



J C KENYON ENGINEERING INC.
STRUCTURAL ENGINEERING CONSULTANTS

May 23, 2012

File: 116-10

Mr. James Youck
P3 Architecture Partnership
2292 Dewdney Ave.
Regina, SK
S4R 1H3

Re: Connaught School
Regina, Saskatchewan

Dear James:

As you requested, we have prepared a preliminary "opinion of cost" for restoring the structural systems at Connaught School as part of a major renewal project for the school. As you are aware, the building has many structural issues with the primary concern being the condition of the foundation. The foundation consists of brick walls supported on concrete footings and the foundation requires stabilization in the form of underpinning with piles. The brick wall foundation presents many difficulties in regard to underpinning in that the brick does not have the continuity that is normally required for underpinning. The brick foundation requires more piles and more time to underpin than a comparable concrete foundation system would.

We have received a preliminary cost estimate from W & R Foundation Specialists for underpinning the structure which puts the cost at approximately \$3.75M. In our opinion, this cost should carry a 25% contingency at this time which puts the underpinning at approximately \$4.5M. This contingency would cover unforeseen conditions and repairs to deteriorated walls and other elements. It should also be noted that W & R has indicated that the time required for the underpinning would be 10 to 11 months.

Other structural items that need to be addressed as part of the renewal project would be the condition of the upper floor structures and the attic slab. These floor systems are sagged and cracked and their structural capacities are unknown since the rebar content within the concrete is unknown. We expect that structural reinforcement of the floors will be required in many areas. At this time, we suggest an allowance of \$1.0M be carried for upgrades to the superstructure.

We also expect that there will be structural modifications which would be part of the renewal project that would include things such as removal of some interior walls, new openings through walls, reconstruction of the front stairs and portico, support of new mechanical equipment and other items. We suggest an allowance of \$750,000 for these additional structural items.

Our opinion of cost is therefore \$6.25M for the structural renewal of this building. Our cost does not include general conditions, contractor overhead and profit and engineering fees.

Further to the above, prior to any decision regarding proceeding with a renewal process, we recommend that a more detailed investigation program be undertaken to assess the condition of the building structure. This would include exposing the footings at several locations to determine the condition of the concrete, retrieval of concrete core samples at the footings and the superstructure

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and an investigation into the slab and beam rebar.

We trust this information is sufficient for your present needs. Please contact our office if you have any questions or concerns.

Yours truly,

J C KENYON ENGINEERING INC.



Jim Kenyon, P.Eng.



Association of Professional Engineers & Geoscientists of Saskatchewan		
CERTIFICATE OF AUTHORIZATION		
J.C. Kenyon Engineering Inc.		
Number C794		
Permission to Consult held by:		
Discipline	Sk. Reg. No.	Signature
Structural	5214	JK