

McINTOSH PERRY

March 21, 2023

Mae Lannan, Climate Change Coordinator
City of Port Colborne
3 Killaly Street West
Port Colborne, Ontario
L3K 2L5

Dear Ms. Lannan:

Re: Lock 8 Gateway Park Pavilion

A visual review was undertaken at the Lock 8 Gateway Park Pavilion on March 20, 2023. The original construction date is not known. The following details McIntosh Perry's observations and recommendations.



The structure consists of 9"x9" wood columns at approximately 11' on centre along the north, south, and east sides. The columns support rough cut wood trusses, purlins, roof rafters, and decking. Trusses include steel tie rods in the centre. Trusses are through bolted to columns using steel angle clips. Diagonal members between columns and trusses are nailed.



Columns are encased with red sandstone at their bases. Stone bases are presumed to be supported by concrete pads or piers. A concrete slab on grade is installed throughout the pavilion, independent of the concrete pads or piers. Termination of the wood columns is unknown.



Cracking along mortar joints was noted at all stone bases. Minimal cracking of stones was noted. Cracks range from hairline to approximately 5mm. Mortar between columns and bases has separated. Significant separation between the stone base and wood column was noted at the northwest corner.



The wood column at the northwest corner is deteriorated where visible within the stone base. There is also notable movement of the column. The column is not supported.



A stone wall, fireplace, and chimney are located along the west side of the Pavilion. Typical mortar cracking was noted at the chimney and north wall.



The sloped roof is finished with newer metal panels. A loose section of roofing was noted at the southwest corner.



Minimal checking, or splitting, of the wood members was noted. Checking is a common occurrence as wood dries. Checking may have occurred when the wood was processed or in recent years.



Based on this limited, visual review, the condition of the structure is fair. The degree of deterioration of the remaining five wood column bases is unknown but is presumed to be like what is observed at the northwest column. Detailing of the stone column bases does not allow for water entry, through mortar gaps and the porous nature of the stone and mortar, to drain freely. Column bases are also untreated (preservative not used) which exacerbates the issue.

MP is of the opinion that the structure should not be used in its current state due to unknown conditions of the wood members. It is recommended that the loose metal roofing be removed, or resecured and remaining fasteners be reviewed due to high winds observed. The columns require temporary support until re-design and rebuilding can commence. The checking of the wood members should be monitored as part of maintenance.

The statements made in this letter are based solely on the information obtained to date as part of the above referenced assessment. McIntosh Perry Limited has used its professional judgement in assessing this information and formulating its opinions and recommendations. The mandate at McIntosh Perry Limited is to perform the tasks prescribed by the client with due diligence of the profession. No other warranty or representation is expressed or implied as to the accuracy of the information or recommendations included or intended in this letter. McIntosh Perry Limited disclaims any liability or responsibility to any person or party for any loss, damage, expense, fine or penalty which may arise or result from the use of any information or recommendation contained in this letter.

Subsurface conditions are to be verified and specifications/drawings are required to properly define the Scope of Work and to obtain formal quotations for any major repair or refurbishment work.

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