

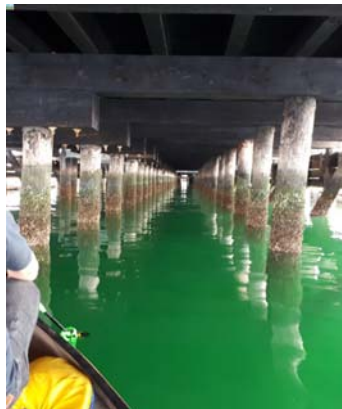


## Ship Point Pier Repairs



### Purpose

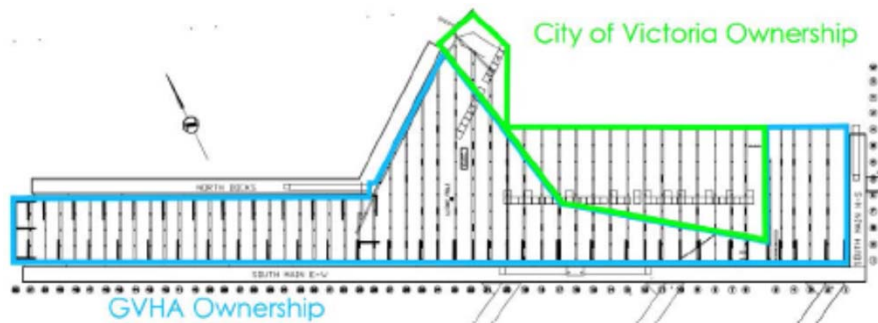
- The purpose of this report is to seek Council approval for progressing critical repairs to the Ship Point pier structure.



Ship Point Pier Repairs

## Background

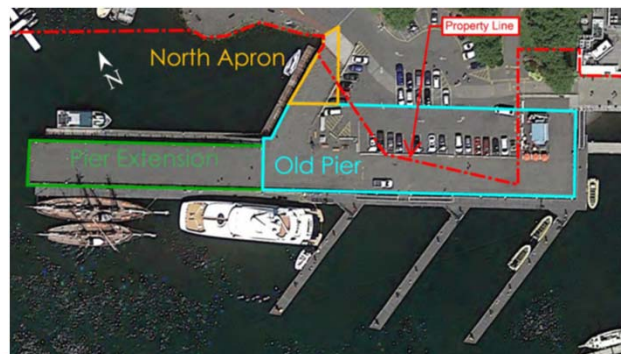
- The pier structure is partly owned by the City and the Greater Victoria Harbour Authority (GVHA). The City owns approximately one-third of the pier.



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## Background

- Three key components: North Apron, Old Pier, and Pier Extension.
- The Old Pier and North Apron formed the original pier structure, constructed in 1949, with the Pier Extension constructed in 1979.



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## Background

- The Ship Point Pier has provided several public amenities, such as the harbour pathway, parking facilities, boat moorage and food vending locations.
- The pier is also host to special events, such as night markets, Canada Day celebrations, concerts and boat races.



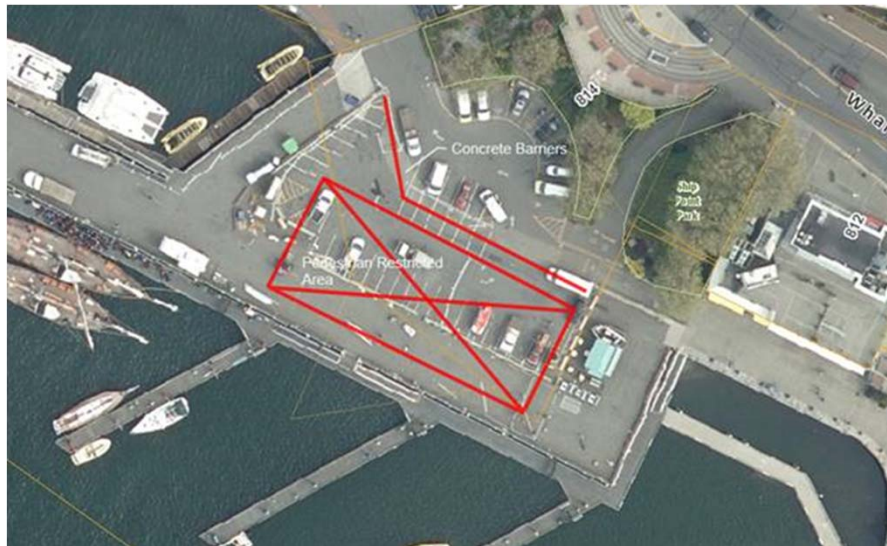
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## Issues

- After completing a preliminary inspection in 2016, the City and GVHA commissioned Stantec to complete a detailed condition assessment of the Ship Point Pier in 2017.
- A major portion of the original 1949 pier (the 'Old Pier') was closed in September 2017 due to safety concerns after initial inspections revealed extensive deterioration of timber piles and decking.



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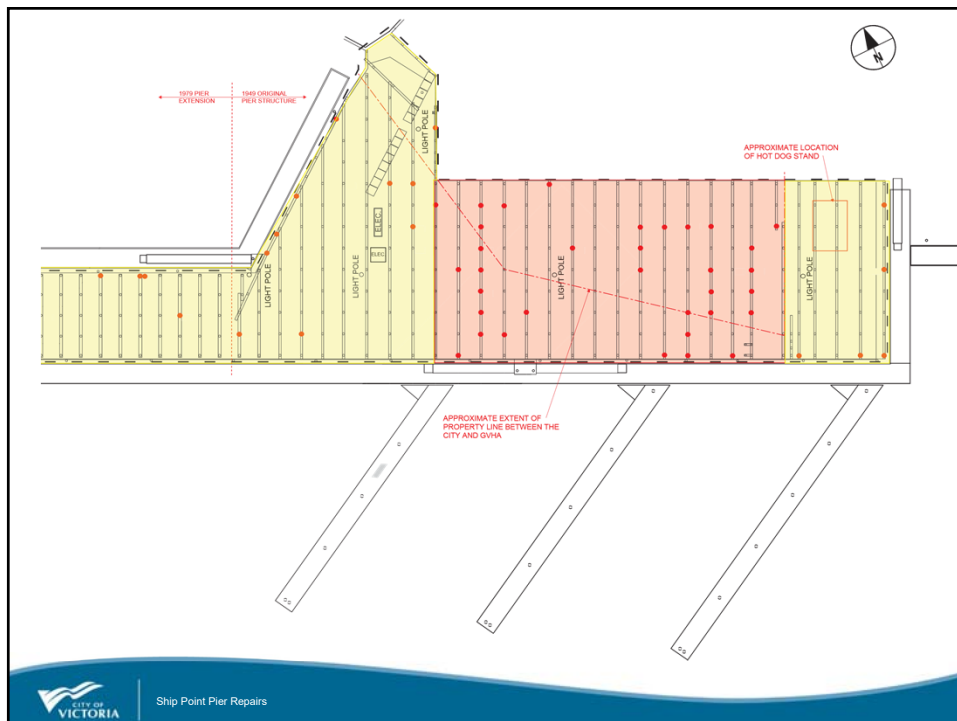
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### Condition Assessment Findings

- The detailed assessment found that the Old Pier structure was in poor condition, while the Pier Extension (owned by the GVHA) was in reasonable shape.
- The key findings of the condition assessment include:
  - Extensive damage to timber piles, beams and decking
  - Significant cracking of the asphalt surface
  - Extensive deterioration along portions of the underside timber retaining wall
  - Hangers supporting mechanical and electrical services under the pier are in poor condition.



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## Options Comparison

| Scenario | 100 Year Lifecycle Cost | Description  | Near Term Pier Closure | Near Term Costs | Long Term Costs |
|----------|-------------------------|--|------------------------|-----------------|-----------------|
| 1        | \$34M                   | <b>Repair</b> Old Pier timber structure using <u>timber</u> piles in 2018/2019.  | NO                     | MED             | HIGH            |
| 2        | \$24M                   | <b>Replace</b> the <u>closed portion</u> in 2020 using timber piles and concrete deck.   | YES                    | LOW             | MED             |
| 3        | \$24M                   | <b>Replace</b> the <u>entire portion</u> of the Old Pier in 2020 using timber piles and concrete deck  | YES                    | LOW             | MED             |
| 4        | \$22M                   | <b>Repair</b> timber structure under closed portion of the Old Pier using steel piles in 2018/2019.<br><b>Replace</b> the <u>closed portion</u> of the Old Pier in 2023 using <u>steel</u> piles and concrete deck. Reuse interim repair materials in ongoing maintenance. | NO                     | MED             | LOW             |



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- A phased replacement of the pier with a new steel and concrete pier is considered the most attractive option.
- A phased replacement would include immediate repairs to the closed portion of the pier in 2018/2019.
- More comprehensive repairs would be required in approximately five years.
- Repair and replacement considerations included the lifecycle costing analysis, planning synergies with GVHA, the City's Ship Point Master Planning process, financial impacts, events and amenity needs.



- Findings from the detailed condition assessment for future repair and replacement requirements will be incorporated into the Ship Point Master Plan design concept for council consideration.



## Recommendations

That Council:

1. Direct staff to proceed with detailed design and construction of repairs required to re-open the closed portion of Ship Point Pier.
2. Reallocate \$1.21 million for the structural repairs at Ship Point Pier from the Belleville Street Complete Streets project.
3. Authorize the Mayor and City Clerk to execute, on behalf of the City, an agreement with the Greater Victoria Harbour Authority (GVHA), on the terms acceptable to the Director of Engineering and Public Works and in a form satisfactory to the City Solicitor, to allow joint tender and repair work of the City's portion of the pier in conjunction with GVHA repairs of their portion of the pier.

