

**FISHERIES AND OCEANS
CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA) 2012
PROJECT EFFECTS DETERMINATION REPORT**

GENERAL INFORMATION

1. Project Title: Finger Pier Wharf Reconstruction, Old Perlican, NL	
2 Proponent: Fisheries and Oceans Canada, Small Craft Harbours (DFO SCH)	
3. Other Contacts (Other Proponent, Consultant or Contractor): Public Works and Government Services Canada	4. Role: OGD Consultant
5. Source of Project Information: Paul Curran, Chief Engineer, DFO – Small Crafts Harbours	
6. Project Review Start Date: December 23, 2015	
7. PATH No.: NA	8. PWGSC File No: R.071033.035
9. TC File No.: 8200-2010-700231	

BACKGROUND

10. Background about Proposed Development (including a description of the proposed development):

The scope of work includes the demolition and reconfiguration of the existing finger pier wharf in Old Perlican, NL. The existing finger pier wharf will be demolished and replaced with two separate finger pier structures seated parallel to each other inside the boat basin.

PROJECT REVIEW

11. DFO's rationale for the project review:

Project is on federal land and:

- DFO is the proponent
- DFO to issue *Fisheries Act* Authorization or *Species at Risk Act* Permit
- DFO to provide financial assistance to another party to enable the project to proceed
- DFO to lease or sell federal land to enable the project to proceed
- Other

12. Fisheries Act Sections (if applicable):

n/a

13. Other Authorities

- Transport Canada – Navigation Protection Program (NPP)

14. Other Authorities rationale for involvement:

- Navigation Protection Act

15. Other Jurisdiction:

- Newfoundland and Labrador Department of Environment and Conservation, Water Resources Division
 - Service NL
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<p>16. Other Expert Departments Providing Advice:</p> <ul style="list-style-type: none"> • Fisheries and Oceans Canada, Fisheries Protection Program • Environment Canada 	<p>17. Areas of Interest of Expert Departments:</p> <ul style="list-style-type: none"> • Fisheries Act
<p>18. Other Contacts and Responses: n/a</p>	
<p>19. Scope of Project (details of the project subject to review):</p> <p><u>Project Description</u> The project scope of work includes:</p> <ul style="list-style-type: none"> • Demolition and removal of the existing finger pier wharf; • Construction of two new finger pier wharves near the original footprint. One finger pier will measure 137m long x 7.6m wide, while the second finger pier will be 107 m in length and 7.6m in width. Both structures will be treated timber cribwork. <p>The reconstruction will require removal of approximately 13100m³ of bottom sediment material to accommodate both a draft of -4.5m below LNT, and to seat the cribwork. The material will be disposed of on DFO uplands to build-up the service areas at the site. Construction debris will be disposed of appropriately as per regulatory approvals.</p> <p><u>Operation</u> The operational aspects of environmental management of this site, as well, mitigation measures for the environmentally responsible aspects of harbour operation (fuelling, waste disposal, activities on the property and water) will be over seen by the local harbour users, in consultation with SCH.</p> <p><u>Decommissioning</u> This facility is not presently planned to be decommissioned. At the time of decommissioning, Small Craft Harbours will develop a site-specific re-use or reclamation plan that is appropriate for the applicable environmental legislation and Fisheries and Oceans Canada policies.</p> <p><u>Scheduling</u> Commencement of this project is subject to DFO SCH operational priorities and funding, as well as regulatory approval, but will likely proceed during the spring of 2015.</p>	
<p>20. Location of Project:</p> <p>Old Perlican is one of the oldest fishing communities in Newfoundland with a population of 676 (Statistics Canada, 2006). It is located in Trinity Bay approximately one hundred and twenty-five (125) kilometres in a straight-line northwest of the City of St. John's, NL in the electoral district of Bonavista - Trinity - Conception. A local Harbour Authority currently manages the Old Perlican facilities.</p>	
<p>21. Environment Description:</p> <p>The municipality of Old Perlican lies in the Northeastern Barrens subregion within the Maritime Barrens ecoregion. This subregion is characterized by widespread barrens with patches of peatlands and forested areas. The warmest temperatures are in July (13°C to 16°C) and the coldest are in February (-3°C to -8°C). Annual rainfall ranges between 1250 mm and 1300 mm.</p>	

An aerial photograph of the project site is attached and shows the existing layout. Breakwaters, marginal wharves and floating docks are all present, along with several large buildings. There is a freshwater brook entering the harbor, however, the proposed location of the wharf reconstruction is sheltered within the harbor.

Species at Risk (Aquatic and Terrestrial)

A search of the Atlantic Canada Conservation Data Centre (ACCDC) database was conducted within a 5 km radius of the proposed project location (ACCDC 2014). The search yielded two species with documented sightings within the search area. However, neither of the documented species was identified as being listed under Schedule 1 of the Species at Risk Act (SARA).

Old Perlican is within the distribution ranges of the Red Crossbill (*percna* subspecies), Eskimo Curlew and Ivory Gull, listed as endangered, and Barrow's Goldeneye and Monarch Butterfly, listed as special concern, under Schedule 1 of the Species at Risk Act (SARA). Marine areas of the project site are also within the distribution ranges of the Blue Whale (Atlantic population), and the North Atlantic Right Whale, listed as endangered under Schedule 1 of SARA.

22. Scope of Effects Considered (sections 5(1) and 5(2)):

Table 1: Potential Project / Environment Interactions Matrix

Project Phase / Physical Work/Activity	As per Section 5(1)			Section 5(1c)				Section 5(2)			Due Diligence			
	Fish (Fisheries Act)	Aquatic Species (SARA)	Birds (MBCA)	Health and Socio economic	Physical and cultural heritage	Land use	*HAPA Significance	Health and Socio economic	Physical and cultural heritage	*HAPA Significance	Water (ground, surface, drainage, etc)	Terrestrial / Aquatic Species	Soil	Air Quality
Harbour development														
Demolition, removal and reconstruction of finger pier wharves	P	-	P	-	-	-	-	-	-	-	P	P	P	P
Dredging	P	-	P	-	-	-	-	-	-	-	P	P	P	P
Dredge spoil disposal	P	-	P	-	-	-	-	-	-	-	P	P	P	P
Operation / Maintenance	P	-	-	-	-	-	-	-	-	-	P	-	-	-
Decommissioning / Abandonment	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*structure, site or thing that is of historical, archaeological, paleontological or architectural significance.
 Legend: P = Potential Effect of Project on Environment; '-' = No Interaction

23. Environmental Effects of Project:

In the table above, potential environmental effects were identified. Scoped project activities such as dredging, disposal, wharf construction and infilling have the potential to effect the environment. Each of the potential effects are addressed here:

Fish / Fish Habitat

- Dredging activities could result in the loss of fish habitat.
- Sedimentation as a result of placement of infilling material may negatively impact fish and quality of potential fish habitat.
- Infilling and construction of new finger pier wharves may result in destruction of potential fish habitat.
- A "Request for Review" has been forwarded to DFO Habitat. Response from DFO has been forwarded to PWGSC, SCH and the contractor.

Birds/Bird Habitat

- Any type of hydrocarbon spill could result in bird or bird habitat loss.
- Noise / fumes may result in birds avoiding the site and surrounding area.

Water

- Improper disposal of dredge material could result in contamination of ground water by placement in areas that may be susceptible to groundwater.
- Improper disposal of dredge material could result in contamination of freshwater (e.g. dredge material placed in or near a waterbody).
- Dredging activities resulting in a sedimentation event within the water column.
- Construction activities taking place near the shoreline may result in run off / erosion.
- Construction of finger pier wharf will result in a loss of flora, fauna, and habitat.
- Sedimentation as a result of infilling may decrease marine water quality at immediate project site.

Aquatic species

- Sedimentation as a result of removal/reinstatement of cribs and infilling may negatively impact aquatic species near project site.
- Accidental discharge of heavy machinery fuel/fluids may negatively impact aquatic species near project site.

Soil (Surface and Subsurface)

- Project activities could potentially result in soil contamination due to improper disposal of dredge material or to some type of mechanical malfunction resulting in a hydrocarbon spill.
- Construction activities at site or natural events (e.g. rainfalls) could result in erosion / sedimentation events.
- Improper disposal of waste material and dredge material could result in contamination of soil.

Air Quality / Noise

- May cause a temporary disturbance to residents and wildlife/marine life.
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24. Mitigation Measures for Project (including Habitat Compensation):

Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion and release of sediment and/or sediment laden water during the construction phase.

As part of this project's pre-planning process, marine sediment samples were collected from the proposed dredge areas and submitted for chemical analysis. The sediment materials will be utilized on the DFO upland area at the Old Perican harbor. Results from the sediment sample analysis are available upon request.

The in-water use of heavy equipment is not permitted. The operation of such equipment should be from dry/stable shoreline areas.

Work should be properly timed to avoid potential interference with commercial and/or recreational fisheries.

Appropriate sedimentation control measures (e.g. silt curtains, booms, etc), should be deployed where required.

All wastes should be recycled where possible or otherwise disposed of appropriately. All treated timber should be disposed of in an approved landfill site as per the Service NL letter.

All crib backfill material should be clean and obtained from an approved quarry.

All drainage and wash water from concrete production should be properly contained and should not drain into the marine environment.

There should be no sedimentation events as a result of proposed activities. If required, mitigation measures must be implemented such as installation of a turbidity barrier, construction of sediment ponds, etc.

Machinery should be well muffled and local municipality construction by-laws must be adhered to.

Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refuelling must be done at least 100m from any water body. Basic petroleum spill clean-up equipment should be on-site. All spills or leaks should be promptly contained, cleaned up and reported to the 24-hour environmental emergencies report system (1-800-563-9089). The proponent should consider developing a contingency plan specific to the proposed undertaking to enable a quick and effective response to a spill event.

Weather conditions should be assessed on a daily basis to determine the potential risk on project activities.

Several environmental approvals / permits have been obtained on behalf of SCH. These include:

1. Environment Canada provided information to support the environmental management process with respect to legislation falling under the auspices of EC.
2. Service NL provided approval to dispose of demolition timber material to an approved landfill, with owners consent.
3. NPP provided approval for the proposed alteration of the lawful work under the Navigation Protection Act. Conditions outlined have to be met.
4. Province provided approval for dredging work on small craft harbor property, but conditions are listed.

5. Fisheries and Oceans provided mitigation measures for the protection of fish and fish habitat.

These approvals are attached and all conditions/mitigation measures must be reviewed and implemented by the contractor.

The project is covered under NL Department of Environment and Conservation Terms & Conditions, and Transport Canada, Navigation Protection Act subsection 5(3) approval. Fisheries and Oceans Canada, Fisheries Protection Program determined that the project would likely not result in Serious Harm to fish or fish habitat and prescribed several mitigation measures to help mitigate potential environmental impacts (included above). Environment Canada has also issued expert advice containing several mitigations and best management practices.

The proponent should ensure that copies of all regulatory approvals are available on-site during project activities.

25. Significance of Adverse Environmental Effects of project:

Significant adverse environmental effects are unlikely, taking into account mitigation measures.

26. Other Considerations (Public Consultation, Aboriginal Consultation, Follow-up)

Public Consultation

The proposed project will provide more adequate and secure access for vessels utilizing this facility. No negative public concern was received as a result of this project. SCH consulted the local harbor users and Harbour Authority on all aspects of the project to ensure all requirements at the site were considered during design.

Aboriginal Consultation

Aboriginal fishers are not known to utilize the Old Perlican SCH facility, nor are there any known aboriginal groups in the surrounding area. As such, aboriginal consultation was not deemed necessary as part of this determination.

Government Consultation

Federal and provincial authorities likely to have an interest in the project were consulted by Public Works & Government Services Canada, Environmental Services, during the course of this assessment. A project description was distributed to the following authorities:

- Fisheries and Oceans Canada – Fisheries Protection Program
- Environment Canada
- NL Department of Environment and Conservation, Water Resources Division
- Service NL
- Transport Canada – Navigation Protection Program

Accuracy and Compliance Monitoring

A follow-up program (as defined in S. 2(1) and as applicable to non-designated projects on federal lands) is a program for determining the effectiveness of any mitigation measures. Site monitoring (accuracy and compliance monitoring) may be conducted to verify whether required mitigation measures were implemented. The proponent must provide site access to Responsible Authority officials and/or its agents upon request.

27. Other Monitoring and Compliance Requirements (e.g. *Fisheries Act* or *Species at Risk Act* requirements)

n/a

CONCLUSION

28. Conclusion on Significance of Adverse Environmental Effects:

The Federal Authority has evaluated the project in accordance with Section 67 of *Canadian Environmental Assessment Act (CEAA), 2012*. On the basis of this evaluation, the department has determined that the project is not likely to cause significant adverse environmental effects with mitigation and therefore can proceed using mitigative measures as outlined.

29. Prepared by: *Cathy Martin*

30. Date: February 24, 2015

31. Name: Cathy Martin

32. Title: Environmental Specialist, PWGSC-ES

DECISION

33. Decision Taken

- DFO may exercise its power, duty or function, i.e. may issue the authorization - where the project is not likely to cause significant adverse environmental effects. Confirm below the specific power, duty or function that may be exercised.
 - DFO to issue *Fisheries Act* Authorization or *Species at Risk Act* Permit
 - DFO to proceed with project (as proponent)
 - DFO to provide financial assistance for project to proceed
 - DFO to provide federal land for project to proceed
- DFO has decided not to exercise its power, duty or function because the project is likely to cause significant adverse environmental effects.
- DFO to ask the Governor in Council to determine if the significant adverse environmental effects are justified in the circumstances

34. Approved by: _____

35. Date: _____

36. Name: Paul Curran

37. Title: Regional Engineer, DFO-SCH, NL

38. References: n/a

TRANSPORT CANADA RECOMMENDATION

39. This section must be completed by Transport Canada;

Environmental effects of the project on navigation are taken into consideration as part of the environmental assessment only when the effects are indirect, i.e. resulting from a change in the environment affecting navigation. Direct effects on navigation are not considered in the environmental assessment, but any measures necessary to mitigate direct effects will be included as conditions of the *Navigation Protection Act* approval.

- Only direct effects are identified; therefore the effects of the project on navigation are not addressed in this environmental assessment.
- Indirect effects were identified and have been addressed in this environmental assessment.

40. REVIEWED by: *Melissa Ginn* 41. Date: February 19, 2015

42. Name: Melissa Ginn

43. Title: Environmental Officer – Environmental Affairs, Transport Canada

44. The above has reviewed the environmental screening report and recommends the determination as indicated above.

45. RECOMMENDED by: *Randy Decker* 46. Date: February 20, 2015

47. Name: Randy Decker

48. Title: Senior Environmental Assessment Officer
Environmental Affairs, Transport Canada

49. APPROVED by: *Kevin LeBlanc* 50. Date: March 3, 2015

51. Name: Kevin LeBlanc

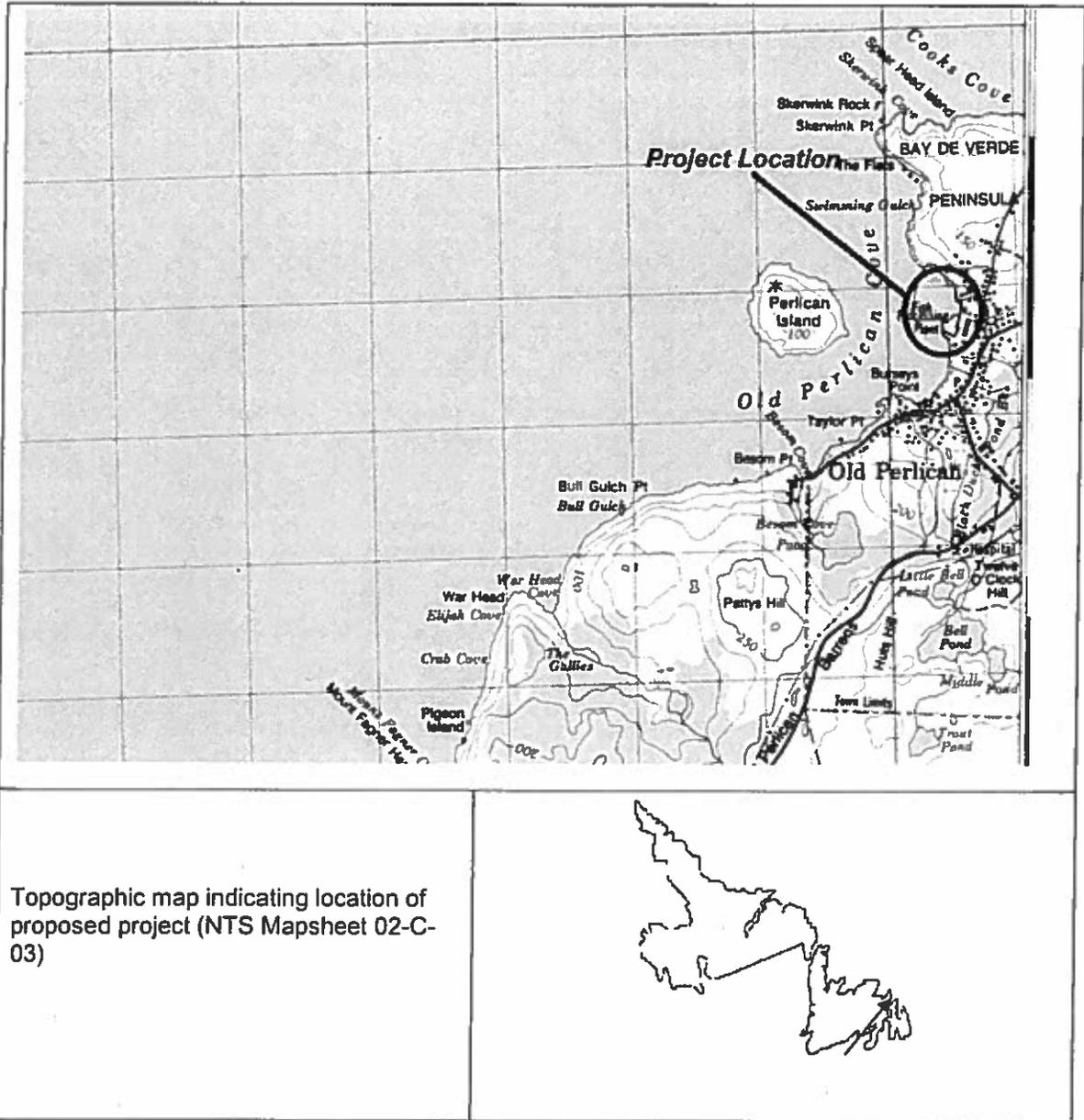
52. Title: Regional Manager – Environmental Affairs, Transport Canada

53. The above has reviewed the environmental screening report and approves the recommended environmental effects determination.

FIGURES

- Topo Map
- Aerial Photographs
- Site Plan





Topographic map indicating location of proposed project (NTS Mapsheet 02-C-03)

Figure 1: Topographic Map indicating project site.



Figure 2: Photo indicating project site (photo courtesy of DFO, 2010)

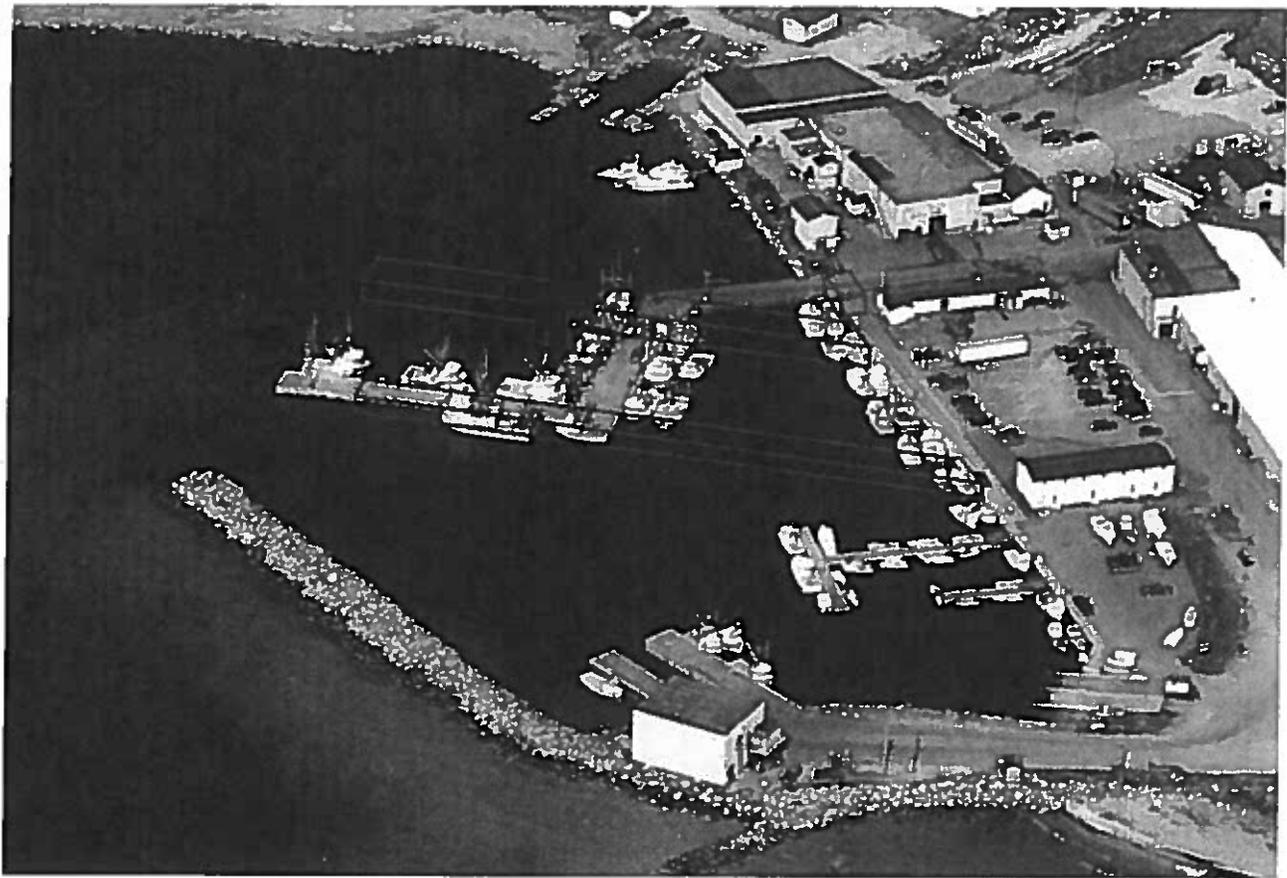


Figure 3: Photo indicating project site (photo courtesy of DFO, 2010)

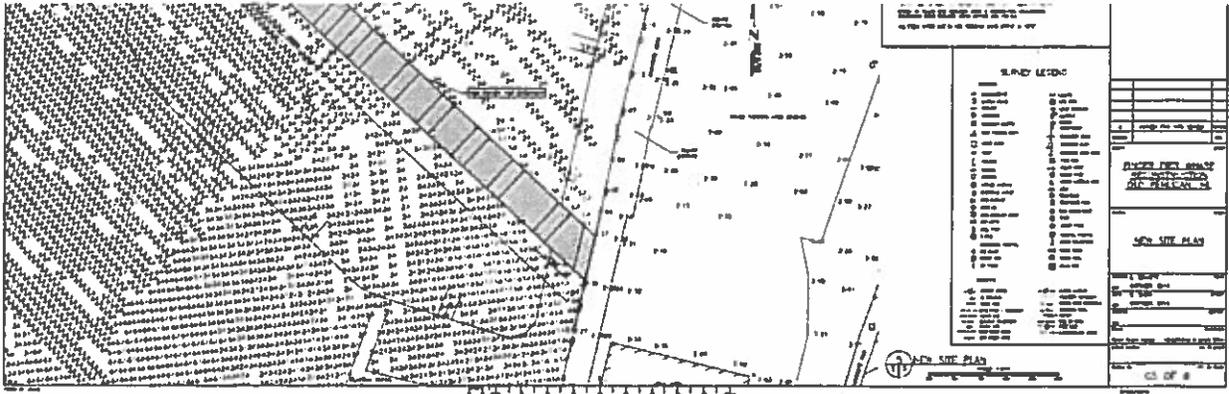


Figure 4: Old Perican Site Plan indicating proposed wharf footprint