instruction.	9/2/2022 1:11 PM
20	Not Fully	9/2/2022 10:23 AM
21	Not really	9/2/2022 10:20 AM
22	No	9/2/2022 9:45 AM
23	NO!!!	9/2/2022 8:58 AM

### Q6 What new types of learning spaces would you like to see in your school?

Answered: 23 Skipped: 11

#	RESPONSES	DATE
1	A designated room for both Physical Therapy & Occupational Therapy at each school that allows students to move around, play, do different tasks in different settings such as table, floor, swing, etc.	9/10/2022 12:43 PM
2	Soundproof rooms that are dedicated only to the performing arts such as band and orchestra in the elementary schools. These sound isolation rooms are an excellent option. They are soundproof and modular. They can be changed based on future needs. Here is the link: https://shop.wengercorp.com/education/soundlokr-sound-isolation-rooms.html	9/7/2022 11:44 AM
3	Common special ed area. All grade level teams together in the same space. We currently have 2 4th and 2 5th grade classrooms outside in relocatables. And another section of each inside the school in the lower level. A kids should be inside of the school!	9/6/2022 7:38 PM
4	Since our school population is growing, it would be nice to have additional classrooms added.	9/6/2022 3:59 PM
5	Office spaces and a staff bathroom. We have one bathroom stall for females to use all day for the entire staff that is not shared with students. It would be great to have a space to hold meetings and a room for classes to go to for special projects. Currently, we have to move the gym class out of the gym to hold events or do special activities.	9/2/2022 9:26 PM
6	More room to accommodate for the increase in enrollment.	9/2/2022 3:15 PM
7	a separate area where students can spread out and not have desks in the way and groups can move around	9/2/2022 3:11 PM
8	Space for specialists SPACE is so needed to meet the learning needs of students who receive supports, meeting rooms to have groups, etc.	9/2/2022 2:31 PM
9	Common areas for grade levels. What Discovery has for each grade level is very nice for learners.	9/2/2022 2:18 PM

We viking elementary school

**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS **APPENDIX** 

10	Addtional classrooms	9/2/2022 2:18 PM
11	None	9/2/2022 2:07 PM
12	See number 4	9/2/2022 2:02 PM
13	More space, or lines redrawn because our school is bursting.	9/2/2022 1:41 PM
14	Enough classrooms so teachers and students do not have to make do with noisy hallways.	9/2/2022 1:28 PM
15	Small group spaces that can be utilized by everyone and not just special ed. More ability to move from classroom to classroom so the students can learn from different teachers during reading and math rounds. Spaces that are sound proof so that band, music and choir can practice without interrupting the learning of the other students.	9/2/2022 1:27 PM
16	A room to have extra activities in. For example, sometimes we need a break and would like to work in another room or when I have a special activity, it would help to have another place to set up so teachers aren't running around trying to get them done. I think it would really help with engagement as well.	9/2/2022 1:23 PM
17	A full sensory room to help with regulation	9/2/2022 1:23 PM
18	Sensory room - for all students to take a break in.	9/2/2022 1:22 PM
19	I would like to see areas where we can group kids without having to rearrange the classroom.	9/2/2022 1:11 PM
20	More gym space.	9/2/2022 10:23 AM
21	A second larger gym	9/2/2022 10:20 AM
22	Space for robotics	9/2/2022 9:45 AM
23	Quiet, private, and enough space to use a computer or other materials.	9/2/2022 8:58 AM

# Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 20 Skipped: 14

#	RESPONSES	DATE
1	The lack of room at each school with the amount of students at each school. Each school is pretty much busting at seams. There is no room for growth. Lots of things are old & dont work. Extra trailers placed nears school for temporary rooms that have stayed too long is not a solution. Elementary kids are walking from school to extra building with little clothes or no jackets on in middle of winter. Once at school students should not have to leave the building.	9/10/2022 12:43 PM
2	Instrument storage. At Viking Elementary, the band and orchestra inventory is out in the open in the lunch room. These are expensive instruments that need to be in a secure location.	9/7/2022 11:44 AM
3	How special ed and speech are involved in every grade levela centrally located spot would be amazing.	9/6/2022 7:38 PM
4	Students benefit from small-medium sized elementary schools. To build a new, large elementary/middle school would not be in the best interests of student learning and growth.	9/6/2022 3:59 PM
5	Air, parking, common spaces, and more classrooms to provide for growth.	9/2/2022 9:26 PM
6	More help for custodians Improve air quality	9/2/2022 3:15 PM
7	More classrooms and meeting spaces for specialists. We keep growing every year. A new gym would be great!	9/2/2022 2:31 PM
8	A/C for sure- and a good overall boiler system. Room temperature (warm or cold) really makes a difference in teaching and learning!	9/2/2022 2:18 PM
9	Making sure all schools have AC in the hot summer/fall days so students can feel comfortable	9/2/2022 2:18 PM

#### VIKING ELEMENTARY SCHOOL

ACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

in school. 10 Can't think of any. 9/2/2022 2:07 PM 11 Air Conditioning 9/2/2022 2:02 PM 12 air conditioning, less students or an addition added to the school, not relocatables. 9/2/2022 1:41 PM 9/2/2022 1:28 PM 13 We need more bathrooms, current technology throughout, updated magnetic boards in all classrooms. 14 More bathroom space for teachers and staff, more classroom storage, updated classroom and 9/2/2022 1:27 PM teaching spaces, current technology, magnetic boards, and dry erase boards. Adding more classrooms and adding more bathrooms for staff! Something as simple as 15 9/2/2022 1:23 PM bathrooms needs to be considered when planning and design improvement projects! It's hard to find time in the first place to go to the restroom but when you have a total of two stalls for staff (and students with special needs) it wastes a lot of time .... 16 The band is currently practicing in the landing between the two school floors and it's not 9/2/2022 1:23 PM practical for teaching for either band teacher/students or teaching students/teaching. 17 Cost to improve verse cost to replace. Let's not pour a bunch of money into a drowning ship! 9/2/2022 1:11 PM Being sure to have adequate spaces for classrooms & specialists to limit sharing. 18 9/2/2022 10:20 AM 19 Ac in the class. Not air chillers as they release water into the air which will cause additional 9/2/2022 9:45 AM issues 20 Special education should be bigger and have the same options as regular classrooms. All 9/2/2022 8:58 AM rooms should have windows, and tables to fit all kids K-5. They should have lights that dim and cabinets with wheels.



### WILDER ELEMENTARY SCHOOL

WILDER ELEMENTARY SCHOOL

Answered: 12 Skipped: 15

N/A We could benefit from having more space for students to have for breaks / quiet working / state testing ect Air conditioning Teachers/staff have to move rooms/office quite frequently	9/6/2022 1:38 PM 9/2/2022 3:53 PM
	9/2/2022 3:53 PM
Air conditioning	9/2/2022 3:05 PM
Currently able to meet requirements given I will be "pushing in" but the sustainability of if there are enough actual appropriate (size/amenitiessink, etc.) classroom spaces and the physical size of some classrooms is questionable.	9/2/2022 2:54 PM
My current classroom is a relocatable trailer. It is fairly up-to-date, and I have AC in my room. However, it is not this way inside Wilder Elementary School. The first two weeks of school in the building have been hot. Teachers have brought in fans from home to cool and circulate the air in their classrooms and through the building.	9/2/2022 2:00 PM
The outside temperatures are making it hot in our building with no air which leads to less learning for our students.	9/2/2022 1:33 PM
The heat is making it hard for students to learn. The paper shortage makes me nervous to send stuff to print shop.	9/2/2022 1:31 PM
Bigger and more classrooms. A designated area of school for SpEd and behavior students that fits the needs that those students need during the day. Somewhere for them to use the tools they need.	9/2/2022 10:39 AM
We have the biggest classroom in our school but with 26 students we don't have a lot of space for everyone. We also don't have air conditioning.	9/2/2022 10:34 AM
Having a shared spaced with the lunch room. Hard to use different equipment because of set up and tare down.	9/2/2022 10:15 AM
no, yes	9/2/2022 9:41 AM
Yes (art); no, we have no AC in classrooms and we have physically run out of classrooms if we need to add any additional sections. The counselor and social worker are sharing an office, which means we have little to no confidentiality with students unless one of us works out of the teacher's lounge or other common space. The conference area we use for IEP/504 meetings is in the middle of the special ed. offices, so students going to speech or reading specialists are walking through confidential meetings.	9/2/2022 9:14 AM
	<ul> <li>My current classroom is a relocatable trailer. It is fairly up-to-date, and I have AC in my room. However, it is not this way inside Wilder Elementary School. The first two weeks of school in the building have been hot. Teachers have brought in fans from home to cool and circulate the air in their classrooms and through the building.</li> <li>The outside temperatures are making it hot in our building with no air which leads to less learning for our students.</li> <li>The heat is making it hard for students to learn. The paper shortage makes me nervous to send stuff to print shop.</li> <li>Bigger and more classrooms. A designated area of school for SpEd and behavior students that fits the needs that those students need during the day. Somewhere for them to use the tools they need.</li> <li>We have the biggest classroom in our school but with 26 students we don't have a lot of space for everyone. We also don't have air conditioning.</li> <li>Having a shared spaced with the lunch room. Hard to use different equipment because of set up and tare down.</li> <li>no, yes</li> <li>Yes (art); no, we have no AC in classrooms and we have physically run out of classrooms if we need to add any additional sections. The counselor and social worker are sharing an office, which means we have little to no confidentiality with students unless one of us works out of the teacher's lounge or other common space. The conference area we use for IEP/504 meetings is in the middle of the special ed. offices, so students going to speech or reading</li> </ul>

#### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 9 Skipped: 18

#	RESPONSES	DATE
1	N/A	9/6/2022 1:38 PM

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**FACILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

2	correlates to answer one with wishing we had more rooms/spacing for pull out support/quiet working spaces	9/2/2022 3:53 PM
3	No.	9/2/2022 2:54 PM
4	We enjoy sharing a small group room between grade level classrooms.	9/2/2022 1:33 PM
5	I enjoy having the shared space between our rooms.	9/2/2022 1:31 PM
6	Each grade level should have a shared space for students to collaborate and work together in more than just their specific classrooms.	9/2/2022 10:39 AM
7	n/a	9/2/2022 10:34 AM
8	Having larger gym and a solid walls between different gym spaces to reduce sound.	9/2/2022 10:15 AM
9	no	9/2/2022 9:41 AM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 10 Skipped: 17

#	RESPONSES	DATE
1	N/A	9/6/2022 1:38 PM
2	Yes we are flexible and do what is be for kids every year	9/2/2022 3:53 PM
3	Unsure.	9/2/2022 2:54 PM
4	Yes, great sized classroom with plenty of technology available.	9/2/2022 1:33 PM
5	Yes I like the size of my room and the technology available. We could use more hallway space for coat hooks.	9/2/2022 1:31 PM
6	No, they need to be bigger. A/C in buildings	9/2/2022 10:39 AM
7	No, there is not a lot of space for flexibility in our classroom.	9/2/2022 10:34 AM
8	no	9/2/2022 10:15 AM
9	not really - we really should have a speaker system in every classroom	9/2/2022 9:41 AM
10	No, they do not	9/2/2022 9:14 AM

### Q6 What new types of learning spaces would you like to see in your school?

Answered: 10 Skipped: 17

#	RESPONSES	DATE
1	N/A	9/6/2022 1:38 PM
2	This would take add more rooms to our school	9/2/2022 3:53 PM
3	Small group learning spaces, community learning spaces (ex. grade level).	9/2/2022 2:54 PM
4	Learning pods outside of classrooms like Discovery. More restrooms and water fountains. More hallway space for coat hooks.	9/2/2022 1:33 PM

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FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

5	Learning pods outside the classroom, bathrooms, and computer labs like Discovery has.	9/2/2022 1:31 PM
6	Collaborative areas, SpEd area with tools for children's needs	9/2/2022 10:39 AM
7	A sensory area, or spaces for to students to go to take breaks, take tests out of the classroom.	9/2/2022 10:34 AM
8	A gym larger then 40X60 that is not share as a lunch room.	9/2/2022 10:15 AM
9	more small group spaces	9/2/2022 9:41 AM
10	Additional classrooms, separate offices for positions that require a level of confidentiality. A space for IEP/504 meetings that student's aren't walking through to reach the speech and reading specialists	9/2/2022 9:14 AM

# Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 11 Skipped: 16

#	RESPONSES	DATE
1	N/A	9/6/2022 1:38 PM
2	NA	9/2/2022 3:53 PM
3	Teacher input	9/2/2022 3:05 PM
4	Just the overall flow of a building- keeping lunchroom, gym, music away from general ed. classrooms because of the ongoing noise issues, etc. Air flow! Some buildings have AC but the system does NOT push area evenly throughout the whole building. So some rooms are cold and others are stiflingly hot.	9/2/2022 2:54 PM
5	Air conditioning, more parking space, not sharing a lunchroom with the gym, a fence around the whole school instead of just half of it.	9/2/2022 1:33 PM
6	Air conditioning, lunch room separate from gym, parking spaces, fence around the school, safe equipment at the playground	9/2/2022 1:31 PM
7	Sharing a space with another person when you have confidentiality for students is hard to find space to meet.	9/2/2022 11:22 AM
8	A/C in all schools Bigger classrooms More bathrooms SMART room for movement	9/2/2022 10:39 AM
9	n/a	9/2/2022 10:34 AM
10	Our classrooms NEED air conditioning. No learning is going on when it's 90 degrees in our rooms.	9/2/2022 9:41 AM
11	separate offices for positions that require a level of confidentiality. A space for IEP/504 meetings that student's aren't walking through to reach the speech and reading specialists	9/2/2022 9:14 AM



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### WINSHIP ELEMENTARY SCHOOL

Answered: 17 Skipped: 23

	PE0PON/252	DATE
#	RESPONSES	DATE
1	I do not have windows. Although this does not directly impact learning, it's quite unsafe and I personally find it rather depressing. We also do not have enough space for our specialist teachers to teach in their own environment. Instead, they use our classroom space during our prep time to teach their classes.	9/13/2022 7:22 PM
2	A few different classrooms around our school are very small compared to others. There are also a handful of classrooms without windows.	9/10/2022 2:21 PM
3	We are fully functional in our learning spaces.	9/9/2022 10:59 PM
4	totally sustainable in their current locations. You need to take care of what you have though. That has been the issue this whole time. Neglect on our building from the district	9/8/2022 9:35 AM
5	I feel like our team will always make it work, though having 4 teachers in one classroom for the special education resource room is not ideal. For our students with emotional needs, the resource room does not provide adequate privacy for students to work through emotions with team members. For our students with attentional needs, it is difficult to provide a quiet, non-distracting environment for learning when 3 others groups are working at the same time.	9/7/2022 2:16 PM
6	I do not have a classroom to teach in at Viking Elementary because all other spaces are taken by other classes. Because of the lunch schedule and clean up time, I only have two hours available to teach out of a seven hour day. This would not be an issue if I had a classroom. The situation is not sustainable. At Winship, I am teaching in a closet that is meant for gym equipment. The program is growing there and I do not have room for more than me and four other students in the space. The space is not sustainable for growth.	9/7/2022 11:44 AM
7	currently we have four special education teachers sharing one classroom so space is a bit of a concern.	9/7/2022 8:22 AM
8	My classroom is sustainable in the current location.	9/6/2022 5:20 PM
9	Classrooms too small and hard to find space for all curriculum materials	9/6/2022 4:35 PM
10	Classroom size limits class sizes and makes it difficult to engage in collaborative groups in smaller classrooms. There is limited number of outlets in certain areas of the classrooms.	9/6/2022 4:21 PM
11	No. My classroom is sustainable in its current location.	9/6/2022 4:12 PM
12	My specific classroom's learning space is sustainable in its current location.	9/6/2022 3:42 PM
13	Due to the fact that special education and speech services share one room there is not ample space to complete movement breaks and activities as well as a lack of space to discuss and problem solve during escalated behaviors without interrupting other students learning.	9/6/2022 3:18 PM
14	My classroom is very small. It would be impossible to have 20 desks in it. We have flexible seating, which works, but it is still so crowded that it feels unsafe at times. I have one small window.	9/6/2022 3:17 PM
15	More outlets are needed to support the one-to-one devices throughout the building.	9/6/2022 3:15 PM
16	At Lewis & Clark there is no air conditioning of any sort. It makes hot days unbearable and learning is diminished greatly. We also have too few outlets to support our devices.	9/3/2022 9:27 AM
17	Lewis & Clark- too hot. There is not air conditioning and it is not adequate to learning. It is also	9/2/2022 2:37 PM



**CILITY ASSESSMENT** EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

> not very accessible for diversity and inclusion. There is inadequate space for students to deescalate. Counselor and Social Worker share office. Nurse does not have an office. There is not adequate privacy for students. Winship-the holes in the brick leads mice to come into the building. It is not handicap accessible for students needing mobility aids. Space is very limited. OT/Band/Orchestra are in a storage room. All 3 special ed and SLP share a room. Classrooms are bursting at the seams.

#### Q4 Do you have any preferences or ideas for how different learning spaces should relate to each other within your school?

Answered: 15 Skipped: 25

#	RESPONSES	DATE
1	I think each wing should have a common work area for students who need to work outside of the classroom. A desk and chairs or even a bench would be great!	9/10/2022 2:21 PM
2	Not at this time	9/9/2022 10:59 PM
3	I want to see kids work in a nice place outside of their classrooms. Not on the floor in a hallway where other classes are walking by while kids work.	9/8/2022 9:35 AM
4	In larger areas, dirt walls or moving walls to block off areas of large classrooms or areas. A little more privacy, and quiet space.	9/7/2022 3:55 PM
5	I do like that the resource room is in a central space in our school. I do like that various grades have their own wings. It would be beneficial to have more space for work areas to better meet student/staff needs.	9/7/2022 2:16 PM
6	A band room should be soundproof so our playing will not disturb other classes. No area in any of my elementary schools is soundproof.	9/7/2022 11:44 AM
7	I think our learning spaces flow well together.	9/7/2022 8:22 AM
8	Break room could include sensory swing	9/6/2022 5:20 PM
9	No	9/6/2022 4:12 PM
10	It would be nice to have more common space to work together amongst an entire grade level. Currently there aren't spaces large enough to house that many students working at once.	9/6/2022 3:42 PM
11	No	9/6/2022 3:18 PM
12	There should be equitable space and more storage in a school.	9/6/2022 3:17 PM
13	No	9/6/2022 3:15 PM
14	Having group learning spaces outside of the classroom is a great way to collaborate and add community within the student body.	9/3/2022 9:27 AM
15	Both schools should have more spaces for differently abled students. Such as quiet spaces, sensory swings, flexible seating.	9/2/2022 2:37 PM

#### Q5 Do your classrooms or learning spaces allow for flexibility to meet changing and future educational needs?

Answered: 16 Skipped: 24

#	RESPONSES	DATE
1	Not at all. We have no collaborative learning space besides our classrooms. My classroom is	9/13/2022 7:22 PM

WINSHIP ELEMENTARY SCHOOL

FACILITY ASSESSMENT EXISTING BUILDING INVENTORY ARCHITECTURAL FINISHES

MECH/ELEC ASSESSMENT EXISTING DEFICIENCIES COST ANALYSIS APPENDIX

one of the smallest in the school and I sometimes have the largest students, which then makes space/movement challenging.

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2	No, classrooms around our school are very small compared to others. There have been many students packed into one small room and it makes learning a little more challenging with so many bodies in a tiny room.	9/10/2022 2:21 PM
3	As of right now, yes. It's hard to predict future trends, so difficult to answer for the future.	9/9/2022 10:59 PM
4	Some of our classrooms are small and some are big. It can be difficult at times with the "flexibility" part of this question.	9/8/2022 9:35 AM
5	We need more space. I adore our school and the culture.	9/7/2022 2:16 PM
6	Not at all. The spaces that are available in the elementary schools are often too small for our group lessons.	9/7/2022 11:44 AM
7	We have a student who is in a wheelchair this year and we are finding that we need to make many changes in order to meet ADA requirements.	9/7/2022 8:22 AM
8	Yes	9/6/2022 5:20 PM
9	Teachers meet changing educational needs, not buildings.	9/6/2022 4:21 PM
10	Yes	9/6/2022 4:12 PM
11	We need more community spaces / rooms that are purposely un-designated for paras to use with students one-on-one and students to gather in small groups.	9/6/2022 3:42 PM
12	No they do not	9/6/2022 3:18 PM
13	No they do not. There is not any work space for "pull out situations. Students/paras/etc are forced to work on the floor.	9/6/2022 3:17 PM
14	Space is limited in our small school for flexible learning spaces.	9/6/2022 3:15 PM
15	No. Our shelves in the library are fixed, and meeting space is limited.	9/3/2022 9:27 AM
16	Lewis & Clark- those classrooms are all outdated and need updates to the structure for flexibility in student needs.	9/2/2022 2:37 PM

#### Q6 What new types of learning spaces would you like to see in your school?

Answered: 15 Skipped: 25

#	RESPONSES	DATE
1	It would be great to have more classrooms that are larger in size! It would also be nice to have enough classrooms in a school. Often times specialists are having to share space because there aren't enough classrooms for each to have their own. I think it would be great to see some comfortable seating in the library amongst the shelves or even in the wings of classrooms.	9/10/2022 2:21 PM
2	I think an outdoor/nature learning space would be really great.	9/9/2022 10:59 PM
3	workspaces for kids outside of their classrooms	9/8/2022 9:35 AM
4	Learning "cubicles" in each grade wing area to provide quiet spaces for students to complete work and for staff members to work with students in one-on-one/small group situations.	9/7/2022 2:16 PM
5	Soundproof rooms that are dedicated only to the performing arts such as band and orchestra in the elementary schools. These sound isolation rooms are an excellent option. They are soundproof and modular. They can be changed based on future needs. Here is the link: https://shop.wengercorp.com/education/soundlokr-sound-isolation-rooms.html	9/7/2022 11:44 AM
6	unsure	9/7/2022 8:22 AM

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7	Creation space, sensory space, collaborative space	9/6/2022 5:20 PM
8	Small group work keva sir area	9/6/2022 4:35 PM
9	It would nice to have collaborative learning spaces for specialists and for teachers to meet, but they are not a necessity. Accessibility and safety should be top priorities.	9/6/2022 4:21 PM
10	Would love to see examples of learning spaces.	9/6/2022 4:12 PM
11	a sensory room used for students who have ADHD other SEL needs etc. This space would be used for large motor, fine motor and calming breaks. This space needs to be separate from the Reset room/padded rooms within the school. It would be preventative care in a designated space for children in need.	9/6/2022 3:18 PM
12	Storage and work space that isn't a lunchroom table.	9/6/2022 3:17 PM
13	Just more room for students to collaborate and create. Our classrooms are small and there are no extra rooms for space.	9/6/2022 3:15 PM
14	Pods for flexible groupings, furniture that is easily moved to create learning spaces.	9/3/2022 9:27 AM
15	more flexible seating options and flexible schedules for students. Hygiene and washer and dryer stations. Kids have dirty clothes or need to freshen up at school because they are not available at home.	9/2/2022 2:37 PM

# Q7 What other issues do you believe should be considered in planning and design improvement projects?

Answered: 17 Skipped: 23

#	RESPONSES	DATE
1	Accessibility issues. Bathrooms for both students and staff aren't very user friendly.	9/13/2022 7:22 PM
2	Staff bathrooms. There are currently two staff bathrooms for all 50+ staff members. Often times there is a long line to use the bathroom and it gets to be very frustrating.	9/10/2022 2:21 PM
3	The exterior of our building needs attention. It does not portray a welcoming, safe and inviting image. Our district has been prioritizing equity recently, but there are many areas that need to be addressed in order to achieve equity among all our buildings. We need our fence replaced, holes repaired and a new exterior. The interior of our building is functioning well. We have an excellent HVAC system, our cafeteria and hallways look great, a beautiful brand new gym floor, and an improved playground on the way.	9/9/2022 10:59 PM
4	The answer isn't to close this school down. Take care of it. It's a great place but needs work done on the outside. The years of neglect are catching up with you.	9/8/2022 9:35 AM
5	security and safety, even with the locked access, there should be a swipe system for families to use before entering. This would bring up family information safer and faster for pick up. Administrators should be on the outside of the building to be more visible and a lock in area for visitors. Now they walk in and the classroom is readily accessible. Exterior is a direct reflection of the District, all areas of every school need to be improved.	9/7/2022 3:55 PM
6	-Accessibility (i.e. wheelchair) throughout all school environments (i.e. inclusive playground equipment; bathrooms) -More room for movement in all school environments (i.e. classrooms/hallways)	9/7/2022 2:16 PM
7	Instrument storage. At Viking Elementary, the band and orchestra inventory is out in the open in the lunch room. These are expensive instruments that need to be in a secure location.	9/7/2022 11:44 AM
8	some of our classrooms are interior rooms with no windows and only one exit. This gives me anxiety for safety if there were to be a fire or an intruder or other emergency.	9/7/2022 8:22 AM
9	new carpet in classrooms	9/6/2022 5:20 PM

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10	Bigger classrooms and resource rooms	9/6/2022 4:35 PM
11	Accessibility and safety	9/6/2022 4:21 PM
12	Unsure	9/6/2022 4:12 PM
13	Classrooms with similar square footage would be helpful, some of our classrooms are large while others can barely house the quantity of students they are used for. Better built in storage solutions would free up physical space as well.	9/6/2022 3:42 PM
14	Equity and accessibility to spaces.	9/6/2022 3:18 PM
15	Safety. Equity.	9/6/2022 3:17 PM
16	Windows that open completely, instead of our current design. Lots of areas for device charging and displaying lessons.	9/3/2022 9:27 AM
17	Ensure equity to the schools that are newer to the older schools. Update playgrounds, outside structures, lighting, technology.	9/2/2022 2:37 PM



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