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## EXHIBITION PLACE

September 13, 2000

To: The Board of Governors of Exhibition Place

From: Danny Chui  
Manager, Capital Works

Subject: **Emergency Capital Works**  
**1) Automotive Building – Pre-Cast Panels Repointing & Re-fastening &**  
**2) Better Living Centre – Steel Column Repair**

### Recommendation:

It is recommended that the Board approve the funding of \$405,000 from the surplus of Food Building – Roof Replacement Project in the Year 2000 Capital Works Program to pay for the emergency repairs of the above mentioned work.

### Background:

The Board approved a 2000 Capital Works Program totaling \$4,245,000 which the amount did not include any funding for the emergency repair of pre-cast panels at the Automotive Building and steel columns repair in the Better Living Centre.

### Discussion:

During the investigation for our 2000 budget preparation, staff discovered a serious structural deterioration condition in each of the two above-mentioned buildings. The following are the detail findings of the two buildings:

1) Automotive Building – Pre-cast Concrete Cladding Repair (Estimated Cost \$290,000)

During investigation in late August of this summer, extensively damaged and cracked pre-cast cladding panels were found. This condition is particularly evident at the northeast corner entrance, the east elevation and the northwest corner entrance. A large portion of the mortar joints connecting these panels have failed and need re-pointing. As many as 15-20 panels in the exterior wall were found to have separated from the adjacent panels and move outward away from the wall at the top or bottom, particularly on the east elevation. Three of these panels were observed to have been pushed out to an unsafe 3/4" to 1" from the surrounding panels. One panel was taken down for investigation and the original steel hooks and brackets securing the panel were found to be badly corroded

or non-existence. Along with two others, they were temporarily re-fastened with angle iron and stainless steel rods. The rate of deterioration has obviously accelerated in recent years as a result of water entering through broken joints and corroding the fastening brackets. To avoid advancement of the deterioration due to penetration of water behind the panels, immediate re-pointing of all affected joints and re-fastening alternate panels with stainless steel anchor bolts are recommended. This work is estimated to cost \$290,000.

2) Better Living Centre – Column Repair Crawl Space (Estimated Cost \$115,000)

During the late August, 2000 inspection of the crawl space, a piece of corroded steel (3" x 4") that had fallen from a steel column was found. It was noted that serious corrosion had occurred in some beams and columns. Structural consultants were requested to inspect all columns in the crawl space area which is below ground floor level of the Better Living Centre. The consultant's report indicated extensive corrosion was found at the base of some columns in the northwest quadrant and particularly those columns located below the washrooms and along the areas where trenches have been dug in the past. 76 columns of the 835 columns in total are found to require repair, either to their base plate, bolt, grout or column itself. Some of the anchor bolts have corroded to the point where replacement is absolutely essential. This repair work, estimated to cost \$115,000, is urgently required.

It is recommended that the funding in the amount of \$405,000 (\$290,000 + \$115,000) for this urgently needed work come from the \$425,820 surplus from the Food Building Roof Replacement Project reported to the Board in the tender report dated September 6, 2000.

Conclusion:

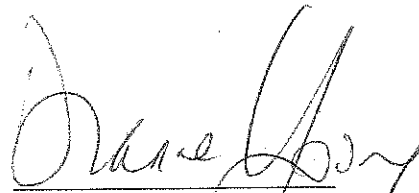
This report recommends that the Board approve the funding of \$405,000 from the surplus of the Food Building Roof Project for the emergency repair of Automotive Building Wall Panels and Better Living Centre columns in crawl space.

Submitted by:



Danny Chui  
Manager, Capital Works

Reviewed by:



Dianne Young  
General Manager & CEO