

Presented To:

Jack Buck
8951 Park St.
Richland, MI 49083
jbuck@richlandlibrary.org

Richland Community Library Exterior Assessment and Repair Plan



Presented By:

Myron Sparrow, Estimator
Building Restoration, Inc.

Proposal No.: P25051

Date: May 22, 2025



May 22, 2025

Jack Buck
Richland Community Library
8951 Park St.
Richland, MI 49083

RE: Exterior Assessment and Repair Plan

Dear Mr. Buck,

In accordance with your request, Building Restoration, Inc. is pleased to provide you with this proposal.

SCOPE OF PROPOSAL

The overall intent of this proposal is to provide a detailed listing of building concerns and repair methods along with pricing. The pricing is divided into immediate, secondary and maintenance type repairs.

IMMEDIATE CONCERNS FOR REPAIR

This section is comprised of issues that are detrimental to the building or the safety of its occupants concerning water infiltration as an immediate concern to keep water out of the building as it accelerates damage and causes extensive repairs after prolonged exposure.

- **Original Chimney:** The original chimney has been leaking for quite some time. As can be seen in the attached photographs there is heavy deterioration damage at the base of the chimney and the basement of the library along with damage to drywall and finishes that are framed alongside the chimney. The upper portion of the chimney that protrudes from the newer metal roof requires extensive mortar replacement, brick replacement, and the current cap is heavily rusted with failing sealants around the flashing. A repair scheme for this area would be to clean and repaint the cap to eliminate the rust damage and create a surface that sealant will bond to. This will allow us to repair any pin holes or leaks in the cap. Replacement of all failed mortar joints on the chimney and any cracked or displaced brick will be replaced or re-laid along with the replacement of sealants on the roof terminations and counter flashings that may no longer be functioning to prevent water infiltration.



- **Large Window Sections on North and South of New Building:** The original sealant in the window sections is urethane and has surpassed its service life. It is shrinking and debonding from the window trims and perimeters along with glass seal and frame to wood trim seal. These open as they can no longer stretch and account for movement or simply did not bond properly to the wood surface, they allow moisture in the window perimeter. As evidence of moisture damage at all the wood sills and trim on the interior of the building. Both the north and south sections require all existing sealants in the systems and trims replaced with a silicone based sealant that will accept this level of movement and remain intact. The wood trim pieces in between the window sections are of particular concern due to the lack of bond that most sealants have with wood over time. These pieces will be removed, the flashing detail will be evaluated to direct any water out that enters behind the wood in the future, and the wood will be replaced and a new sealant joint installed. It will be discussed at the time of replacement if the new wood pieces should or should not be wrapped in aluminum or be made of a plastic product that allows an advantage to adhering sealant.



- **Urethane Sealants:** All the existing building penetrations on the new structure windows and doors have been terminated with a urethane sealant that is susceptible to UV deterioration and has a service life of 7 – 10 years. This sealant is weather checked, ripped open, debonding, and no longer creates an adequate seal to stop the infiltration of water. All the currently failing urethane sealant on the additions and newer structure will be removed and replaced with a silicone sealant utilizing the following procedures.
 1. Remove existing failed sealant via grinding and oscillating knife.
 2. Clean all joints of dirt, dust, and debris.
 3. Install bond breaker, or properly gauged backing rod to prevent three-sided adhesion.
 4. Install a one-part neutral cure silicone sealant.
 5. Dry tool sealant to assure two-sided adhesion and to avoid the premature failures associated with wet slicking.
 6. Color of sealant will match the existing.



- **Sidewalk Repair:** At the left stair of the main entrance four panels of the sidewalk approach have either cracked or sunk in to a point where tripping hazards have been created. As this is a public entrance we highly suggest the removal and replacement of these four panels. Along with this we will remove and compact the base material to create a stable substrate for the new sidewalk to be supported. Once the sidewalk is poured back the surface will be exposed by washing off the concrete paste topping. This will provide an aged look to the new sections of the sidewalk, so they blend in with the surrounding sidewalk.



SECONDARY REPAIRS

This section covers structural repairs, masonry issues, issues with flashings and deterioration that need to be addressed within the next three years to eliminate further damage to the building.

- **Brick Replacement:** Due to the age of the brick on the original structure the brick is very soft and ductile. There has been repointing and replacement performed over the years with a harder mortar or harder brick and by nature they do not move the same. All failed mortar joints on the original structure will be removed and replaced with an aesthetically matching mortar, but most importantly a mortar that matches in compressive strength and porosity, so it can breathe and move like the original. All broken brick will be removed and replaced with an as closely as possible matching brick.

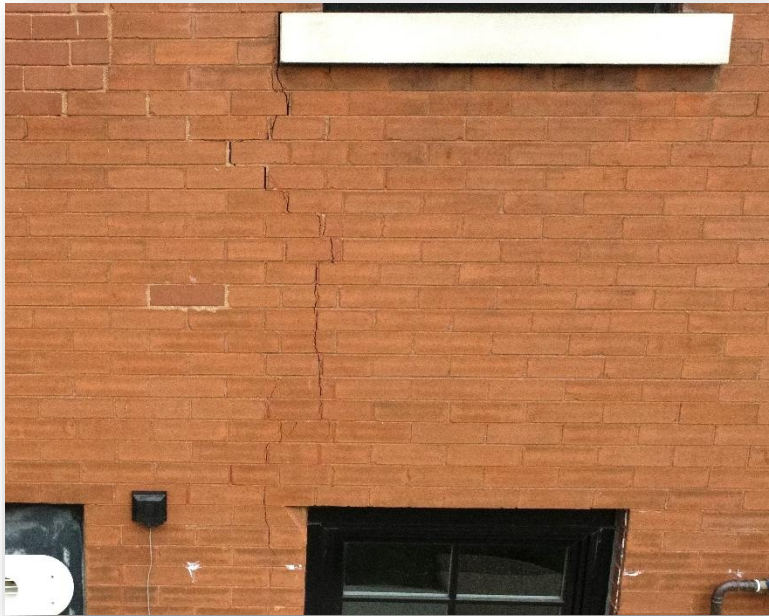


- **Brick Repointing:** All mortar joints that are no longer functioning to properly bond together brick and masonry units and resist the ingress of water will be replaced, along with any joints that have heavily eroded away from their original surface. Building Restoration, Inc. will not be removing and replacing previous inadequate repairs unless they have failed. The following steps to proper re-pointing will be followed:
 1. Mortar matching will be achieved via matching our pre-made biscuits, followed by an onsite match to be verified by you, prior to repointing.
 2. The mix design will be a lime putty-based mortar with matching aggregate to achieve national park standards of proper bond and same or lower compressive strength as the matching mortar.
 3. Removal of deteriorated mortar (a minimum depth of two times the width of mortar joint) will follow the current OSHA standard for silica dust control when performing this work.
 4. Removal of debris in the joint will be via brushing, vacuuming, or water flushing.
 5. Close examination will determine the extent of deterioration in the joint and surrounding area.
 6. Rework the joint, as necessary.
 7. Air blast to remove debris in the joint.
 8. Water-soak the substrate.
 9. Pre-wet to reduce the amount of initial dehydration of the mortar that is about to be replaced.
 10. Deliver mortar to the prepared joint. Several layers may be required to fill the joint flush with the outer surface of the masonry.
 11. Strike back (tooling the joint to match the existing historic joint).
 12. Wait for the mortar to set until it is ready to be compacted.

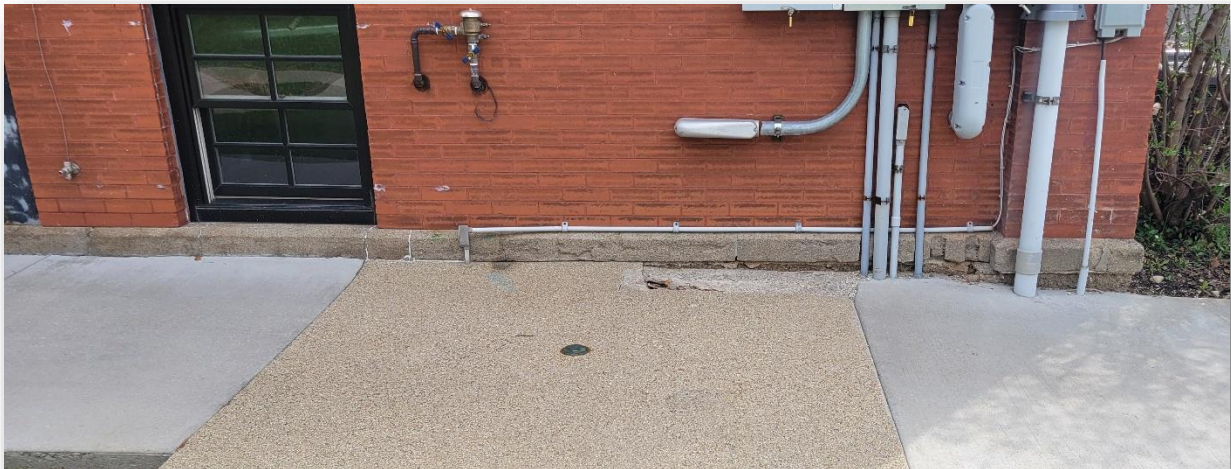
13. Dry brush compact the joints to allow for further development of bond to original remaining mortar and substrate.
14. Allow for adequate cure of the new mortar.
15. Pre-wet to saturate the substrate in preparation for the last step.
16. Weathering wash to match the old and new masonry.



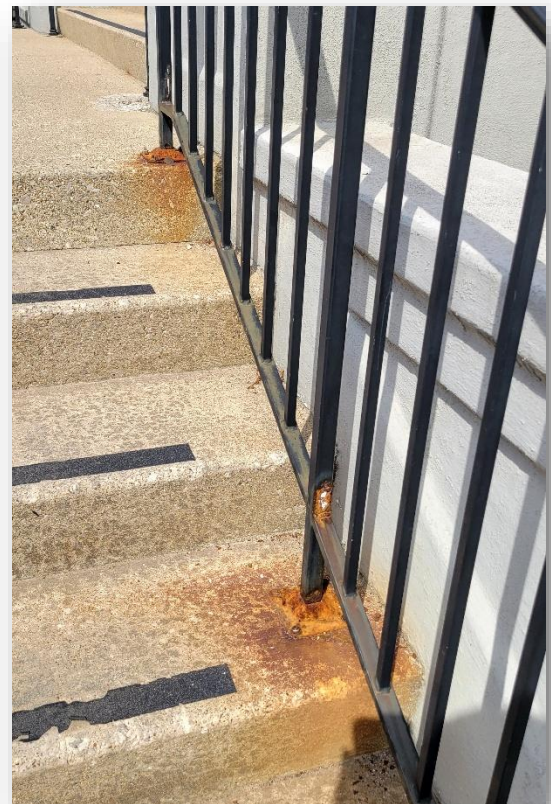
- **Movement Cracking:** Along the west wall and southwest corner there are areas of settlement that have caused movement cracking in the brick masonry. As one specific reason for the settlement has not been determined, it is most likely these cracks will continue to move slightly widening and shrinking as thermal changes occur over the seasons, or as road work or parking lot work is done in the future. We suggest the brick and mortar in the areas of movement cracking not be replaced as they are too rigid to accept this level of movement. These areas will be cleaned from previous sealant installation, routed to create a proper bonding surface, and a silicone sealant of matching color along with a sand surface broadcast will be installed to mimic the look of a masonry joint. This will conceal the installation of sealant and blend in with the surface of the building.



- **West Wall Curb Sealants and Concrete Replacement and Repair:** The concrete curb stone to sidewalk juncture along the west wall has experienced movement and deterioration over time. As these joints have opened they allow water to penetrate the foundation and water service vault, deteriorating the concrete surface. It is necessary to seal these areas to eliminate water intrusion. All open joints, cracks, and separations in the curbing will be routed and sealed with a silicone sealant broadcast with sand to mimic masonry. A cove seal will be repaired or installed between the curb and the sidewalk. The sidewalk joints will be caulked and sanded. The concrete area by the electrical connections will be patched and repaired and the surface will be removed and reinstalled. After concrete repair is completed the lid to the water access vault will have a polymer modified surface coating applied. This will mimic the look of concrete but will seal off this vault lid and not allow saturating water to percolate through the top of the vault.



- **Main Entrance Handrail Repair and Reinstallation:** The existing handrail is beginning to rust and become unstable just above the anchoring base plates. Many base plates have rusted through and are no longer functioning to help keep stability in the rail. Currently, it is in a usable condition, but this repair is necessary sooner rather than later. Handrail sections will be removed one half at a time so all surfaces of the stair will still have at least one usable handrail. The handrails will be cleaned and repaired. The base plate will be cut off and a new stacked base plate will be installed with a modified hole pattern so when it is re-anchored the same holes are not utilized. After the repairs are completed the handrails will be reinstalled and the other section will be removed to facilitate the repairs.



- **Flashing Caps at Patio Entrance:** The brick wing walls that create the entrance surround at the lower patio level of the new section of the library have an inadequate flashing design. The copper flashing wrapping the wall plate on the top of the wall has no drip edge to stop water from cascading around the plate and running down the surface of the brick. There are overlaps in seams that are not sealed and are no longer intact. This allows water to enter through the top of the flashing and access the inside of the unheated wing wall. As this brick has core holes it is very easy for water to move through the wall and pool. During freeze/thaw conditions this water expands and cracks the brick as can be seen in the attached photographs both wing walls have staining and leaching along with cracked sections of brick. The roof sections will be supported, the flashing and wall plate removed, and new plates will be installed with aluminum wrap and cap flashing with a taller face and drip ledge to prevent water from cascading down the face of the wall. If an adequate brick match can be procured broken and cracked bricks will be replaced. Due to the coloration and iron spot pattern in the brick an adequate match is highly unlikely. If a brick is not found an option to rout and seal the cracks with a sand broadcasted silicone will be discussed.





GENERAL MAINTENANCE AND UPKEEP ISSUES

Due to the lack of a maintenance fund and continued maintenance on the exterior of the building over the years these general maintenance items should be completed within a 3 -5 year range to limit the amount of damage to the building after these items begin to fail. Most items start out as aesthetic, but if the aesthetic nature of the damage is not addressed they become detrimental to the structure over time.

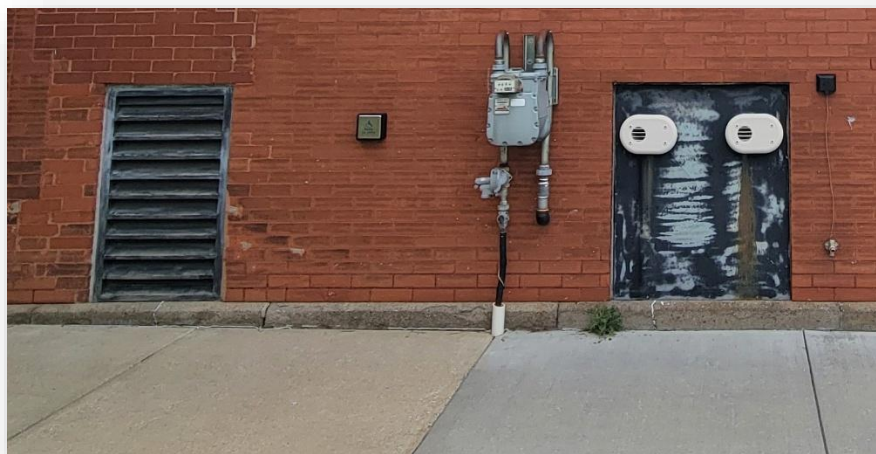
- **Main Entrance Site Wall Surface Coating:** The existing masonry slurry coat that has been applied to the main entrance site walls is debonding and flaking. Many areas have come loose, and this creates an aesthetically unpleasing surface. The surface coat was potentially applied to clean up the appearance of the wall but may also have been helping to reduce water intrusion and prolong the life. We suggest a heavy power washing and surface preparation take place and a new thin shelled masonry surface coating be applied.



- **Main Entrance Column and Door Wood Repair:** At the main entrance to the library the wood wrapped column bases and entrance door surround trim are experiencing water intrusion and minor rotting. The bubbling and blistering paint allows water to access the wood and accelerate the deterioration. The column base trims are currently in need of replacement and most of the wood structure requires repair, cleaning, and repainting.



- **Vine Removal and Louver Repair:** On the southwest corner of the main entrance and the west wall the original structure has decorative metal louvers and window infills that require cleaning and painting along with the removal of vine growth. The vegetation that is causing the growth of the vines has been removed but the sections of vines that are embedded in the louvers are still attached. These will need to be cut out and removed so repair of the louvers can take place. The louvers will be water blasted to create an adequate bonding surface for new coats of primer and paint. The louvers will be primed and painted a matching color to the library entrance wood.



- **Wood Trim at West Entrance, Soffit and Fascia Repair on Original Building Additions:** All these wood trim sections have experienced deterioration in the paint layers over time. Many sections are bare wood and require a light sanding to close the surface, primer and two coats of paint. This will take place on the door surround of the west, all the soffit and fascia of the rear addition along with the gabled wood trim and siding to seal the surface of the wood and reduce the ability for water to infiltrate and rot these detailed **sections**.



- **New Building Siding, Cleaning, and Repair:** The wooden fish scale siding on the newer building has greatly faded over time and many of the surfaces are completely losing their paint. A heavy power rinse will eliminate any de-bonded and flaking paint and create a surface adequate for bonding a new exterior paint. As this is a wood siding a breathable paint or colored stain will be utilized to allow the wood to expel moisture during very humid seasons.



- **Clean Up:** We shall clean up and remove all items associated with our work and dispose of properly off-site.
- **Schedule:** At the time of preparing this proposal we are scheduling work for spring 2026. Due to when your signed proposal is received by us this schedule may have changed. Upon receipt of the signed proposal our project manager will place it on our schedule. You will be contacted with a proposed start date.

If, during the performance of our work, the price of material significantly increases, through no fault of Building Restoration, Inc., the price of material will be adjusted by an amount reasonably necessary to cover any such significant price increases. A significant price increase will mean any increase in price exceeding five percent (5%) experienced by Building Restoration, Inc. from the date of the proposal signing. Such price increases will be documented through quotes, invoices, or receipts. Where the delivery of material is delayed, through no fault of Building Restoration, Inc., because of the shortage or unavailability of material, Building Restoration, Inc. will not be liable for any additional costs or damages associated with such delay(s).

Our lump sum bid for the above stated work includes the following and is subject to the Attachments, including the *General Terms and Conditions* attached as Attachment A, which are incorporated into the contract:

- MATERIALS and TAXES
- LABOR: Direct, Supervisory, General, and Administrative
- INSURANCE: Worker's Compensation \$1,000,000; General Liability \$2,000,000; Umbrella Liability \$5,000,000; Automobile Liability for Company Owned Vehicles \$1,000,000.
- EMPLOYEE BONDS: Employees of *Building Restoration, Inc.* are company bonded through Hanover Insurance Company for a maximum of \$10,000.
- SUB-CONTRACTORS: Will not be used as the entire project will be performed by *Building Restoration, Inc.*
- EXCLUSIONS: Our lump sum bid for the above-stated work excludes permits. All permits required will be charged to the project at cost plus 10%.
- The property owner or their representative agree that this job is not subject to Michigan Prevailing Wage laws.

LUMP SUM BID:

P25051 *PLEASE INDICATE BELOW WHICH OPTION(S) YOU ARE CHOOSING

- | | | |
|--------------------------|--------------|---------------------------------------|
| <input type="checkbox"/> | \$49,600.00* | Immediate Concerns for Repair |
| <input type="checkbox"/> | \$44,093.00* | Secondary Repairs |
| <input type="checkbox"/> | \$56,043.00* | General Maintenance and Upkeep Issues |

**Subject to 30-day acceptance.*

Building Restoration, Inc. would like to thank you for giving us this opportunity to be of service to you, and we hope to be working with you on this project in the near future. If you have any questions, concerns, or if we can be of any further assistance, please feel free to contact us.

Respectfully submitted,



Myron Sparrow
Estimator
Building Restoration, Inc

Attachment A:	General Terms and Conditions
Attachment B:	Hazardous Materials
Attachment C:	Safety
Attachment D:	Contract Termination Provisions
Attachment E:	Proposal Acceptance