

YS High School/ Middle School Building
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Building Envelope/Roof

General Observations

Despite the negative impressions many villagers have of the high school buildings, it would appear on first observations that those impressions are not related to structural defects or failures. The buildings appear well built and structurally sound. In 2018 Shell Myer Structural engineers confirmed the building was structurally sound during their evaluation.

The structures appear to have a good framework and components that have endured despite the lack of updating. Many of the interior and exterior components are no different than what a new build might have offered, other than being currently dated by faded colors and equipment.

There are basic safety issues that should be addressed, the climbable antenna mast, stairs with excessive spacing on the handrail spindles, unprotected open flooring at stair windows. Exterior stairwell railing being an open type.

Exterior Evaluation

The high-rise building is a structurally sound building in relatively good condition. The east wall still needs to be inspected to determine if the wall anchors have been installed as was noted in 2018 by the Shell Meyer engineering firm.

The doors and windows are basically the same as any new build would have installed .

Visually the exterior is unappealing and can be updated by changing out the dated panels repainting the corrugated panels as a short term update.

The type of construction allows for interior walls to be removed if required and the lower front could be extended out to the walkway concrete pillars.

There are numerous small repairs needed to bring it back to a new equivalent. I have attached my inspection template to note many of these needs.

Windows

Most of the windows are double pane but there are still originals single pane windows on the backside of the high school, the two art rooms the music room and the back of the Spanish room which would definitely need replacement.

Shoe Box

The shoe boxes are always considered the stepchildren of the school buildings. These are not trailers but modular units which were built on a crawl space with a block foundation, completely

encapsulated with a brick exterior, and roofed with a modified bitumen roof which is a quality product. Each room has its own HVAC package unit which should allow for precise cooling and heating. If heating and cooling is ineffective it is likely because of control issues which will need to be addressed for the comfort of those using the space. Complaints of air quality can also be addressed through more effective air exchange.

There have been complaints about moisture and mold in the shoebox area. Part of the reason this is a problem is because they never put a moisture barrier under the units which would have been standard to prevent such problems. And the foundation extends beyond the bottom of the wall meaning that rainwater is encouraged to drain under the modular units. This moisture problem can be addressed rather simply by placing a moisture barrier in the crawlspace and also with grading and flashing on the foundation. There may also be a failed downspout leader which needs to be addressed. There may be reasons why the shoeboxes would eventually have other uses other than classrooms. But they are quality product that could have a number of other important uses by the district. Something as simple as storage space which appears in short supply. These are a quality product that should be used in any future planning for the school.

The Music Room is an iconic building that should be maintained as much as possible: the exterior panels appear to be transite which should be replaced (which would be an opportunity to change the color), the acoustics in the building are excellent for teaching music. An important shortcoming of the music room is the lack of accessibility.

Gymnasium and Surrounding Buildings are in excellent condition with very little routine maintenance required to bring them up to date.

Roofing

The bituminous built-up ballasted roofing on all the buildings have been professionally installed and maintained. This is a standard type of roof covering and commonly used on similar buildings of this age.

There have been small leaks at the edges of the roof from time to time caused by ice getting up under the flashing. There have also been small leaks in the art room and recently in the drama room. An infrared scanning of those areas would be recommended.

The roofs on the high-rise building, the lower buildings surrounding the gymnasium are all in fairly good condition. They are due for a restoration. The tower roof and the roof over the front hallway were restored and came out of warranty about two years ago.

The gymnasium roof is at the end of its functional life and requires replacement before there is a failure that would damage the hardwood flooring the building. When reroofing it will be necessary to add insulation to the roof which will improve the functionality of the gymnasium.

The shoe box roof was redone 6 or 7 years ago and is under warranty and in good condition.

The 2002 addition has its original roof and now would be the time to restore it. Doing a restoration gives them a new lease of life with the expectation of possibly getting a total of possibly 30 years total life.

Electric – The electric system in the entire building is safe but there is a need for increased capacity. The sparking outlet in the tower last autumn immediately tripped the breaker indicating that the electrical safety system operated as designed. The outlet had to be replaced. There is a definite need for additional receptacles and additional branch feeds in areas of all the buildings to cope with the added electrical use needs.

The panels in the old section are original but functional and one is a PushMatic which is outdated in and needs to be replaced. In the original building the wiring is functional and has no need for replacement. It does need additional panels for increased capacity. Increased receptacles are needed for current needs of students, teachers and staff.

The entire school has lighting that was changed to a T8 several years ago. We could use the same fixtures but change over to LEDs which would be an important upgrade and energy efficiency improvement.

Other essential needs -The kitchen, cafeteria, orchestra and entryway need upgrades.