

WILD ROSE SCHOOL DIVISION

2022-2025

THREE YEAR CAPITAL PLAN

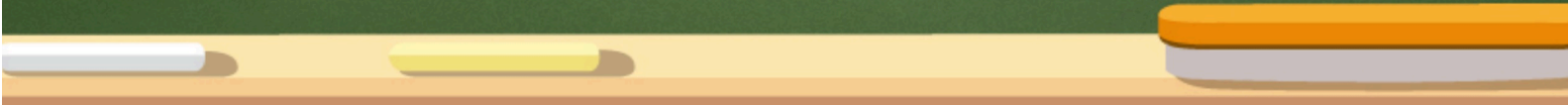


TABLE OF CONTENTS

Executive Summary	3
General Information	4
2022-25 Capital Priorities	7
Priority 1 Right-size Breton Schools	8
Priority 2 Modernize and Right-size Ecole Rocky Elementary	12
Priority 3 Frank Maddock High School - Major Modernization	14



Executive Summary

Wild Rose School Division (WRSD) is a division with 13 school facilities that range from those built in the 1950's to schools requiring modernization to fit the needs of current educational programming. Construction on three replacement schools is to begin later this year. There are schools located throughout our large geographical region that are in need of modernizing, right sizing or replacing.

WRSD continues to partner with the respective communities, counties, towns and the Government of Alberta to meet our goal of ensuring all of our students continue to receive an excellent education in modern school facilities that support 21st century learning and program delivery.

Every year school boards assess their school capital requirements and prioritize proposed projects based on defined priorities. These projects are identified in a Three Year Capital Plan that must be approved by the Board and submitted to Alberta Education annually by April 1. The plan must be developed in accordance with Alberta Education's project drivers - Health & Safety, Building Condition, Enrolment Pressures, Functionality & Programming and Legal.

Wild Rose School Division's Three Year Capital Plan submission includes the following priorities:

Priority 1 - Right-size Breton Schools

Priority 2 - Modernize and Right-size Ecole Rocky Elementary

Priority 3 - Frank Maddock High School - Major Modernization



General Information

Wild Rose School Division serves the communities of Rocky Mountain House, Drayton Valley, Caroline, Leslieville, Condor and Breton. We have 17 schools that serve approximately 4,400 students across about 2,612 square miles.

- 13 school facilities (two schools are co-located)
- 1 school facility owned by the Rocky Christian School Society
- 2 Outreach schools (leased space)

Recently Opened School Capital Projects:

- Evergreen Elementary in Drayton Valley (August 2020)



Upcoming Approved School Capital Projects:

- Condor Elementary Replacement School, will be built as a Kindergarten to Grade 6 school in Condor, Alberta



Upcoming Approved School Capital Projects (continued):



Please note that school names are placeholders only until names are finalized.

- Leslieville Replacement School, will be built as a Grade 7 to Grade 12 Junior and Senior school in Leslieville, Alberta



Please note that school names are placeholders only until names are finalized.



- HW Pickup replacement school, will be built as a Kindergarten to Grade 9 school in Drayton Valley, Alberta.



2022-25 Capital Priorities



Priority 1 Right-size Breton Schools

Right-size Breton Schools

- Major Modernization of Breton High School & Reconfigure Breton High School into a Kindergarten to Grade -12
- Close Breton Elementary and demolish building

Student Enrolment

	2017-18	2018-19	2019-20	2020-21	2021-22 Projected
Breton Elementary	175	176	188	167	156
Breton High	132	153	146	152	154

Information

As per the 2018-19 ACU report, Breton High School is 39 percent utilized. Reconfiguring the high school into a K-12 school would increase the student population in the building and improve the utilization rate significantly - to approximately 79 percent.

Breton High School is a grade 7 to 12 facility located in Breton, Alberta. The original 1956 structure was demolished (date is unknown). All sections of this facility have masonry exterior and interior walls. A single storey school was constructed in 1959 (1,443.2 m2). Then, 3 single storey additions were constructed, the 1965 (989.3 m2), 1968 (611.8 m2) and a 1991 addition (1,263.7 m2). Also, this facility was modernized in 1991. The total building area is 4,308.0 m2.



Breton Elementary School is a Kindergarten to Grade 6 school located in Breton, Alberta. The original split level school was built in 1952 (531.7 m²) as phase one with phase two phase commencing immediately at completion of the 1952 structure in 1953 (702 m²). Two additions followed, 1966 was a (557.4 m²) single storey addition constructed to the north of the original school and the other in 1981 also a single storey addition (973.0 m²). All sections have masonry exterior and interior walls. Modifications and renovations were undertaken in 1995 and in 2004. The total gross area of the building is 2,764.1 m².



Challenges

In January 2021, the division hired an independent engineering firm to conduct a structural inspection of both the elementary and high school buildings.

Breton Elementary School

In regards to Breton Elementary, the engineering firm stated that the structure was in marginal but serviceable condition. However, they noted the following,

- the upper floor framing of the 1952/1953 classroom wing exhibits deflection resulting in a “noisy” floor,
- frost/ moisture penetrates the exterior masonry wall around the main entry area. Some slab settlement was observed in multiple locations,
- straw masonry units used for gym addition exhibit some stress cracks at the roof glulam beam bearing locations,
- the exterior envelope requires new membrane and insulation for the majority of the building.



It would be very costly to convert the existing elementary building into a high school. The current gym would not provide sufficient space for high school programming and there is no optimal space to develop CTS labs. In addition, the heating and ventilation equipment in the 1952 section of the building, and the plumbing system and fixtures in the 1966 and 1981 sections are at, or approaching the end of their useful life. The 1966 and 1981 sections also require new windows. Lastly, areas of the 1952 section does not have proper weeping tile which has resulted in several basement leaks in the past. According to the engineering firm a modernization of Breton Elementary School to implement required upgrades will be at approximately 75 percent of the cost of new construction.

Breton High School

In regards to Breton High School, the engineering firm stated that there were no major structural issues noted during their inspection of the building. The existing structure was observed to be in serviceable condition throughout the school. There are minor issues such as exposed exterior foundation insulation and frost penetration at the gym entry that could be addressed and further investigation of existing wood joists over the classroom areas should be undertaken to verify their integrity as some old water leaks were observed. They noted that the main floor slabs and load bearing walls appeared to be in good condition. The majority of the roof finishes were recently replaced and/or repaired. They also recommended that a modernization of the school building was feasible.

Solution

The division's first capital priority is to right-size and fully modernize Breton High School to accommodate all local students, grades Kindergarten to Grade 12. The modernization would involve replacing air handling units, the pneumatic controls system and the fire alarm system. In addition, larger, oversized classrooms would be reconfigured to increase the number of classrooms to accommodate elementary educational programming. The current CTS space would be reconfigured to include a cosmetology lab and an art room. The theater/music room would be reconfigured to utilize the space more efficiently and finally, LED lighting would be installed throughout the entire building. Additional work such as building envelope upgrades may be required to meet current energy standards.

The project would also include the demolition and disposal of the existing Breton Elementary School. In relation to phasing, the recommendation is to modernize the Breton High School first, move the elementary students to the modernized Kindergarten to Grade 12 facility and then demolish the elementary school.

This priority would meet three of Alberta Education's project drivers including, functionality and programming, building condition and enrolment pressures.

Risk of Project not being Approved

Breton High School will remain significantly underutilized. Operation and Maintenance funding will continue to be used to maintain and operate two large facilities and efficiencies will not be realized. IMR funding will need to be utilized to update building components in a piecemeal fashion. This method is financially inefficient and disruptive to building occupants and overall provides a less desirable finished result. As well, without the integration of modular classrooms into our facility plans, the division does not have the ability to readily adapt the facilities' sizes to accommodate enrollment pressures. In the case of decreasing enrollment, the only option is to demolish portions of the existing facilities. This is not ideal nor feasible and therefore inefficient operations continue.



Priority 2 Modernize and Right-size Ecole Rocky Elementary



Student Enrolment				
2017-18	2018-19	2019-20	2020-21	2021-22 Projected
319	315	294	259	250

Information

Ecole Rocky Elementary is a Kindergarten to Grade 5 English and French Immersion school located in Rocky Mountain House, Alberta.

A single storey 996.3 square meter school was constructed in 1948. There was a 176.8 square meter addition in 1950 and a 758 square meter addition including a finished basement in 1953. In 1955 a 1,610.8 square meter single storey school was constructed to the east with a shared gymnasium. In 1971, the two structures were linked with a 107 square meter vestibule and a mechanical mezzanine was constructed above the stage location. In 1989 the gymnasium was renovated and an addition of approximately 400 square meters was constructed. A significant



portion of the buildings were modernized in 1989. The school capacity is approximately 570 students.

Challenges

The school saw a major modernization and addition in 1989. During this time, many major building components and finishes were replaced. As this modernization was over 30 years ago, many of these elements have now met or exceeded their design life. Examples of these elements include but are not limited to:

- Heating boilers and distribution system
- Air handling systems
- Building management system
- Fire alarm system
- Lighting (exterior and interior)
- Electrical systems
- Windows
- Roofing
- Exterior wall finishes
- Flooring
- Interior and exterior painting
- Millwork

Solution

A major modernization of the facility would renew these components in a proactive manner reducing potential negative impact to the occupants, provide the greatest financial benefit, meet new energy standards to reduce operating costs and extend the useful life of this facility.

As well, during the modernization, a right sizing process would be used to remove the two story (west) section of the building reducing the building size and eliminating current access issues to the basement area. The right sizing process would be combined with the modernization, replacement components would be appropriately sized for the smaller facility area therefore increasing efficiency and reducing capital costs.

Risk of Project not being Approved

Operation and Maintenance funding will continue to be used to maintain and operate a large facility and efficiencies will not be realized. IMR funding will need to be utilized to update building components in a piecemeal fashion. This method is financially inefficient and disruptive to building occupants and overall provides a less desirable finished result.



Priority 3 Frank Maddock High School - Major Modernization

The following projects comprise Priority 2:

- Major Modernization & CTS Reconfiguration



Student Enrolment				
2017-18	2018-19	2019-20	2020-21	2021-22 Projected
539	527	514	498	479

*Grades were re-configured with the closure of Evergreen Elementary school



Information

Frank Maddock High School is a grade 9 to 12 school located in Drayton Valley, Alberta. The 1971 original building with 4,311.00 m². is one storey with a mezzanine. It has non-combustible construction with sprinklers. The 1977 addition with 1,327.00 m² is one storey and has 2 portions (1977-North addition and 1977-South addition). It has non-combustible construction with sprinklers. The 1982 addition with 1,941.00 m² is one storey with mezzanines. It has non-combustible construction. The 1998 addition with 1,075.00 m² has a walkout basement, main floor and a mezzanine. It has combustible construction. The total area is 8,654.00 m². A major modernization was done in 2000 to the 1971 original building and 1977 addition.

The current configuration of the building does not meet Alberta Education and Alberta Infrastructure guidelines as the industrial CTS areas are oversized for the capacity and student population while the foods program has a waiting list of approximately 20-30 students per semester due to limited lab and classroom space. The gym is undersized and there is a need for additional physical activity space in order to provide all the educational programming requirements.

Frank Maddock High School has valuable CTS shops for Automotive, Welding and Construction equipped with high tech, expensive tools and equipment. NAIT, Alberta Advanced Education and the Town of Drayton Valley have expressed an interest in sharing these spaces, but no clarity on partnership opportunities have been forthcoming to date.

Challenges

The school building is 50 years old. The high school has a low utilization of approximately 62 per cent. The configuration of space in the high school does not meet with the division's requirements for program delivery and is not compatible with 21st Century Pedagogy; it is too segregated which does not permit collaboration between staff members and between students. There are obsolete spaces, such as computer rooms; and under-utilized spaces like the theatre and basement. It also has barrier free access challenges to the basement and other areas that needs to be addressed. A major modernization would meet the functionality and programming project driver.

In July 2020, the division hired an independent engineering firm to conduct a structural inspection of the building. The engineering firm found minor structural deficiencies including,

- the settlement of main floor slab on grade was observed in several locations along perimeter walls,
- minor cracks in masonry walls,
- weathering of exterior load bearing masonry occurred along south and east elevations,
- the stucco covering the load bearing exterior masonry walls around the trades and technology part of the building is damaged and requires remedial work to prevent water infiltration,
- the exterior gym wall has been mechanically damaged and requires repairs/ replacement,



- the Theatre should be further reviewed to ensure that it is capable of supporting all superimposed live loads as per current building code requirements,
- the stucco applied to the original exterior elevations around the stage has some major vertical cracks

The engineering firm noted that no major structural issues were observed during their visual inspection and that overall the existing structure was in serviceable condition. The firm also stated in their report that the Frank Maddock High School building could be modernized.

Solution

The solution would be a major modernization of Frank Maddock High School. The existing CTS spaces would be modernized and redeveloped to accommodate foods programming and cosmetology. The spaces would also be reconfigured to allow for additional classroom space. In particular, the cosmetology space would be relocated from its current location among the regular classrooms to the shop area and the foods classroom would also be moved to the shop area. This project would maximize value and increase the usage of our existing space. The current foods and cosmetology spaces would then be reconfigured to classrooms. The cosmetology room is over sized for a regular classroom but with the addition of a movable partition, it would provide more flexibility. The existing foods and cosmetology classrooms are located in the main area of the school and would fit well into the existing programming. In addition to programming and space changes the following systems and components in the CTS area would be modernized to extend the life of the facility, support current programming requirements and meet current energy codes.

- **Mechanical**
 - Air handling units and associated ductwork
 - Exhaust fans
 - Heating and domestic water piping
 - Control valves
 - HVAC controls
- **Electrical**
 - Motor controls
 - Lighting systems
 - Electrical distribution systems
 - Panelboards
- **Fire/Life/Safety Systems**
 - Sprinkler system
 - Fire alarm system
 - Building communication components
- **Building Envelope**
 - Exterior walls
 - Windows
 - Exterior and overhead doors
- **Interior finishes and equipment**
 - Flooring

- Ceiling
- Paint
- Lockers

Risk of Project not being Approved

The opportunity to provide enhanced educational programming for CTS courses will be limited. A student wait list for certain courses will remain. The current configuration of space in the high school does not meet with the division's requirements for program delivery and is not compatible with 21st Century Pedagogy.

As the CTS area of the school was constructed in 1982 and has not seen a major modernization, many of the systems are approximately 40 years old and have reached the end of their design life per Alberta Infrastructure guidelines. Using IMR funding in a piecemeal fashion to ensure efficient and consistent operation of this facility is financially inefficient, is disruptive to building occupants and overall provides a less desirable result.

Recent events

In February 2020, the division led a Drayton Valley Schools regional planning study with funding received from Alberta Education. Participants that took part in the study represented Alberta Education, WRSD trustees and administration, Drayton Valley school principals and parents, Town of Drayton Valley officials, ONPA Architects and Tech-Cost Consultants. The study took place over four days including tours of all our school facilities in Drayton Valley and the development of several future school and grade configuration scenarios for Drayton Valley.

After the study, Wild Rose School Division continued to work with Alberta Education to develop a strategic capital plan for the schools in Drayton Valley. And as a result, Alberta Education and Alberta Infrastructure approved a replacement school for H.W. Pickup Junior High School in the Fall of 2020. Construction on the new school is expected to be complete in 2023. Once complete, the new building will house middle schoolers and K-9 students enrolled in the Drayton Christian School. In addition, the existing H.W. Pickup building will be demolished along with the Eldorado school building.

