
CITY OF KELOWNA

MEMORANDUM

Date: April 15, 2009
File No.: 6340-30
To: City Manager
From: Director, Infrastructure Planning
Subject: Reuse of Okanagan Lake Bridge Pontoons as Breakwater & Future Public Pier

RECOMMENDATION:

THAT Council give approval in principle to the adaptive reuse of the salvaged Okanagan Lake Bridge pontoons as a breakwater and a future public pier/marina in the general location shown in Annex 1;

AND THAT Council direct staff to pursue required applications with the BC Integrated Land Management Bureau, the BC Ministry of Environment, the Federal Department of Fisheries and Oceans, and the Federal Ministry of Transport for this project;

AND THAT Council authorize the Mayor to sign a letter referencing Council's support as an attachment to the various applications;

AND THAT Council approve a budget of \$35,000 transferred from the "Building Replacement Planning 2009 capital budget for engineering studies required for the applications, due diligence on SNC-Lavalin's engineering proposals, and to support public input processes;

AND THAT Council direct staff to engage the City's solicitor to work with SNC-Lavalin on a Memorandum of Agreement for the transfer of the pontoons from SNC Lavalin to the City for Council consideration;

AND THAT Council direct staff to create opportunities for dialogue with the public regarding this proposal and report back to Council;

AND FURTHER THAT staff return to Council in mid-May 2009 with final recommendations.

BACKGROUND:

SNC-Lavalin (SNC-L) is under contract with the Province of BC to retire the old pontoons from the previous Okanagan Lake floating bridge in a way that fully extinguishes all Provincial liabilities. SNC-L is exploring opportunities for adaptive reuse, and failing that, is expected to demolish the pontoons. Their deadline is mid-May for a signed memorandum of agreement with serious recipient(s). Both Penticton and the Westbank First Nation have considered and rejected the opportunity.



1. The SNC-L proposal is to relocate pontoons as a breakwater for existing marinas, primarily because the various approval processes are less onerous for this use relative to other more intensive uses. Fortunately, the City has completed an application to the BC Integrated Management Bureau for an extension of the Kelowna Yacht Club Basin water lease another 100 meters west to accommodate approximately 300 net additional moorage slips. This provides an opportunity to reuse the pontoons as a deep-water breakwater on the outer perimeter of the lease line (see Annex 1). The value of a breakwater of similar function is estimated at a minimum of \$10 million. The proposed plan reuses 10 of the 12 pontoons with the following future development opportunities:
2. A public walkway from the Water Street boat ramp to the northerly pontoons creating a linear marine park over ½ kilometer long. The pontoons could be developed for public uses including walking, picnicking, watching water sport events and as an event venue.
3. The breakwater could be developed for public boat moorage as follows:
 - a. the northerly pontoons and access pier for short-term day moorage of about 30 boats,
 - b. the inside of the western pontoons for about 50 serviced slips for overnight public moorage
 - c. the outside of the western pontoons for short-term day moorage of about 30 boats.
 - d. the central areas of some pontoons for small boat club boat storage
4. Others yet to be determined.

All future development opportunities would require both a financial strategy and approval from authorities having jurisdiction regarding design details. It is anticipated that public-private partnerships and marina leases would be viable in a project of this nature.

INTERNAL CIRCULATION TO:

Financial Services, Community and Media Relations, Real Estate and Building Services, Design and Construction Services, Infrastructure Operations, Regional Services

LEGAL/STATUTORY AUTHORITY:

Kelowna Yacht Club (KYC) Basin Lease: Currently the City has a lease with the KYC for the Yacht Club Basin off Stuart Park. The lease delegates responsibility for the maintenance of the City-owned log breakwaters to the KYC. There are currently about 480 slips protected in the basin. The planned expansion would increase the slips to about 760. The pontoon breakwater would provide much greater protection and the Yacht Club would be expected to contribute to the maintenance of the pontoon breakwater in accordance with the value they receive. The application for the expansion of the yacht basin would include an additional area for the City to anchor the pontoon breakwater.

City as Owner: Before relocating and anchoring the pontoons, SNC-L would require a legal transfer of ownership to the City that indemnified both themselves and the Province from any liability. The City's lawyer will be asked to participate on a team to draft the agreement for Councils' consideration.

Future Liability: The anticipated life of the pontoons used for these purposes is 50 years or longer conditional on appropriate maintenance. At that time, the City would need to sink or demolish them. This would entail applications with the authorities having jurisdiction at that time, and the associated costs.

LEGAL/STATUTORY PROCEDURAL REQUIREMENTS:

The following will require formal applications:

- Federal Department of Fisheries and Oceans (habitat)
- Transportation Canada (navigable waters)
- BC Ministry of Environment (environmental impact)

- BC Integrated Land Management Bureau (water lot license for land tenure)

All parties have been notified of the project and are prepared to give it immediate attention. Both the use as a breakwater and the future use as a multi-use public pier would be cited in the applications. Preliminary assessment would suggest that commercial uses requiring utility infrastructure (solid and liquid waste) would complicate the application and slow it down outside of SNC-L's time frame.

Subject to the project moving forward, the installation process would take 6-8 weeks and would be scheduled for early fall, 2009, after the summer boating season has concluded.

FINANCIAL/BUDGETARY CONSIDERATIONS:

Application to Authorities Having Jurisdiction (AHJ): AHJ will require various environmental impact studies. The City, as owner, would be responsible for commissioning these studies at an anticipated cost of \$19,000.

Public Process: A \$1,000 budget would be needed to conduct an open house at Stuart Park. The budget would cover costs such as tent rental, and dry-mounted display boards.

Initial Capital: SNC-L will be responsible for the total cost of engineering, relocating, and anchoring the pontoons in their final positions ready for turnover to the City. In principle, the budget for relocation cannot exceed their budget for demolishing the pontoons. Preliminary engineering has already been completed to validate the feasibility of the proposed breakwater arrangement.

On-going Operation and Maintenance (O&M): An immediate budget of \$15,000 is required to engage an engineer to review the SNC-L proposal including the O&M manual. SNC-L advises that a reasonable budget for O&M of the breakwater would be about \$50,000 per year, on average. Surpluses in any year would be put aside in a reserve to offset future repairs or the final decommissioning cost. This O&M cost estimate will be confirmed by the City's consultant. The annual budget would be established as a base budget through the supplementary budget approval process. The costs could be partially offset through revenues from the Yacht Club lease and/or future public moorage.

Short Term Capital: It is anticipated that public access would be developed as soon as possible, given approvals of authorities having jurisdiction, and available funding. This would include the extension of the south floating wharf of the Water Street Boat Ramp (scheduled for replacement in the next year or so), an accessible ramp to the pontoon decks, a bridge at the north-west corner over boat access to the KYC and the public moorage marinas, minimal surfacing, security gates and railings on the pontoons for public safety, and the public moorage (conditional on a viable business case). The capital could be raised by the City either through public borrowing or a public-private partnership for the public moorage or both. A budget will be developed for the next report to Council.

Long Term Capital: The public park would include streetscaping (lights, pavements & street furniture, landscaping, and minimal servicing to support festival events). This would be funded from existing park development budgets over time and respecting Council's City-wide priorities.

De-commissioning: SNC-L advises that the cost for de-commissioning the pontoons in today's dollars would be ½ million dollars or more, depending on the methodology used. A capital reserve will be established to accumulate funds for decommissioning through an annual appropriation.

Contract Terms: Due to time constraints, all consulting contracts will be sole sourced.

TECHNICAL REQUIREMENTS:

SNC-L will prepare the engineering for the relocation and permanent anchorage of the salvaged pontoons. In addition, they will prepare a recommended O&M Manual. The anticipated O&M includes:

- monitoring the pontoons for leaks, and appropriate remediation;
- inspecting the anchorage system for wear, and making appropriate repairs.

The City will execute due diligence by having an independent engineer review the forthcoming SNC-L design work, including the O&M manual.

EXTERNAL AGENCY/PUBLIC COMMENTS:

This project addresses some of the needs identified in the Central Okanagan Regional District's "Major Lakes Recreational Marine Facilities Study" published following substantial public input in late 2008.

The reuse of the WRB Bridge pontoons will create a substantial public asset providing public access to the lake and public moorage, and will have a significant visual presence on the waterfront. The pontoons have would have a 510 meter (1,683') frontage and are all 15 meters (50') wide with a deck height of 2.4 meters (8') above the water line. The 60-meter pontoons have an additional 1.5 meter (5') parapet, while the 75 meter pontoons have no parapet. Due to technical constraints, the 75-meter pontoons can only be used at the end of an assembly of pontoons, and have therefore been located at the joint between the north and west breakwater. This reduces the visual impact of the pontoons from Waterfront Park and increases the view from these pontoons in all directions when used as a public park. Annex 2 uses Goggle Earth™ to accurately show the visual impact of the pontoons from various waterfront locations. They have been placed to minimize their obstruction of the view.

Staff proposes to solicit public input regarding this proposal and to report the findings back to Council by mid-May through the following:

1. Conduct discussions with the Kelowna Yacht Club, and
2. Hold an open house in Stuart Park on Thursday, April 30, 3-8pm.

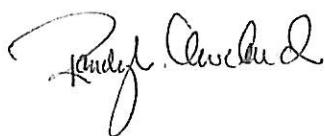
ALTERNATE RECOMMENDATION:

THAT Council decline SNC-Lavalin's offer to accept the salvaged WR Bennett Bridge pontoons from the decommissioned Okanagan Lake Bridge.

Considerations that were not applicable to this report:

EXISTING POLICY:**PERSONNEL IMPLICATIONS:**

Submitted by:



R Cleveland, Director, Infrastructure Planning



Approved for Inclusion:

J. Paterson, GM Community Sustainability

cc: David Graham, Director, Strategic Initiatives
Keith Grayston, Director, Financial Services
Carla Stephens, Director, Community & Media Relations
Bill Berry, Director, Design & Construction Services
Doug Gilchrist, Director, Real Estate and Building Services
Ron Forbes, Property Manager, Estate and Building Services
Derek Edstrom, Project Manager, Estate and Building Services
Joe Creron, Director, Infrastructure Operations
Randy Prost, Kelowna Yacht Club

ANNEX 1: Site Plans



Figure 1: Context Plan

Figure 2: Detail Plan with notation

ANNEX 2: Goggle Earth Sketches to illustrate visual impact



Figure 3: Aerial looking north-west



Figure 4: View from City Park Pavilion



Figure 5: View from Water Street Boat Ramp

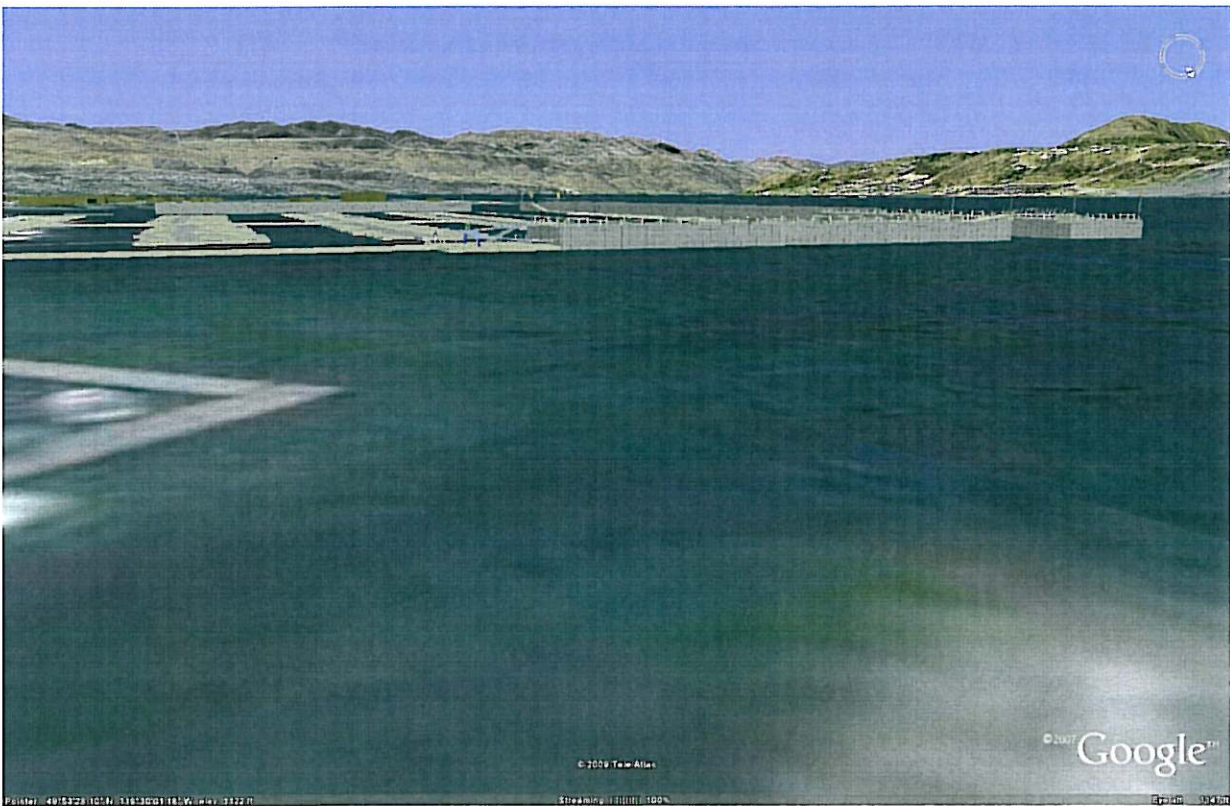
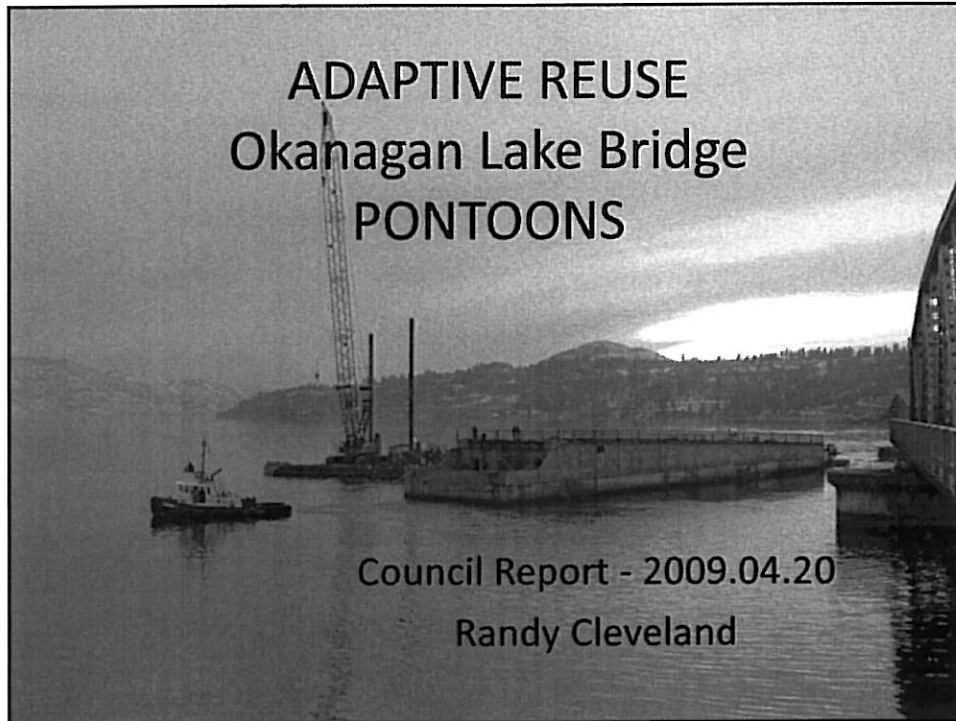


Figure 6: View from Simpson Boardwalk at Lagoons Lock System



BACKGROUND INFO

1. SNC-Lavalin:

1. must **EITHER** find new uses-owners for the salvaged Okanagan Bridge pontoons (12) **OR** crush them
2. offered to prepare, deliver and install the pontoons for use as a breakwater for existing marinas
3. offered to prepare a preventative maintenance plan for peer review by a City-hired engineer
4. initiated discussions with 8 parties including Penticton, West Bank First Nation, West Bank Yacht Club, Shelter Bay Marina, City of Kelowna
5. needs solid agreement(s) by mid-May 2009

BACKGROUND INFO

2. The need for more boat moorage on Okanagan Lake is well established (CORD Major Lakes Recreational Marine Facilities Study)
3. The City of Kelowna:
 1. Leases water-lots from BC and in turn sublets to the KYC (the City owns a small part of this waterlot)
 2. Owns and leases existing breakwaters to the KYC under the Yacht Basin lease
 3. Is applying to BC for an expansion of the Basin lease to allow the KYC to expand from about 480 to 760 boat slips (additional 280); substantial deep-anchored breakwaters will be required for expansion

BACKGROUND INFO

4. The previous Council rejected a plan to reuse the pontoons as a floating public dock because of both capital and O&M costs
5. DFO, Coast Guard, BC-MOE and BC-Integrated Land Management Bureau approvals required for reuse

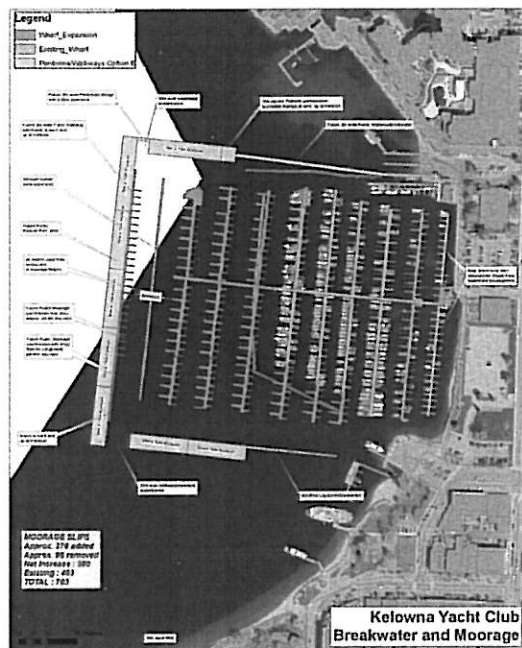
Proposed Location:

1. Breakwater outside perimeter of planned KYC expansion
2. Accessible to public from Water Street Boat Launch
3. Potential for:
 1. Public Pier
 2. Public boat marina

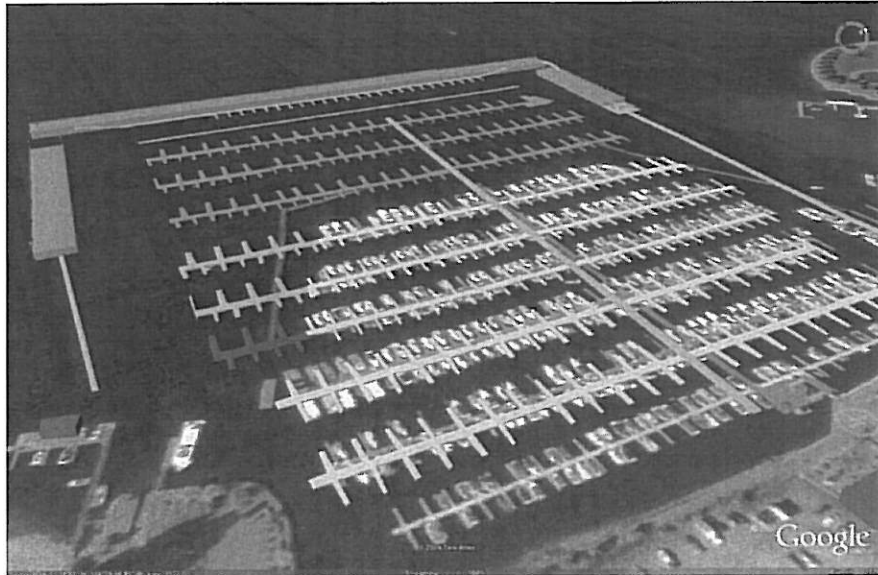


PROPOSED LAYOUT

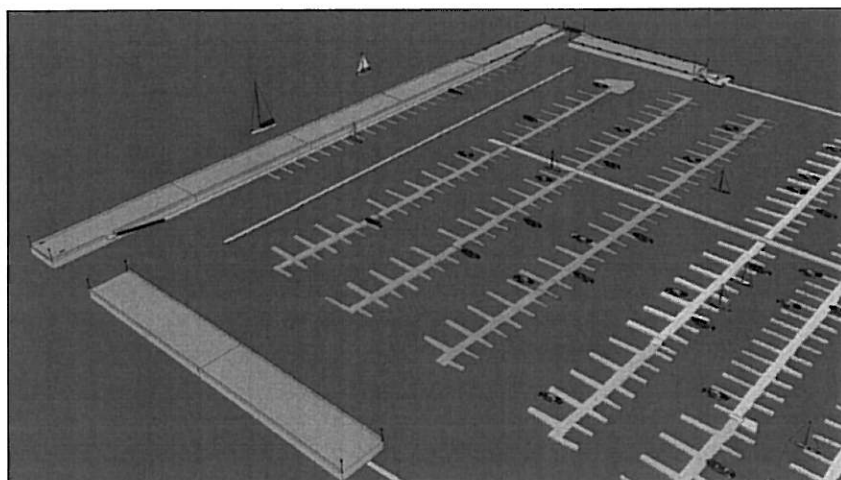
- 6 x 60m sections
- 2 x 75m sections (no parapets)
- 510 m long, 15 m wide, 2.5m high + 1.5 m parapet



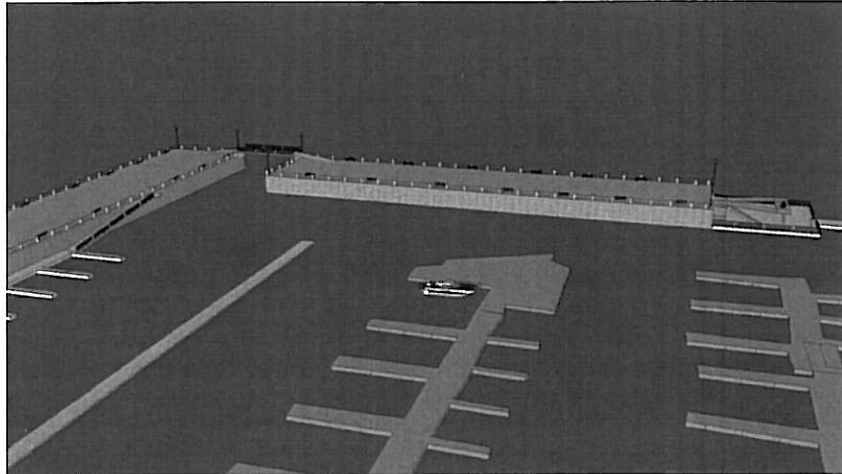
Visual Impact: Bird's Eye looking NW



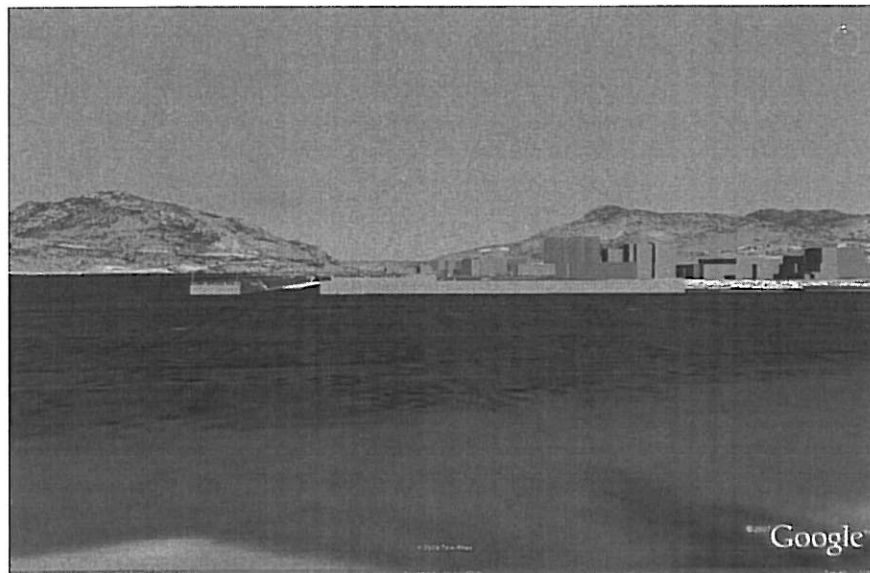
Areal sketch looking North-West



Sketch of North-West Corner



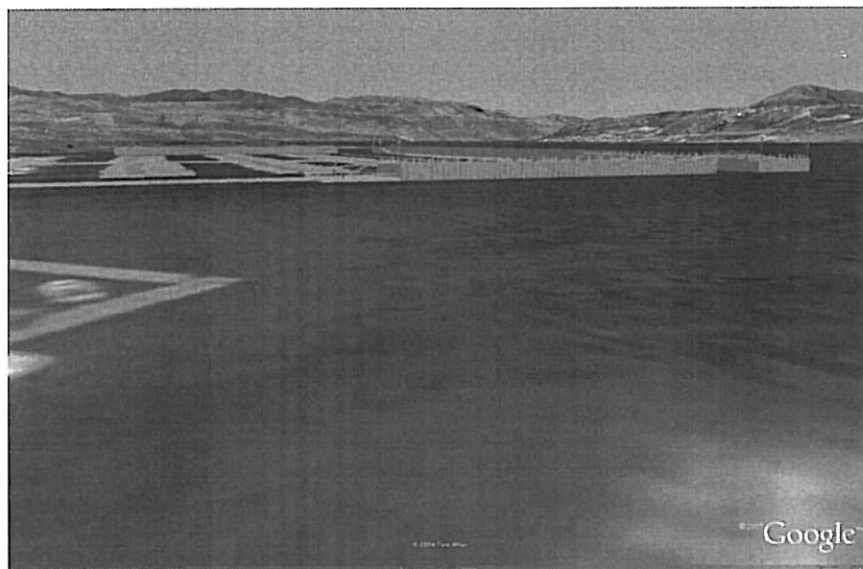
Visual : from City Park Pavilion



Visual : from Water Street Boat Ramp



Visual: from Lagoons Lock



ISSUES

- Breakwater requirements of KYC expansion
- Future development costs and funding strategies (project not in 10-year capital plan)
- Future O&M costs and funding sources
- Service Life and decommissioning costs
- Input of Authorities having jurisdiction
- Public input and public process legislation

RECOMMENDATIONS

- THAT Council
 - Give approval in principle to proposal
 - Approve \$35,000 budget to progress proposal

RECOMMENDATIONS

- THAT Council direct staff to:
 - Launch formal applications to Authorities Having Jurisdiction
 - Engage consultants for due diligence on SNC Lavalin's engineering design and O&M recommendations
 - Hold Public open house and discuss proposal with KYC
 - Develop an MOU with SNC-Lavalin to specify obligations and liabilities incurred in transfer and any need to engage Alternative Approval Process
 - Develop capital budgets for public access and 'pier-scaping' AND funding strategies
 - Return to Council with further information