

cc JM /
LU /

July 6, 2010

P10-2298

District of Metchosin
4450 Happy Valley Road
Victoria, BC V9C 3Z3

Attn: Joe Martignago, CEO

RECEIVED
JUL 12 2010
DISTRICT OF METCHOSIN

Re: **Metchosin Firehall**
Metchosin, BC

Dear Joe:

At your request, the undersigned completed an on-site inspection at the above building on June 22, 2010. The purpose of the inspection was to complete a preliminary condition assessment and to provide a professional opinion on the structural condition of the building. Present during the inspection were you and Mr. Jim Whitfield who helped with the history of the building. For the purpose of this report, the firehall is considered as one building even though a newer building was constructed adjacent to an existing building and joined by an enclosed link. Also, the elevation facing the street is considered the north elevation. Selective photographs are included for reference purposes.

Building History

The original building was a two bay firehall structure complete with hose tower and was constructed in 1960-1961. It was constructed of timber roof joists bearing on unreinforcing masonry block walls (URM). The walls are believed to be 12 inches thick and were probably constructed on concrete foundations. Roof sheathing was probably parallel or diagonal shiplap. The original single storey building was approximately 13 feet high and contained two apparatus bays. Four additions to the original building were completed prior to the main apparatus bay building to the east in 1993 including another bay to the east in 1967-1968, a 25 foot concrete block single storey recreation room on the south and a two storey concrete block addition on the southwest corner. A wood frame lean-to structure was added on the east end of the building at the time of the new three bay apparatus building and hose tower in 1993. This new building in 1993 is constructed of timber roof trusses and precast concrete wall panels.

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Building Condition

The building for both the original and subsequent additions and the new apparatus bay building are in good condition for their age and well maintained with the 1993 building being newer and in better condition.

Structural Assessment

A structural assessment was not completed on the original building and subsequent additions nor was it completed on the 1993 apparatus bay building. It appears that the original building and subsequent additions have sustained their gravity loads adequately from 1960, however current firehalls should be designed as post-disaster structures and in our opinion, the original building and subsequent additions would likely collapse or partially collapse during a current Code seismic event. This does not apply to the 1993 apparatus bay building which was probably designed to the requirements of the 1990 National Building Code of Canada or the 1992 British Columbia Building Code. In our opinion, the 1993 apparatus bay building designed to either the 1990 or 1992 Code would be structurally adequate for current seismic loading.

Conclusion

It is our opinion that the original building and subsequent additions, not including the 1993 apparatus bay building, would collapse or partially collapse under expected current Code related seismic forces. It is also our opinion that it would not be cost effective to seismically upgrade this structure to meet the post-disaster seismic requirements of the current 2006 British Columbia Building Code.

We trust the foregoing is sufficient for your needs at this time. Please contact the undersigned if you have any questions regarding this letter report.

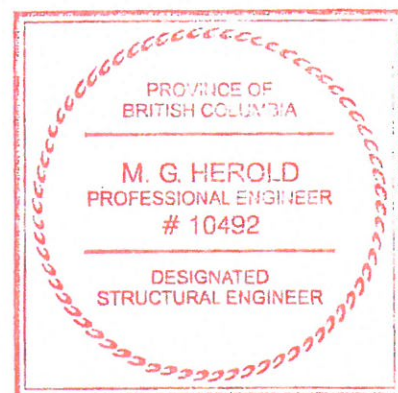
Yours truly,

HEROLD ENGINEERING LIMITED



Mike Herold, P.Eng., Struct.Eng., M.I.Struct.E., LEED AP

MGH/emb



July 8/10

