



THE CORPORATION OF THE CITY OF COURTENAY

BRIEFING NOTE

To: Council
From: Chief Administrative Officer
Subject: Anderton Dike Wall – Project Update

File No.: 5225-04-20
Date: June 9, 2016

ISSUE:

The purpose of this briefing note is to update Council on the status of the Anderton Dike Wall project and the actions that have been undertaken by staff.

BACKGROUND:

Following the December 2014 flood event, inspections of the City's dike wall infrastructure identified some issues with the sheet pile retaining wall adjacent to the properties at 426 and 440 Anderton Avenue that required further investigation. The City engaged engineering consultants, McElhanney Consulting Services Ltd. (McElhanney), to conduct geotechnical and structural assessments of both the retaining wall and the adjacent private buildings. These assessments have revealed deterioration in the condition of the retaining wall requiring immediate remedial action.

KEY CONSIDERATIONS:

Based on the analysis performed by McElhanney, the wall is marginally stable in its current state, as determined from the information gathered and analysis performed. This means that the wall is able to accommodate the existing forces acting upon it, however if there is a sudden change in these forces (from earthquake, significant changes in river flows or groundwater conditions, migration of soils behind the wall resulting in soil settlement and/or additional movement of the wall), the wall has a high likelihood of failure. In general, the wall has suffered an "in service failure" in the sense that it is no longer functioning in the capacity which it was intended.

Stabilization of the wall needs to be done immediately as a temporary measure. The window of opportunity to construct in the river this year is fast approaching (late July/early August) and any interim solution requires permitting approvals from the Provincial and Federal Government. Staff is working with McElhanney to determine the most appropriate course of action to improve the stability of the wall and advance the permitting process as soon as possible. Concurrently, work has begun on the design criteria for a permanent structural replacement.

The following is a summary of activities completed by staff over the past few months:

- Established a site inspection program to track and monitor any visual changes to the site
- Established a survey monitoring program to observe movements in the building structures, retaining wall and property surface and regular site inspections
- Drafted an Emergency Response Plan for coordination with the Comox Valley Emergency Program; coordination and review with CVEP is forthcoming
- Prepared and circulated an Emergency Preparedness sheet for the tenants and owners of the buildings

- Conducted an information meeting with the tenants and residents; provided all reports and information prepared on behalf of the City discussing the site conditions; followed up from meeting with circulation of information package to capture those who could not attend the meeting.
- Met with the Ministry of Forest, Lands and Natural Resource Operations to understand the current path to approvals for a permanent replacement of the dike wall.
- Interim solution design is 75% complete and under review by staff
- Submitted an Expression of Interest for grant funding to the National Disaster Mitigation Program for consideration in the next grant intake.

The next steps for this project over the coming weeks include:

- Meet with CVEP and review the Emergency Response Plan for properties adjacent to the retaining wall.
- Complete ISO31000 Risk Assessment
- Complete concept design and permit approvals
- Obtain council approvals for funding of temporary works
- Construct temporary works
- Analysis options for permanent solution and determine recommended option for “go forward” strategy

Prepared by,



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