



Shields Valley Public Schools Master Planning

June 2, 2022

Elementary Schools Assessments

Architect/Engineer

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CT Project No.: SHIELDS_MP

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Introduction

Cushing Terrell was enlisted by the Shields Valley School District to provide assessments of the 1913 Elementary School and 1967 Elementary School, both located in Wilsall, Montana. The assessments are part of the Master Planning process that the School District has embarked on. Cushing Terrell breaks our comprehensive planning process into three phases: Assess, Explore, and Apply. One of the first steps in the Assess phase was to assist the Shields Valley Planning Committee in establishing your Guiding Principles which are the Goals, Priorities, and Vision of the School District which will guide the Planning Committee through the master planning to ensure we are staying within the boundaries defined by the stakeholders at each step along the planning process. Those Guiding Principles are included with this report for reference.

Cushing Terrell field verified the existing conditions at each of the elementary schools over the course of several days in the Spring of 2022. The purpose of the building assessments was to identify deferred maintenance items at the two schools. The District requested we breakout the assessments separately and focus on the elementary schools first. Our team assessed the architectural, structural, plumbing, and electrical systems of the buildings. Mechanical systems for the elementary schools were not assessed due to the recent failure of the existing boiler system. After evaluating the existing conditions at each school, Cushing Terrell compiled the identified deficiencies into this report.

Beyond the physical assessment of the buildings and their systems, Cushing Terrell also provided an assessment of the educational spaces in the facilities and compared their adequacy to the educational pedagogy the District has established.

The scope of Cushing Terrell's evaluations also includes providing cost estimates for each of the identified deficiencies so the Board of Trustees can make informed decisions on potential renovations and/or additions or new construction projects. These deferred maintenance items were reviewed at the Planning Committee meeting on June 2, 2022. The items will eventually be prioritized by the planning committee and the Cushing Terrell team and those priorities will be added to this report.



Prioritized Guiding Principles – Shields Valley School District Master Planning

- High Quality Education
 - Socially, Emotionally, and Academically Connected Students
 - Inclusion for all kids; Accessible / ADA
- Meets Current Needs First, then address Future Needs
- School as a Community Center to maintain community involvement
 - Maintain Culture / Core Values / Community Pride
- Safety and Security
- Healthy Schools
- Sustainable – in both Longevity and Energy Efficiency
 - Build to Last / Build for Growth
 - Energy Efficient Facilities
- Honor History of the Valley, both Physical & Valley Environment
 - Maintain Agricultural Values
- Blend traditional teaching with modern teaching/learning.
 - Embrace Progress, Be Innovative but Maintain Traditions / Values

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Interior of 1967 Elementary School

Entry Vestibule: The main entry to the 1967 school has the original exterior entrance doors which appear to be uninsulated hollow metal doors. The doors have a mix of original hardware and newer hardware. The hardware on the pair of doors where access controls have been installed have newer exit devices and newer closers. The other doors appear to have the original exit devices and original closers. The doors also have the original single pane, wired glass in the vision panels. There is a transom above the doors which has single pane glazing which is not energy efficient. At some point, a set of interior vestibule doors were added, which is constructed out of aluminum storefront system. These doors appear to be in fairly good condition, but they also have what appears to be older closers. It was noted that the spacing between the interior doors and the exterior doors is not of sufficient width to comply with ADA requirements, with a distance of 4'-6" in lieu of the required 5'-0". The flooring in the vestibule appears to be a vinyl tile which could contain asbestos. This flooring appears throughout the school. The ceiling in the vestibule is a 12"x12" glue-on acoustical tile. This type of ceiling tile appears throughout the school. Materials testing will be conducted to confirm which, if any, materials contain hazardous materials.

Main Lobby: The main lobby to the school has walls of painted CMU, carpet flooring with rubber base, and ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. This area also houses original wood display cases for school trophies and other mementos.

Principal's Office: This office has walls of painted CMU, flooring is vinyl tile and ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. Windows are single pane which are not energy efficient, and the lower portion of the windows are operable, awning type. New window blinds have been installed which do help to improve the thermal comfort in the room. The door into the office appears to be the original wood door set in a hollow metal frame and the door has a knob handle which does not comply with ADA requirements.

Gym: The floor level of the Gym is three and a half feet lower the floor of the main school. The only way to access the Gym is via a set of stairs which does not comply with ADA requirements. Handrails serving the stair also do not comply with ADA requirements, as they do not have the proper extensions at top and bottom. The finish on the stairs is a slip-resistant rubber tread and the bottom landing is carpet with rubber base. The doors into the Gym appear to be the original wood doors set in a hollow metal frame and the hardware appears to be the original exit devices and closers. The flooring inside the Gym is a hardwood surface with a vented base. The wood bleachers are original to the 1967 construction and do not comply with current codes for railings and for ADA accessible spaces. The walls of the Gym are painted CMU with painted concrete foundation exposed at the lower portion of the wall. The ceiling consists of painted steel roof trusses with glued-on acoustical tiles in-between, and pendant light fixtures and two skylights. The basketball hoops are new, but the electronic scoreboard appears to be older and the two drinking fountains appear to be original.

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Women's Locker Room: Located adjacent to the Gym, the locker room has painted concrete floors, painted CMU walls and some painted gypsum board partitions, and the ceiling is painted gypsum board with surface mounted light fixtures. The lockers, toilet partitions, toilet fixtures, and shower stalls are all original to the 1967 construction, as are the ceramic tile flooring, wall tile, and terrazzo shower bases. Some of the terrazzo bases are not in good condition and the shower fittings appear to be original. None of the toilet stalls, showers, or lockers are ADA accessible. The doors are original wood doors set into hollow metal frames. The door hardware is an older closer and knob handle, which is not ADA compliant. The windows are single pane wired glass. The only elements in this area that are newer are the toilet accessories.

Men's Locker Room: Also located adjacent to the Gym, this locker room is very similar to the women's locker room. The room has painted concrete floors, painted CMU walls and some painted gypsum board partitions, and the ceiling is painted gypsum board with surface mounted light fixtures. The lockers, toilet partitions, toilet fixtures, and shower stalls are all original to the 1967 construction, as are the ceramic tile flooring, wall tile, and terrazzo shower bases. Some of the terrazzo bases are not in good condition and the shower fittings appear to be original. There is currently a leak at one of the shower faucets which has caused damage to the tile wall and tile flooring. None of the toilet stalls, showers, or lockers are ADA accessible. The doors are original wood doors set into hollow metal frames. The door hardware is an older closer and knob handle, which is not ADA compliant. The windows are single pane wired glass. The only elements in this area that are newer are the toilet accessories.

Laundry Room: This room has painted concrete floors, painted CMU walls and the ceiling is painted gypsum board with surface mounted light fixtures. The mop sink and wood shelving appear to be original to the 1967 construction. The original wood door is set into a hollow metal frame. The door hardware is an older closer and knob handle, which is not ADA compliant. The water connection at the wash machine has leaked and eroded the gypsum board wall below.

Coaches Room: This room has walls of painted gypsum board and painted CMU, flooring is vinyl tile and ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. The original wood door is set into a hollow metal frame. The door hardware is an older closer and knob handle, which is not ADA compliant. There is exposed wiring at gypsum board walls. There is a private restroom and shower located off this office. The plumbing fixtures, shower partitions and terrazzo base are all the same as the locker rooms, appear to be original. The toilet accessories are newer, however.

Nurse Station: This room has walls of painted gypsum board, flooring is vinyl tile, and ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. The original wood door is set into a hollow metal frame. The door hardware is an older closer and knob handle, which is not ADA compliant. There is a private restroom and shower located off this nurse station. The plumbing fixtures, shower partitions, and terrazzo base are all the same as the locker rooms, appear to be original. The toilet accessories are newer, however.

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Equipment Storage: Located under the stairs leading to the mezzanine, this room has a concrete floor, CMU walls and some gypsum board partitions and a gypsum board ceiling with old lighting. The original wood door is set into a hollow metal frame. The door hardware is an older closer and knob handle, which is not ADA compliant.

Weight Room: Located on the mezzanine in the Gym, this room has carpet flooring, painted CMU walls and partial height gypsum board painted partition separating it from the Gym below. The ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. The stair leading up to the weight room has handrails which are not ADA compliant, as they do not have the proper extensions at top and bottom of the stair run.

Music Room: Also located on the mezzanine in the Gym, this room has carpet flooring, painted CMU walls and painted gypsum board walls which are damaged in some areas. The ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. There is old wood shelving in this room. The original wood door and wood frame has a lever handle hardware. There is a suspended unit heater in this room with exposed insulated piping. There is an exterior emergency egress stair off this room leading down to grade. This stair has a metal guardrail that is not code compliant, as it does not have sufficient intermediate rail spacing within the guardrail and it also is missing handrails at both sides of the stair.

Music Storage Rooms: There are three small storage rooms with vinyl tile flooring, painted CMU walls and painted gypsum board walls, with 12"x12" glue-on acoustical tile ceiling with surface mounted fluorescent light fixtures.

Stage/ Cafeteria: This space serves as both stage and as a lunch room for the school. There is sheet vinyl flooring with welded seams, painted CMU walls, and the ceiling is a 12"x12" glue-on acoustical tile with suspended fluorescent light fixtures. The pair of doors leading into this area appear to be original and have knob handles which are not ADA compliant. The stair leading down to the Gym level is also not Code compliant as it is too steep with 8" risers and with guardrails which do not have sufficient intermediate rail spacing within the guardrail. The handrails also do not comply with ADA as they do not have the proper extensions at top and bottom of the stair run.

Kitchen: The kitchen has epoxy coated, slip-resistant flooring, painted CMU walls and some painted gypsum board partitions, and a 2'x4' suspended panel ceiling with recessed fluorescent lighting. The serving line consists of what appears to be the original wood casework and stainless steel countertops which in several places has seams with sharp edges and some areas which are dented or warped. Elsewhere in the kitchen there are plastic laminate countertops, some of which are damaged. There is an old wood accordion door which is used to close off the kitchen from the lunchroom. The kitchen equipment is old including the range/oven, convection ovens, and wall mounted ovens, refrigerator and, what appears to be, the original wood walk-in freezer. There is an exhaust hood over the range that appears to have a built-in fire suppression system however it is most likely not compliant with current

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code. The three-compartment sink is newer and is in fair condition, along with handwash sink and dishwasher and ware washing line also appears to be in fair condition. The Hobart mixer also appears newer and in good condition. However, adjacent to the washing line is old most likely original wood casework. There are single pane windows with wire glass. The original wood door is set in a hollow metal frame. The main door into the kitchen has a lever handle, although the door into the food storage room and the exterior egress door both have knob handles which are not ADA compliant.

Main Hallway: The hallway has carpet flooring with rubber base, painted CMU walls, and ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. The exit doors at the end of the hallway appear to be the original uninsulated hollow metal doors. The exit doors have a mix of original hardware and newer hardware. The hardware on the door where access control has been installed has newer exit device and newer closer. The other door appears to have the original exit device. The doors also have the original single pane, wired glass in the vision panels. There is a transom above the doors which has single pane glazing which is not energy efficient. There are metal lockers located within the hallway which are in fair condition.

Staff Breakroom: This room has walls of painted CMU and painted gypsum board, vinyl tile flooring, and the ceiling is a 12"x12" glue-on acoustical tile with suspended fluorescent light fixtures. Windows are single pane which are not energy efficient, and the lower portion of the windows are operable. The door appears to be the original wood door set in a hollow metal frame and the door has a lever handle which complies with ADA requirements. The casework in this room is most likely the original wood cabinets and open shelving.

Staff Restroom: This restroom has walls of painted CMU and painted gypsum board, vinyl tile flooring, and the ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. The door appears to be the original wood door set in a hollow metal frame and the door has a lever handle which complies with ADA requirements. There are grab bars but the toilet fixture itself is not ADA compliant due to the configuration of the fixture layout and also due to the height of the toilet itself. The wall mounted lavatory appears to be original, however the toilet accessories are newer.

Boys Restroom: The flooring in this restroom is mosaic 1"x1" ceramic tile and there is 4"x4" ceramic tile on the walls to a height of seven feet, with painted gypsum board above the wall tile. The ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. Some of the ceiling tiles are water damaged in this room. The plumbing fixtures are old as are the metal toilet partitions. There is no ADA compliant toilet stall in this restroom. The toilet accessories are newer.

Girls Restroom: The flooring in this restroom is mosaic 1"x1" ceramic tile and there is 4"x4" ceramic tile on the walls to a height of seven feet, with painted gypsum board above the wall tile. The ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. The plumbing fixtures are old as are the metal toilet partitions. There is no ADA compliant toilet stall in this restroom. The toilet accessories are newer.

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Janitor Closet: The flooring in this room is epoxy coated, slip-resistant, the walls are painted CMU and painted gypsum board, and the ceiling is painted gypsum board. There is an old mop sink and old wood shelving. The door appears to be the original wood door set in a hollow metal frame and the door has a knob handle which does not comply with ADA requirements. A pipe chase is located within this space also and it is possible there is piping with insulation that may contain asbestos in this chase.

Art Supply Room: This room has walls of painted CMU and painted gypsum board, flooring is vinyl tile and the ceiling is a 12"x12" glue-on acoustical tile with surface mounted fluorescent light fixtures. The door appears to be the original wood door set in a hollow metal frame and the door has a knob handle which does not comply with ADA requirements. The casework in this room is most likely the original wood cabinets with plastic laminate countertops and open wood shelving.

Typical Classrooms: Each of the typical classrooms has walls of painted CMU and painted gypsum board, vinyl tile flooring, and the ceiling is a 12"x12" glue-on acoustical tile with suspended fluorescent light fixtures. Windows are single pane which are not energy efficient, and the lower portion of the windows are operable. The window sills are quarry tile which is in good condition. New window blinds have been installed which do help to improve the thermal comfort in the room. The classroom doors appear to be the original wood doors, with vision panels of wired glass, set in hollow metal frames and the doors have lever handles which complies with ADA requirements. There are no closers on the doors, only overhead stops. The casework in the classrooms are most likely the original wood cabinets with plastic laminate countertops and old sinks with old faucet and bubbler. The paper towel dispenser and soap dispenser are newer. The tack boards and marker boards are in fair condition.

Kindergarten Classroom: This classroom is like the typical classroom, except that it has a small restroom in the corner of the room. The restroom has walls of painted CMU and painted gypsum board, flooring vinyl tile flooring, and a painted gypsum board ceiling. The door appears to be the original wood door set in a hollow metal frame and the door has a knob handle which does not comply with ADA requirements. The plumbing fixtures are old, and it is apparent that leaks over the years have damaged the vinyl tiles. The toilet accessories are newer, however.

Exterior of 1967 Elementary School

The entrance to the school is accessed via a long series of ramps from the gravel parking areas. There are no paved ADA accessible parking stalls available. The ramps themselves are of appropriate slope as to comply with ADA requirements however the upper landing at the entry doors is only 4'-6" in lieu of the required 5'-0" distance. And the guardrails along the ramps are not ADA compliant due to not having horizontal rails at 4" above the walking surface. There are some uneven surfaces in the concrete ramp in front of the entry doors along with some spalling concrete in that area. There is a painted stucco finish at the ceiling at the recessed entry area, some of which is in need of touchup repairs.

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Along the length of the roof line, there are painted wood soffits which are in need of repainting. There is also painted wood fascia at the roof, most of which has deteriorated beyond repair. It is recommended to cover the fascia with metal when the building is reroofed. Some eaves have gutters but not all do, this also should be rectified when the school is reroofed. At the northwest end of the school, it was noted that there was no rain leader at the bottom of the downspout to lead water away from the foundation.

At the perimeter of the school, the exposed portion of the foundation wall is painted but in many areas the paint is chipped and/or peeling. Repainting of the foundation wall is recommended.

At the west end of the building, there is a painted stucco finish at the ceiling at the recessed entry area some of which is in need of touchup repairs, similar to the condition at the main entry ceiling.

There is a concrete pad and steps outside the egress door from the Kitchen, however there is no guardrail at the landing or handrails at the steps. Similarly, at the northeast exit from the Gym, there is a concrete landing and steps which do have a guardrail; however the guardrail does not have the appropriately spaced intermediate railing to comply with code.

At the gym, there are concrete bases at the bottom of two columns where the concrete has eroded. One is located at the north wall and the other is located at the south wall. These are considered to be mainly poor detailing rather than being structural issues, as the concrete at the baseplate level seemed to be intact.

Summary of Architectural Deficiencies

From a Building Code compliance standpoint, the main issue with the elementary school is that some components of the egress stairs do not comply with the Code. The non-compliant Building Code issues includes the risers at the Stage to Gym stair and associated guardrails. And at the following stairs there are non-compliant guardrails and/or handrails: the exterior northeast exit from the Gym, exterior southeast exit from the Music Room, and the exit from the Kitchen. Additionally, the old wood bleachers' rails do not comply with current Building Code and the bleachers do not comply with ADA for seating requirements.

The other major Code compliance issue is the lack of ADA accessibility throughout the school. There is no accessible route from the parking lot to the main entry, the width of the upper landing at the ramp at the main entry is too short, and the width of the security vestibule is too short. Once inside, there is no accessible route to the Gym level, there are no accessible restrooms, the locker rooms are not accessible, and some doors do not have level handle hardware.

From an energy efficiency standpoint, the main issue is the single-pane windows throughout the school. The exterior hollow metal doors appear to be uninsulated and therefore are not energy efficient. From a

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worn materials and equipment standpoint, the main issue is the aged kitchen with its aged food service equipment. And most of the doors and hardware throughout the school are original and dated and should be replaced.

Within Appendix A are Rough Order of Magnitude cost estimates for each of the following architectural deficiencies which were identified within this report –

- Add ADA parking stalls
- Add Lift to access Gym
- Asbestos abatement
- Bleacher replacement
- Carpet replacement
- Exterior / Interior doors and hardware replacement
- Exterior repainting
- Kitchen remodel
- Locker Rooms remodel
- Restrooms remodel
- Security Vestibule replacement
- Stair/Ramp handrails, guardrails replacement
- Window replacement

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PHOTOS OF ARCHITECTURAL DEFICIENCIES



Figure 1- Handrail at Stair from Lobby down to Gym level.



Figure 2 – Handrail at Stair from Stage down to Gym.

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Figure 3 – Guardrail at Stair from Stage down to Gym level.



Figure 4 – Shower at Men's Locker Room.

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Figure 5 - Exit stair from Music Room at Mezzanine level.



Figure 6 – Landing at bottom of Music Room exit stair.

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Figure 7 – Guardrail at northeast exit stair from Gym.



Figure 8 – Landing at exit door from Kitchen; missing guardrail.

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Figure 9 – Route to Main Entry from Parking Lot; No ADA parking is provided.



Figure 10 – Ramp from Red Building down to White Building.

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Figure 11 – Chipped and peeling paint at foundation wall.



Figure 12 – Downspout missing rain leader at foundation wall.

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Figure 13 – Patched stucco soffit at ceiling of Main Entry.



Figure 14 – Peeling paint typical at wood soffit and fascia at perimeter of building.

Prepared By: Patrick Todd

ROOFING

1913 Elementary School:

This is the original school that is two stories with a steep metal roof that was installed approximately 20 years ago. The roof is too high for my ladder and too steep for me to access. I could only review the roof from the ground and adjacent building. The metal roof is a mechanically attached metal standard Delta Rib 36" panel roof. The roof is considered a steep roof since it has a greater than 6/12 slope. The existing roof appears to be at least an 8/12 sloped roof. There is a snow bar retention system that has been installed as well as gutter and downspouts around the entire perimeter of the roof. The roof appears to be in good condition as I do not see any fasteners backing out at this time. The plumb pipe jacks appear to be worn but are still functioning. The plumb pipes need to be monitored and budgeted to be replaced in the next 2-3 years. The south side of the building has several metal panels where the paint finish is wearing off exposing the metal face. I believe this is a paint finish issue and is factory related since it is only affecting curtain panels. The district should check to see if they received a finish warranty. If one was provided and it's within the warranty time frame the district should follow up on it.

The building Envelope appears to be in fair condition. There are several small cracks throughout the entire stucco and limestone portion of the building. There are also several windows where the seals are broken, and moisture has fogged the window. There are also a few windows where the wood frames have deteriorated and failed.

Recommendations:

Recommend monitoring the metal roof finish and remove and replace the roof plumb pipe jacks in the next two (2) years. Seal all cracks in the stucco and limestone and repaint the building. Consideration for sealing and repainting and for window replacements depends upon expected future use of this building.

1967 Elementary School:

The main elementary school roof has four different roof sections. Each roof section covers these locations. Roof Area A: The lower roof is over kitchen space. This is the low south side of the building. Roof Area B: Is located over classroom space which expands over the west side of the building. Roof Area C: This roof section is over the stage/cafeteria area and is located in the center part of the building. Roof Area D: This roof is the high roof over the gymnasium area that is located on the East side of the building. All the roof sections roofs appear to be approximately 25+ years old. They all appear to be in Fair condition. Each roof section has had the roof edge metal removed and replaced approximately 5-10 years ago. All the roof sections have deteriorated wood fascia.

Roof Area A: Kitchen Roof

This roof does show signs of membrane wear & tear mainly due to age. The roof has new edge metal that has been stripped in. This stripping is in fair condition but is bucking water at the inside edge at the lap. The masonry wall has a large crack in the masonry joint that should be sealed.

Prepared By: Patrick Todd

ROOFING

Roof Area B: Classroom Roof

This roof also shows sign on normal wear & tear. The roof has new edge metal that has been stripped in. This stripping is in fair condition but is bucking water at the inside edge at the lap. On the east side of the building there is a piece of plywood attached to the wall. It appears to be at a location where a wall vent might have been in place at one time. The plywood has deteriorated and is not watertight at the perimeter of the plywood edge. This item needs to be removed and replaced with a properly insulated and covered and sealed prior to next winter.

Roof Area C: Stage/Cafeteria area

This roof also shows sign on normal wear and tear. The roof also has new edge metal that has been stripped in. This stripping is in fair condition but is bucking water at the inside edge at the lap. There is a stucco wall that is located at the east side of the roof section and is part of the gym wall. This is heavily cracked and deteriorated and is starting to fall off the wall in several locations. This needs to be sealed watertight as soon as possible for it to not leak into the building.

Roof Area D: Gym Roof

This roof area also shows signs of normal wear and tear. There is a snow retention system that was installed that consists of staggered 2x4 lumber that was secured and has been flashed with the membrane material. The northwest corner of the roof has experienced a wind uplift issue as the membrane has pulled away from several of the blocks in this location. The lower roof edge metal stripping is starting to fail in several locations but mainly at the lower edges of both sides of the gymnasium roof. These locations are also allowing moisture to pond at the edges of the stripping material. This edge metal stripping will eventually fail and allow moisture to enter at the edge metal fasteners. There were two roof vents that appear to have leaked at one time. These leaks appear to have been coming in from the vents on top of the curbs. This issue has been taken care of. There are two skylights on the roof. These skylights are aged and have seals that are no longer watertight. One skylight has moisture between the lenses. The other has fine cracks in the corners of the lens. Both skylights are aged and are in need of replacement.

Recommendations:

I recommend that the district begin to budget for roof replacement of all the roof sections of the 1967 elementary school. I would also recommendation to cover the wood fascia with a 24-gauge Kynar coated metal on all the roof sections. This will eliminate further deterioration of the wood and it will eliminate a maintenance item for the school.

Within Appendix A are Rough Order of Magnitude cost estimates for each of the following roofing/envelope deficiencies which were identified within this report –

- Replacement of plumb pipe jacks at 1913 building
- Roof replacement at 1967 building, including covering the wood fascia with prefinished metal
- Skylight replacement at 1967 building
- Wall/envelope repairs noted to maintain watertight conditions

Prepared By: Patrick Todd

ROOFING



1913 Building: Metal panel paint is failing.



1913 Building: Pipe jack rubber gasket is failing.

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1913 Building: Window seal has failed.



1913 Building: Cracks in stucco are evident as well as window frame has deteriorated.

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ROOFING



1967 Building Roof Area A: Overview



1967 Building Roof Area A: Edge Stripping

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1967 Building Roof Area A: SW Corner of gym adjacent to roof section A is failing.



1967 Building Roof Area B: Overview

Prepared By: Patrick Todd

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1967 Building Roof Area B: Plywood attached to the gym wall. Deteriorated and not water tight.



1967 Building Roof Area B: Edge overview.

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1967 Building Roof Area C: Overview of roof and stucco wall.



1967 Building Roof Area C: Entire stucco wall on the west side of the gym is failing.

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ROOFING



1967 Building Roof Area D: Overview of the gym roof.



1967 Building Roof Area D: Strip in edge is failing on the gym.

Prepared By: Patrick Todd

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1967 Building Roof Area D: Water is bucking at the strip in edge.



1967 Building Roof Area D: Wind uplift at snow retention.

Prepared By: Patrick Todd

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1967 Building Roof Area D: seals are broken. Moisture buildup in corner of skylight



1967 Building Roof Area D: Skylight with moisture and cracking in corner.

Prepared By: Patrick Todd

ROOFING



1967 Building Roof Area D: Fascia wood face should be clad with metal.

Prepared By: Kevin Feldman

STRUCTURAL

General

The following is intended to be a generalized assessment of the conditions observed of the facilities during a walkthrough on April 19, 2022. With this being a non-destructive assessment, it included only observation of visible portions of the structure with the underlying premise that the facilities were adequately designed/constructed. As such, the primary focus of this assessment is to identify building elements that show significant signs of distress or deterioration that would affect its original intended performance and/or present a threat to life safety.

1913 Elementary School

This building consists of two distinct portions that were constructed during different time periods. The original section at the front (North portion) of the building consists of a masonry structure with a wood framed roof and is approximately 76 feet wide by 36 feet deep. The back (South portion) of the building consists of a more traditional wood framed structure over a concrete foundation and is approximately 65 feet wide by 76 feet deep. Each type of framing will be discussed further below.

From historical photos and local knowledge, it was determined that the original masonry construction included a third story. The third story however sustained significant damage in the 1959 Hebgen Lake Earthquake and was eventually removed and replaced with the current roof system leaving what is currently a two story building. It is not known if the first floor structure sustained any damage during this event, and if any remediation of the remaining structure occurred.

The exterior face of masonry covered with a layer of paint may be concealing some aspects, but the overall condition of the exterior is in fair condition. The most notable signs of deterioration occur in the mortar beds of the masonry joints. This deterioration of the mortar is caused by alkali silica reaction which occurs when the mortar experiences wetting and drying cycles. This deterioration was most significant near the bottom of the wall/foundation in areas where the existing site grades do not provide positive drainage away from the building and trap water against the foundation which based on observation of the interior of the building has also led to the intrusion of water into the building. Deterioration of the mortar has led to observed damages to the foundations however the current level of deterioration does not present a threat to life safety at this time. Observation of the exterior of the building did not indicate any signs of significant settlement or foundation related movement to the building.

The wood framed addition appeared to be of typical wood construction supported by concrete foundation walls that extend up approximately three feet above finish floor elevation. There were areas of cracking observed in the exterior finishes; however, this looked to be the result of deterioration of the exterior finish rather than any signs of structural deficiencies or movement.

The lower level of the building was approximately three feet below finished grade at the North side of the building and is of slab on grade construction. Similar to the deterioration of the mortar observed from the exterior deterioration of mortar and plaster on the interior face of the foundations has

Prepared By: Kevin Feldman

STRUCTURAL

occurred. This was most prevalent at the Northwest corner of the building along the exterior wall. Other than these observed effects of degradation of the mortar and plaster finish the lower level of this building was generally found to be in fair overall condition.

The main level floor structure of both portions of the building was not visible, but is assumed to be 2x joists framed north to south over a central bearing line. A portion of the central bearing was visible in the hall area of the lower level of the original structure. It consisted of a steel beam spanning across the hallway and bearing on interior columns/pilasters. There were no signs observed with in the floor structure that would indicate any significant deficiencies.

Overall, the roof structure appeared to be in good condition. There were no areas of dry rot, or mold observed that would indicate moisture issues. The only significant sign of distress observed was in the roof was the failure of one of the roof rafters where the ridge of the wood framed addition is overbuilt over the rafters of the original building. This failed joist was identified in previous assessments and has been modified since this previous assessment but rather than repair the damage a beam was simply installed to distribute this load to the two rafters adjacent to the failed roof rafter. This modification does not however adequately address the failure of the rafter and should be further repaired as recommended in the recommendations presented below.

Recommendations for 1913 Elementary School

It is apparent the majority of the deterioration to the masonry/finishes of the original building are a result of environmental conditions, and in particular moisture. In an effort to address this it is recommended that a qualified mason repoint all spalled and degraded masonry joints. In the most severe cases, cracks should be grout injected. It is also recommended that the exterior façade be detailed as to prevent moisture from infiltrating the structure, most notably at the corners of the window openings. At the ground level, it is recommended that at a minimum the exterior grades be reworked to provide positive drainage around the entire perimeter of the building. Excavation around the perimeter of the building to expose the foundations repointing deteriorated jointing and installing a waterproofing membrane to the below ground portions of the foundation would further aid in extending the remaining useful life of the structure.

With regards to the roof structure, we have provided for a temporary solution to help alleviate some of the stress placed on that single cracked joist. A more permanent solution should be devised that transfers the load from those joists entirely and supports it by the dividing wall between the two building sections and/or the central bearing line at the center of the addition.

Overall, the building shows slight signs of distress or deterioration, mostly in the exterior masonry. This is not due to any significant structural defect, but rather the neglect in proper maintenance of the masonry and in poor waterproofing details at the window locations. The structural system has served its function well for a very long period of time, and looking forward, there is no indication that the building wouldn't continue to function suitably if the proper maintenance is performed.

Prepared By: Kevin Feldman

STRUCTURAL

1967 Elementary School

This building was constructed in 1967 and consists of a single story building with the main portion of the building consisting of an open web steel bar joist roof structure supported on CMU bearing walls with a brick veneer. The gymnasium portion of the building consists of pre-engineered metal building construction with CMU and brick infill walls between primary building frames and on the East end wall of the Gymnasium. Observation of this building did not present any significant structural deficiencies as the structure itself was found to be in good overall condition with no significant signs of movement or distress. The wood fascia around the perimeter of the building was found to be deteriorating however this is addressed in the assessment of the roofing and building envelop portion of this assessment.

Recommendations for 1967 Elementary School

The 1967 school was found to be in generally good condition with no visible signs of deterioration or damage to the primary structure and as such there are no structural recommendations provided for this facility.



1913 Building: Adverse Grades at North Side of Building

Prepared By: Kevin Feldman

STRUCTURAL



1913 Building: Adverse Grades and Foundation Deterioration at Northeast Corner of Building



1913 Building: Adverse Grades and Foundation Deterioration at Northwest Corner of Building

Prepared By: Kevin Feldman

STRUCTURAL



1913 Building: Masonry Deterioration Due to Moisture



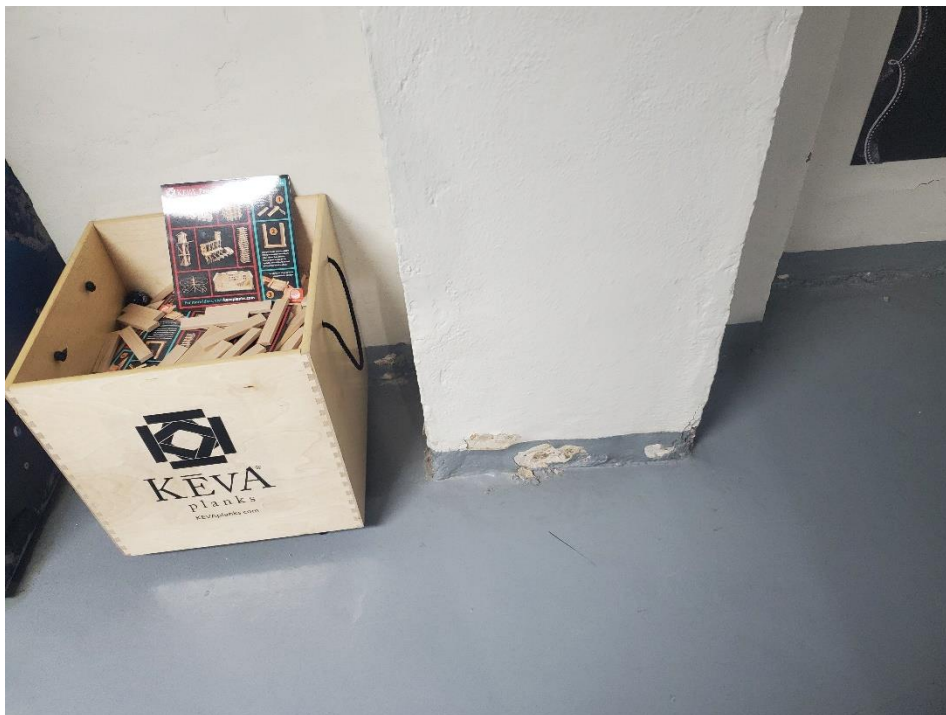
1913 Building: Foundation Deterioration at Interior Face of Foundation

Prepared By: Kevin Feldman

STRUCTURAL



1913 Building: Foundation Deterioration at North Wall



1913 Building: Alkali Silica Reaction At Interior Foundation

Prepared By: Kevin Feldman

STRUCTURAL



1913 Building: Foundation Deterioration At Interior Face of Wall



1913 Building: Alkali Silica Reaction on Interior Foundation Wall

Prepared By: Kevin Feldman

STRUCTURAL



1913 Building: Failed Roof Joist at Overbuild



1913 Building: Prior Repair at Failed Roof Joist

Prepared By: Kevin Feldman

STRUCTURAL



1967 Building: Classroom Wing



1967 Building: West End of Classroom Wing

Prepared By: Kevin Feldman

STRUCTURAL



1967 Building: Lunchroom/Kitchen Wing



1967 Building: Gymnasium

Prepared By: Jeff Haidle

ELECTRICAL

1967 Elementary School

Electrical Power

The electrical service comes to the building from a pole mounted transformer to a vault which is located below the Principal's Office. This electrical room is accessed through a short door in the northwest corner of the gymnasium. The service is 120/240 single phase, rated for 600 Amps. The main distribution panel is in good condition by appearance, but the equipment is aged and no longer manufactured. With the age, there is concern that the breakers will operate as designed. Branch distribution panels are in good condition and breakers are still available for these panels. It is recommended that the main distribution panel be replaced within the next five years.

The telephone service enters the building from a pedestal outside, routed into the electrical room as well. This system is size appropriately for this building. No recommendations.

Lighting

The existing fluorescent lighting systems have been retrofitted with LED tubes. In the corridor areas, these fixtures appear to be in good condition and working well. In the classrooms, the fixtures are working well and structurally are fine; however, the lenses are yellowing showing their age. It is recommended that these classroom light fixtures be replaced within the next 5 years.

The utility type areas in the building still have the older incandescent type light fixtures. The light fixtures are in good condition. Lamps can be replaced with LED type lamps. When the budget is available, it is recommended that these fixtures be replaced with new LED strip type fixtures.

The gymnasium lighting appears to be older Incandescent high bay fixtures. The fixtures are in good condition; however, they are not energy efficient and are aged. In addition, the light levels appear to be low for this type of space. For energy savings and better quality and quantity of lighting, it is recommended that the lighting be replaced with new LED high bay lighting.

The Stage lighting system is aged. The lighting controls are aged and are only partially functional. Currently, the frequency of use of the room may not warrant a larger investment. In that case, some basic switching and wall box dimmers could be installed to replace the outdate dimming panel. However, if this room is intended be used in such a way that a more sophisticated lighting control is desired with scenes and zones, a new central dimming head end should be installed and a lighting console located at an appropriate location in the room. The light bars should be replaced with new stage lighting bars with twist lock receptacles and LED fixtures.

Lighting controls throughout the school do not meet current energy code requirements. There is minimal, if any, occupancy sensing or dimming. It is recommended that lighting controls be installed to comply

Prepared By: Jeff Haidle

ELECTRICAL

with the latest energy code, including occupancy sensors, time controls, dimming and potentially some daylighting controls.

The emergency lighting system in the building is present with exit signs and emergency heads on exit signs. However, the emergency egress lighting coverage for a 1 foot-candle path is estimated to be low. It is recommended that emergency egress lighting be added to ensure building code compliance for the 1 foot-candle egress path. Exterior emergency egress lighting has become a requirement since this building was constructed as well; therefore, it is not present. It is recommended that this be added at each entrance/exit.

Exterior lighting is functional; however, the fixtures are aged and show signs of deterioration. It is recommended that the exterior lighting be replaced with new LED light fixtures for energy savings, reliability and better illumination.

Systems

The Fire Alarm system is an aged Simplex system which appears to have one zone. There are horns in the main corridor areas and pull station near the main vestibule. There are no visible notification devices and current device locations do not comply with NFPA in the corridor. It is recommended that the fire alarm system be replaced entirely with a new system that complies with NPFA and ADA including corridor audible and visual indication, smoke detection and pull stations.

The voice data communication system including wireless access points is in good working order and is being used as intended. Smartboards are using the wireless system. Projectors are being removed. Classrooms are using the phone system and cell phones for communication to the front desk. The existing intercom system is not being used.

The existing master clock system is an older Simplex system. When, or before, the system stops working, it is recommended that Atomic 120v or battery-operated clocks be installed, which are more reliable with less maintenance.

There is no existing CATV system. No recommendations.

Summary

Within Appendix A are Rough Order of Magnitude cost estimates for each of the following electrical deficiencies which were identified within this report –

- Replace main distribution panel
- In the classrooms, replace light fixtures (the lenses are yellowing)
- In utility areas, replace incandescent light fixtures with LED strip type fixtures
- In the gym, replace incandescent high bay light fixtures with LED high bay lighting

Prepared By: Jeff Haidle

ELECTRICAL

- In the stage area, replace lighting controls, consider if other lighting upgrades are needed
- Add lighting controls throughout the school to comply with the latest energy code
- Add emergency lighting to the exit path to ensure building code compliance
- Add exterior emergency egress lighting at each entrance/exit
- Replace exterior lighting with LED light fixtures
- Replace fire alarm system with a new system that complies with NPFA and ADA
- Upgrade master clock system with Atomic 120v or battery-operated clocks

Prepared By: Corey Johnson

EDUCATIONAL

Summary: Shields Valley Elementary School is located in the town of Wilsall, Montana and comprises of two separate facilities serving K through 6 grades. Junior High and High School is provided in the neighboring community of Clyde Park, Montana about a 10-minute drive south on US Hwy 89 N. Both the 1913 and 1967 facilities have simple layouts, but contain multiple levels that are not ADA accessible. Administration is located adjacent to the main entry and has views to arrival and parking. The entry vestibules are not equipped with modern safety and security features and office check-in window and doors. Travel between the buildings and the playground is not secure. The community has access to both the gymnasium and commons cafeteria after hours, however the academic wing cannot be closed off or secured. Due to the multiple levels and separate building connectiveness, observation and best utilization of space is compromised.

Academic Core Spaces: There are currently no spaces dedicated for Preschool. The dedicated classrooms range in size from 772 - 893 sf, averaging 820 sf. Since the classrooms are subdivided into different learning centers the desired size is 900+ SF. There are no breakout spaces adjacent to the classrooms for small group acoustically separated functions. Existing furniture has been equipped with tennis ball legs to allow them to be more mobile.

Administrative Services: The offices are located adjacent to at the primary entrances, but doesn't have direct access to a secure vestibule. The nurses suite is not located adjacent to the main office.. The counselor and Title 1 lab are located in the upper level of the 1913 facility with difficult access from the primary grades.

Library / Media Center: The Library is located on the lower level of the 1913 building and not easily accessed by the primary grades and community after hours. The room isn't adequately sized for various twenty-first century activities and work areas.

STEM Lab: There isn't a dedicated space for STEM and 5th and 6th grade level science programs.

Art Studio: The overall size is adequate, however, the equipment and layout needs updating.

Music Studio: The music studio is not accessible, and the room size, configuration and acoustic doesn't meet current standards.

Gymnasium / Activities: The gymnasium size is adequate for elementary school. The locker rooms and adjacent support spaces do not meet current standards and accessibility codes.

Student Dining / Cafeteria: The student dining area is currently located on the raised gymnasium stage. Acoustic separation and current facility code and safety standards are not being met.

Life Skills Lab (Home Ec): The overall size is adequate, however, the equipment and layout needs updating.

Prepared By: Corey Johnson

EDUCATIONAL

Support Services: Restrooms do not meet current accessibility and code standards. Corridors and hallways are narrow and with classroom door opening into them and lockers on both sides.

Conclusion: Overall the facilities educational adequacy GPA is 1.5 D, short of meeting the minimum standards. This overall score comes from assessing 32 educational adequacy factors. This score is for assessing the **facility only**, and doesn't take into account the program, pedagogy, curriculum, teaching and learning proficiencies. Given the age of the facilities this score is not surprising. The structural systems are masonry and hard to adapt and reconfigure for educational upgrades, growth and new technologies. It is our opinion that given the current building conditions and configurations, significant renovation and upgrades could raise the score to a C+ or B-.

SHIELDS VALLEY SCHOOL DISTRICT EDUCATIONAL ADEQUACY SUMMARY SHEET

Date: 06/02/2022

Cushing
Terrell

Shields Valley Elementary School

Grades Served:	K-6
Constructed:	1913, 1967
Levels:	2
Gross SF:	34,125
Acres:	17.69
15 recommended	

# Classrooms	7
Enrollment:	108
Capacity (MT Code):	122
Utilization:	89%
SF/Student	316

Edu Adequacy GPA:	1.5 D
Est. 1913 Reno Cost:	\$4,999,680
Est. 1967 Reno Cost:	\$6,346,857
Est. Renewal Cost:	\$17,062,500
Facility Condition Index:	0.66
(13 Reno + 67 Reno / Renew)	

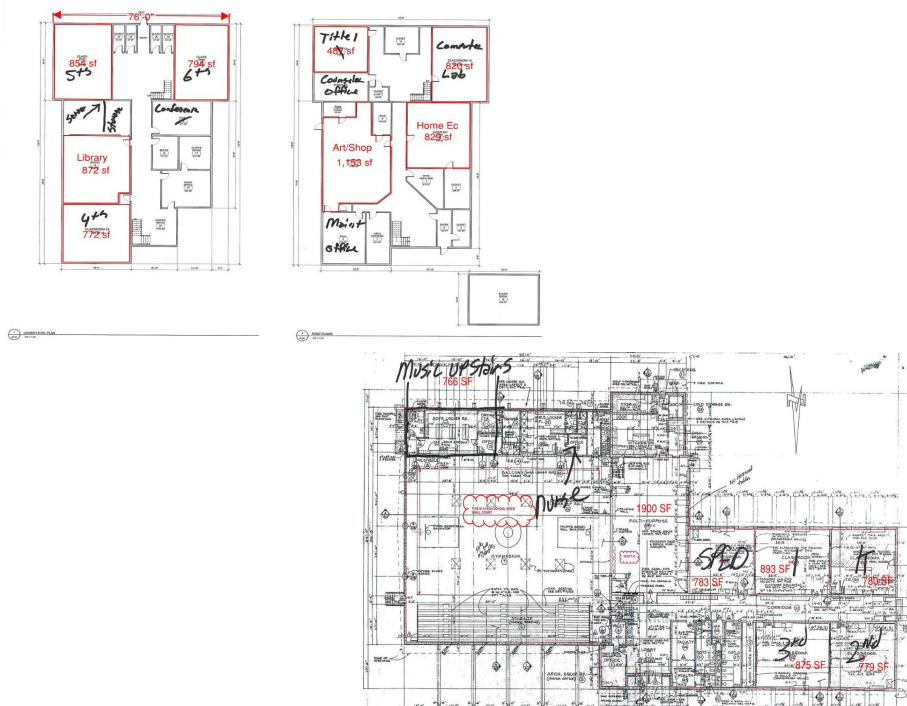
SUMMARY:

Shields Valley Elementary School is located in the town of Wilsall, Montana and comprises of two separate facilities serving K through 6 grades. Junior High and High School is provided in the neighboring community of Clyde Park, Montana about a 10 minute drive south on US Hwy 89 N. Both the 1913 and 1967 facilities have simple layouts, but contain multiple levels that are not ADA accessible. Administration is located adjacent to the main entry and has views to arrival and parking. The entry vestibules are not equipped with modern safety and security features and office check-in window and doors. Travel between the buildings and the playgrounds are not secure. The community has access to both the gymnasium and commons cafeteria after hours, however the academic wing cannot be closed off or secured. Due to the multiple levels and separate building connectiveness, observation and

CONCLUSION:

Overall the facilities educational adequacy GPA is 1.5 D, short of meeting the minimum standards. This overall score comes from assessing 32 educational adequacy factors. This score is for assessing the facility only, and doesn't take into account the program, pedagogy, curriculum, teaching and learning proficiencies. It is our opinion that given the current building conditions and configurations, significant renovation and upgrades could raise the score to a C+ ~ D

FLOOR DIAGRAM(S):



LOCATION VICINITY MAP:



School Property in Wilsall, MT

Shields Valley Elementary School

ASSESSMENT ITEMS

Grade Comments

A 4.0 = exceeds standards; B 3.0 = meets standards;
C 2.0 = minimum standards; D 1.0 = below standards

School Site & Grounds:

Primary Entrance	A single primary entry is clear and present as one approaches the school
Vehicular Circulation	There are safe and separated pathways and traffic lanes to and from school
Parking	Have adequate parking for staff, visitors, and events
Visitor Approach	There is a good line of sight from the main entry office to arriving vehicles
Grounds Security	The playgrounds and playfields are fenced and secure
Playground Safety	Playground areas are safe, monitored, accessible and age appropriate
Playfield Safety	Playfield areas are safe, monitored, accessible and age appropriate
Outdoor Learning	There are outdoor spaces equipped for learning, discovery and gatherings
Pedestrian Circulation	Facilities on the campus have accessible, safe and secure routes between them
Site Infrastructure	Grounds, roads and utilities are sufficient and easily expanded for future demands

1.0	two entries
1.0	traffic and pedestrian lanes not clearly delineated
1.0	on site parking area is very limited
3.0	offices have windows to arrival and parking
1.0	no fencing at any of the playgrounds or playfields
2.0	equipment and fall protection needs improvement
1.0	track and field not adjacent to school campus
0.0	no dedicated shelter or seating apparent
1.0	route between building not fenced or secured
2.0	school owns adjacent undeveloped properties

School Community & Shared Spaces:

Visitor Monitoring	Secure vestibule at the primary entry for monitoring and checking in visitors
Safety and Security	The main office is adjacent to the primary entry secure vestibule
Corridors & Commons	School corridors and common spaces can be easily observed and patrolled
Lockdown Capabilities	Staff have immediate lockdown capabilities at the entry, classrooms, etc.
Commons & Lobbies	The commons and main lobby area is warm welcoming and adequately sized
Accessibility	The school is fully accessible and ADA code compliant
Gymnasiums	Gym / assemblies are adequately sized, equipped and accessible after hours
Libraries	Library / media center is adequately sized, equipped and accessible after hours
Gathering Spaces	Places and furniture for social interactions, clubs, and community gatherings
Healthy School Culture	Provides a sense of community and healthy learning culture
Future Proof	Structural type and systems allow for future adaptations, growth, and technologies

0.0	not connected and naturally monitored from the office
1.0	adjacent but not connected by window or door
2.0	simple layout, but many levels
1.0	panic buttons and policy weren't observed (confirm)
2.0	no commons separate from cafeteria
0.0	facility levels and restrooms are not accessible
3.0	no doors to secure classroom wing after hours
1.0	in 1913 building with no after hours use
1.0	stage is primary area for gatherings
2.0	hard to fully achieve in two separate buildings
1.0	masonry walls and structural systems

Classrooms, Labs & Learning Studios:

Size	Adequately sized, configured and equipped for multiple modalities of learning
Daylight and Views	Have daylight, views, fresh air and easy access to the outdoors
Utilities	Are equipped with adequate power, technology and flexible furniture
Acoustics	Have adequate acoustics and sound separation for adjacent spaces
Access to Services	Have easy access to restrooms, handwashing / project sinks and drink stations
Breakout Areas	Easy access to adjacent breakout areas for small group and independent study
Interior Windows	Observation transparency with ability to quickly block views during lockdown
Sense of Community	Provides a sense of community and healthy learning culture
Flexible Furniture	Have mobile furniture and equipment for flexible learning layouts
Storage	Adequate storage for projects, supplies, equipment
Dedicated Labs	Lab space dedicated to STEM / STEAM

2.0	820 sf ave size / 900 sf + desired
2.0	most have small windows
1.0	power and data lacking in older facilities
3.0	corridor walls are concrete masonry units
2.0	classrooms have sinks
1.0	all breakout spaces in the classroom
2.0	transparency for monitoring classrooms is lacking
3.0	open to community events
3.0	classrooms seem to be setup in multiple ways
2.0	approx. 12 LF of base cabinets in each classroom
1.0	lacking adequate science lab

Overall Facility Educational Adequacy GPA: 1.5 D (below acceptable standards)

PRIMARY SPACE COMMENTS

Academic Spaces:	The are currently no spaces dedicated for PreSchool. The dedicated classrooms range in size from 772 - 893 sf, averaging 820 sf. Since the classrooms are subdivided into different learning centers the desired size is 900+ SF. There are no breakout spaces adjacent to the classrooms for small group acoustically separated functions. Existing furniture has been equipped with tennis ball legs to allow them to be more mobile.
Admin Services:	The offices are located adjacent to at the primary entrances, but doesn't have direct access to a secure vestibule. The nurses suite is not located adjacent to the main office. The counselor and Title 1 lab is located in the upper level of the 1913 facility with difficult access from the primary grades.
Library / Media Center:	The Library is located on the lower level of the 1913 building and not easily accessed by the primary grades and community after hours. The room isn't adequately sized for various twenty-first century activities and work areas.
STEM Lab:	There isn't a dedicated space for STEM and 5th and 6th grade level science programs.
Art Studio:	The overall size is adequate, however, the equipment and layout needs updating.
Music Studio:	The music studio is not accessible and the room size, configuration and acoustic doesn't meet current standards.
Gymnasium / Activities	The gymnasium size is adequate for elementary school. The locker rooms and adjacent support spaces do not meet current standards and accessibility codes.
Dining / Cafeteria:	The student dining area is currently located on the raised gymnasium stage. Acoustic separation and current facility code and safety standards are not
Life Skills (Home Ec):	The overall size is adequate, however, the equipment and layout needs updating.
Support Services:	Restrooms do not meet current accessibility and code standards. Corridors and hallways are narrow and with classroom door opening into them and lockers on both sides.

1913 Elementary School - Renovation Costs Summary

Costs include General Conditions of 15%. Overhead/Profit of 15% & Escalation to March 2023.

Remodel Component	Subtotal Construction Costs
Architectural	
Escalated costs from 2014 Assessment Report	\$560,000
CMU repair	
Exterior handrail/guardrail and Ramp modifications	
Add two ADA Restrooms	
Add two Egress Exits at dead end corridor	
Interior handrail/guardrail modifications	
Add fire sprinkler system	
Add fire pump	
Add Elevator	\$160,000
Asbestos abatement (placeholder)	\$100,000
Other material replacements, upgrades (placeholder)	\$250,000
 Roofing / Envelope / Structural	
No major roofing issues - Minor repairs of pipe jacks	\$15,000
Foundation waterproofing	\$75,000
Grading repairs	\$45,000
Masonry repointing	\$60,000
Roof joist repair	\$7,000
 Mechanical	
New ventilators, cabinet heaters, water piping, new controls	\$800,000
 Electrical Systems	
Total for all line items listed below @ \$25/SF	\$350,000
Replace main distribution panel	
Replace light fixtures throughout with LED fixtures	
Add lighting controls throughout the school	
Add interior emergency lighting to the exit path	
Add exterior emergency egress lighting	
Replace exterior lighting with LED light fixtures	
Replace fire alarm system	
Upgrade master clock system	
<hr/>	
Subtotal Project Costs - 1913 School	\$2,422,000

Educational Improvements @ \$75/SF - 14,000 SF		\$1,050,000
General Conditions @ 15%		Included
Contractor's Overhead/Profit @ 15%		Included
Contingency @ 20%		\$694,400
Other Project Costs @ 20%		\$833,280
TOTAL PROJECT COSTS -1913 School		\$4,999,680

1967 Elementary School - Renovation Costs Summary

Costs include General Conditions of 15%. Overhead/Profit of 15% & Escalation to March 2023.

Remodel Component	Subtotal Construction Costs
Architectural	
Add ADA parking stalls	\$135,877
Add Lift to access Gym	\$45,968
Asbestos abatement (placeholder)	\$86,730
Bleacher replacement	\$124,150
Carpet replacement	\$15,575
Exterior &/ Interior doors and hardware replacement	\$111,477
Exterior painting	\$14,455
Kitchen remodel including food service equipment and Type I hood	\$603,713
Locker Room remodel	\$203,927
Restrooms remodel	\$108,774
Security Vestibule replacement	\$36,028
Stair/Ramp handrails, guardrails replacement	\$47,534
Window replacement	\$159,005
Roofing / Envelope	
Roof replacement including covering wood fascia with prefinished meta	\$698,870
Skylight replacement	\$9,107
Wall/envelope repairs noted to maintain watertight conditions	\$20,237
Mechanical	
New ventilators, gym units, cabinet heaters, water piping, new controls	\$419,196
Electrical Systems	
Replace main distribution panel	\$35,366
Replace light fixtures lenses in Classrooms	\$53,635
Replace incandescent light fixtures in utility areas LED light fixtures	\$7,481
Replace incandescent light fixtures in Gym with LED light fixtures	\$54,143
Add lighting controls throughout the school	\$26,597
Add interior emergency lighting to the exit path	\$13,122
Add exterior emergency egress lighting	\$8,405
Replace exterior lighting with LED light fixtures	\$6,938
Replace fire alarm system	\$49,870
Upgrade master clock system	\$2,992
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Subtotal Project Costs - 1967 School	\$3,099,172

Educational Improvements @ \$75/SF - 20,000 SF		\$1,500,000
General Conditions @ 15%		Included
Contractor's Overhead/Profit @ 15%		Included
Contingency @ 15%		\$689,876
Other Project Costs @ 20%		\$1,057,810
TOTAL PROJECT COSTS - 1967 School		\$6,346,857