



CITY OF RICHMOND

REPORT TO COMMITTEE

TO: General Purposes Committee

DATE: November 8, 2000

FROM: Jeff Day, P. Eng.
Director, Engineering

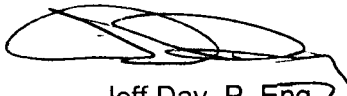
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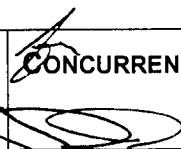
RE: Britannia Shipyard Building – Restoration

STAFF RECOMMENDATION

It is recommended that:

1. Funding in the amount of \$91,000 be approved for the additional work required to address the powder post beetle infestation and other unforeseen conditions to allow the contractor to complete the restoration and seismic renovations of the Britannia Shipyard Building; and
2. Funding of \$42,195 be allocated from the 1999 Minor Capital Program, Account #45099; \$48,805 be allocated from the Minoru Fieldhouse, Account #45911.


Jeff Day, P. Eng.
Director, Engineering

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ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Budget	Y <input type="checkbox"/> N <input type="checkbox"/>	

STAFF REPORT

ORIGIN

In July 2000, Council approved a contract for the seismic and life safety upgrading of the Shipyard Building at the Britannia Heritage site. This was awarded to Makam Construction Limited for the sum of \$418,224.

BACKGROUND

Restoration at the Britannia Heritage site has been underway for several years with the successful completion of works at the Kishi Boat Works, the Murakami Complex, among others. Most recently, Council approved a number of significant upgrades to the Shipyard Building that included seismic upgrades to the roof and structure, fire suppression and detection systems.

In order to maximize the scope of work identified for this phase of restoration, Council considered and adopted a proposal from the Britannia Business Plan Steering Committee. In part, that proposal recommended the use of Human Resources Development Canada (HRDC) work crews as part of the contractors resources in order to undertake additional renovations to the pier alongside the net loft building. The project time schedule was revised by the contractor to reflect these changes and completion was projected for late October 2000.

The restoration and safety renovations to the Shipyard Building are well underway. However, as the project has progressed, a number of unforeseen problems outside of the approved scope of work have materialized, resulting in additional construction costs not previously anticipated. In order to address these problems and to complete the current project additional funds are required

ANALYSIS

There are three primary areas wherein the project is experiencing extra costs, namely:

- Costs associated within the anticipated project contingency allowance of 5% resulting from minor deviations to the intended plan and normal to any construction project. These items result in response to 'as-found' site conditions. The additional costs in this category are approximately \$26,000.
- As was originally planned, a segment of the HRDC participation was to provide labour for the roof replacement work. However, as a result of HRDC personnel being reluctant to participate in the roof work, the contractor has increased his labour component to ensure the roofing program continues uninterrupted and does not disrupt the project schedule. The cost related to this portion of the project is approximately \$24,000.
- During the course of construction, it was discovered that there has been substantial deterioration to the substructure, beams, pile caps, etc., largely due to a powder post beetle infestation. Many of the timber members, which were determined to be in acceptable condition at the time of earlier renovations to the substructure, have now substantially deteriorated. Their deterioration is to the point that continued upgrading to the building structure cannot be accomplished without their replacement. The estimated cost related to these repairs is \$58,000.

DISCUSSION

Use of HRDC work crews has provided some financial benefit and has certainly reduced costs, albeit only 50% of the \$50,000 proposed due the inability of the HRDC work crews to complete demolition and replacement of the building roofing system.

The determination and extent of the powder post beetle infestation was not anticipated and the damage to the substructure or foundations of the building is significant. The project is at the critical stage that if the additional funding is not allocated, the work could not be completed to the requirements of the B.C. Building Code and would no longer be habitable.

By allocating the required funding of \$91,000, the project will now be completed by December 31, 2000 to the original planned scope of work.

FINANCIAL IMPACTProject Status

Approved Construction Contract Makam	\$418,224
Authorized Contingency Change Orders	\$ 25,000
Consultant Team and City Costs	<u>\$117,200</u>
Sub Total	\$ 560,424

Change Orders Pending	\$ 26,000
HRDC Related Costs	\$ 24,000
Structural Changes Required	\$ 58,000
HRDC Pier & Floats Seine Net Loft	\$ 22,000
HRDC Walkway at Seine Net Loft	<u>\$ 50,000</u>
Sub Total	\$ 180,000

Total Costs to Project Completion	\$ 740,424
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Approved Budget

Existing Funds Account #45870	\$ 449,500	
Millennium Grant	<u>\$ 200,000</u>	
Total	\$ 649,500	\$ 649,500

Additional Funding Requested		\$ 90,924
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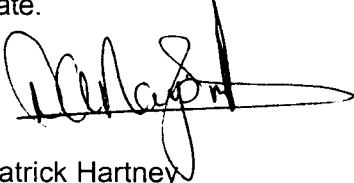
Proposed Funding Sources

1999 Minor Capital Program	Account #45099	\$42,195
Minoru Fieldhouse	Account #45911	\$48,805
	Total	\$91,000

The balance of funding from the Minoru Fieldhouse Project is recommended since this project has now been deferred by Community Services pending a full review of the Minoru Park site.

CONCLUSION

In order to complete this phase of the Britannia Shipyard Building, staff are recommending that an additional \$91,000 be allocated to the project. Completing the critical substructure repairs caused by the powder post beetle infestation, will ensure the safe occupancy of the building and allow the opportunity to re-assess future work within the heritage site without jeopardising the investment to date.



Patrick Hartney
Project Manager

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