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

GENERAL INFORMATION

1. Project Title: Wharf reconstruction and dredging, Trout River, NL	
2 Proponent: Fisheries and Oceans Canada – Small Craft Harbours (DFO – SCH)	
3. Other Contacts **(Other Proponent, Consultant or Contractor):** Public Service and Procurement Canada (PSPC)	**4. Role:** OGD Consultant
5. Source of Project Information: Paul Curran, DFO-SCH	
6. Project Review Start Date: June 24th, 2018	
7. DFO File No.: 18-HNFL-00302	**8. PSPC File No:**
9. TC File No.: 8200-03-1681/NEATS#48481	

BACKGROUND

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

The scope of work for this project involves the removal of the existing timber crib wharf located in Trout River, NL, and replacing it with a new steel-sheet pile wharf. Part of this Project also includes dredging portions of the harbour to accommodate vessels that may use the harbour. The work includes the removal of an existing concrete deck and its components, existing rip rap around the cribs, and an existing asphalt area adjacent to the wharf.

Site drawings depicting the work to be done are provided in Appendix B. The scope of work includes the associated aspects of the removal of existing components, installation of new components, and dredging of portions of the harbour.

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	**14. Other Authorities rationale for involvement:**
Transport Canada – Navigation Protection Program and Environmental Affairs and Aboriginal Consultation Unit (TC NPP and TCEA)	*Navigation Protection Act*
15. Other Jurisdiction: Newfoundland and Labrador – Department of Municipal Affairs and Environment, Water Resources Division (NLDMAE-WR) Newfoundland and Labrador – Department of Municipal Affairs and Environment, Pollution Prevention Division (NLDMAE-PP) Newfoundland and Labrador – Service NL (SNL)	
16. Other Expert Departments Providing Advice:	**17. Areas of Interest of Expert Departments:**
Fisheries and Oceans Canada, Fisheries Protection Program (DFO FPP)	*Fisheries Act*
18. Other Contacts and Responses: N/A	

19. Scope of Project (details of the Project subject to review):

Construction/Installation:

The Project involves the removal of certain components of the existing wharf and structures in Trout River, NL. This is the first phase of the Project and includes:

- An existing asphalt area
- An existing concrete slab
- A portion of the existing concrete wharf deck, including a jib crane base, cleats, wheel guards, ladders, fenders, wharf timber cribs, and ballast
- Existing wooden timber cribs
- Portion of an existing water line

Once these components have been removed, the second phase of the Project involves reinstallation of the upland asphalt area with new asphalt, and the replacement of the concrete deck with a new, reinforced concrete deck in the existing footprint. The wooden timber cribs making up the marginal wharf will be replaced by installation of a new steel-sheet pile wharf in the existing footprint. The portion of water line that was removed will also be upgraded and replaced.

The third phase of the Project involves dredging sections of the harbour and bay, to provide adequate draft for vessels using the harbour. Approximately 5000 cubic metres of material will be dredged from a 6,795 m^2 area. Material will be transported to a local quarry for placement and disposal (Appendix A).

Further details are provided in the site drawings, provided in Appendix B. Standard construction methods will be used for the Project, and it will likely involve the use of heavy machinery, a barge, and divers to complete the required work. The wharf sections will be assembled on site using a combination of heavy equipment and manual labour and floated into position. Dredging will likely be completed using long-reach track excavators working from the existing structures and/or a floating barge.

The Project site is located entirely in Trout River, NL, There are no anticipated stream crossings on the Project site that will be altered or disturbed during Project activities.

Operation

The Environmental Management System with an integrated Environmental Management Plan for Harbour Authority of Trout River will cover operational aspects of environmental management at the site (fuel storage, waste disposal, and activities on the property). As such, environmental effects resulting from the DFO SCH operations are not considered further in this project effects determination.

Decommissioning

This facility is not presently planned to be decommissioned. At the time of decommissioning, DFO- SCH will develop a site-specific re-use or reclamation plan that is appropriate for the applicable environmental legislation and DFO-SCH policies.

Scheduling

Subject to regulatory approval and DFO SCH operational priorities and funding, this Project will likely commence during the 2018 – 2019 fiscal year.

20. Location of Project:

The community of Trout River is located on the west coast of the Island of Newfoundland. Approximate coordinates are 49.480550 N, -58.131380 W. An aerial photograph of the site is provided in Appendix A. The site is accessible by road via route 431.

21. Environment Description:

Physical Environment

Trout River is a community located on the west side of the Northern Peninsula approximately 60 km north of the city of Corner Brook. The Project site is comprised of a treated timber cribwork marginal wharf and canopy, and an unpaved upland parking and service area. A river, Trout River, flows through the community and feeds into the Gulf of St. Lawrence and serves as the access channel to the DFO-SCH facilities. The surrounding area includes roads and residential homes.

Trout River is located within the Coastal Plain Subregion of Northern Peninsula Ecoregion. This includes the western side of the Northern Peninsula to the lower slopes of the Long Range Mountains. Most of the coastal plain is dominated by bogs and scrub forest. This ecoregion differs from most other forested parts of the Island of Newfoundland by the shortness of the vegetation season, 110 to 150 days compared to 145 to 170 days for other areas. The frost-free period is comparable to most other areas and somewhat better than in central Newfoundland. Precipitation is lower due to low summer temperatures and shorter vegetation season; soil moisture supply is probably adequate at most times. The soils are comparable to those of western Newfoundland. Limestone underlies most of the region, with acidic rocks more common on the eastern side of the peninsula. Balsam fir is the dominant forest cover except at high elevations (300 to 400m) on the eastern side of the peninsula, where black spruce appears to be a natural component of the stands (NL Department of Fisheries and Land Resources 2017).

Biological Environment

Trout River flows from its headwaters, Upper Trout River Pond, into Lower Trout River Pond in an approximately northwest direction into Trout River Bay and ultimately into the Gulf of St. Lawrence. Trout River is a scheduled Atlantic salmon river, which also supports populations of resident and sea-run trout, American eel, and American smelt. According to DFO's Traditional Ecological Maps of the area, cod, halibut, lumpfish, turbot, seal, Irish moss, herring, mackerel, lobster, and snow crab may also be found within the vicinity of the Project site.

Special Areas

Trout River currently does not overlap with or fall under a protected area or Important Bird Area. However, the community and the harbour are located adjacent to Gros Morne National Park, which has been identified as an Important Bird Area. Species identified within this area include rock ptarmigan, red crossbill, harlequin duck, dovekie, and great black-backed gull.

Trout River is a sensitive area for the protection and conservation of Atlantic salmon and sea run eastern brook trout that migrate to and from the area.

Trout River has also been classified as a sanctuary for American lobster and has recently been designated as a Marine Refuge Are by DFO, due to productive habitat characteristics for American lobster. Lobster fishing activity is prohibited within this area, and DFO has stated that no other human activities that are incompatible with the conservation of lobster are permitted in this area.

Trout River also provides habitat for capelin spawning between June and July. To avoid potential impacts to migrating salmon (smolts and adults), lobster spawning and capelin spawning, in-water work should NOT be completed during the May 1st – September 15 time frame.

Species at Risk (Aquatic and Terrestrial)

A search of the Atlantic Canada Conservation Data Centre (ACCDC) database was conducted which produced a list of rare/unique species (i.e. plants and animals) within a 5 km buffer zone (standard ACCDC procedure) of the site of the proposed work. All species were crossed-referenced with Schedule 1 of the Species At Risk Act (SARA) and none were found to be listed as extirpated, endangered, threatened or of special concern.

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

Table 1: Potential Project / Environment Interactions Matrix

	As per Section 5(1)			*Section 5(1c)*				*Section 5(2)*			*Due Diligence*			
				Aboriginal Interest										
Project Phase / Physical Work/Activity	*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/Marine Sediment*	*Air Quality*
Construction / Installation														
Demolition of existing wharf sections	P	-	P	-	-	-	-	P	-	-	P	P	P	P
Construction of new wharf components	P	-	P	-	-	-	-	P	-	-	P	P	P	P
Dredging of harbor sediments	P	-	P	-	-	-	-	P	-	-	P	P	P	P
Operation / Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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:

Potential Project / Environmental Interactions and their effects are outlined below:

Fish:

- In the event of a hydrocarbon spill during construction activities or operations (including use of a boat or barge), hydrocarbons could enter the marine environment, potentially affecting the quality of marine fish and fish habitat.
- Sedimentation as a result of runoff from unearthed material, construction of dredge access road and/or dredging material during construction could affect quality of fish and fish habitat if it enters the marine environment.
- Accidental discharge of concrete mix, heavy machinery fuel / fluids, or hazardous substances could negatively affect marine fish and fish habitat.
- Trout River is a sensitive area for the protection and conservation of Atlantic salmon and sea run eastern brook trout that migrate to and from the area. Trout River has also been classified as a sanctuary for American lobster and has recently been designated as a Marine Refuge Area by DFO. Trout River also provides habitat for capelin spawning between June and July. In-water work completed during May 1 – September 15 may interfere with important life stages of these species.
- Pile driving could have negative impacts on fish and marine mammals within proximity to the wharf structure.

Birds / Bird Habitat

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

Health and Socio economic:

- Potential for safety hazards to workers and site users during construction activities.

Water

- Sedimentation as a result of construction activities has the potential to negatively affect marine water quality at the immediate Project site.
- Construction-related refuse may be accidentally deposited into the marine environment, decreasing marine water quality.
- Accidental discharge of heavy machinery fuel / fluids or hazardous substances (e.g., concrete wash water) has the potential to enter the marine environment and may result in a decrease of marine water quality.
- Construction activities taking place near the shoreline has the potential to result in runoff / erosion, especially during precipitation events, which could affect the marine water quality.
- Improper disposal of dredge spoils and treated timber may result in negative impacts to receiving waters.

Aquatic Species

- Sedimentation as a result of wharf construction and dredging may temporarily disrupt and/or negatively impact aquatic species at the immediate project site.
- Accidental discharge of heavy machinery fuel/fluids or hazardous substances could negatively impact aquatic species.
- Improperly disposed of dredge spoils may erode and result in sedimentation of surface water, negatively impacting aquatic species.

Soil / Marine Sediments

- Accidental discharge of heavy machinery fuel / fluids or other hazardous substances on land

adjacent to the marine environment has the potential to contaminate the surrounding soil.

- Excavation of metals-impacted sediment has the potential to release contaminants, especially during precipitation events, into the environment.
- Improper disposal of dredge spoils and treated timber may result in negative impacts to receiving soils.

Air quality

- Improper storage/disposal of dredge spoils may result in unpleasant odours and provide annoyance to facility users and nearby residents.
- Construction activities may result in nuisance impacts due to an increase in noise and dust and the use of heavy equipment.

Navigation:

- Environmental effects of the project on navigation are taken into consideration as part of the Project Effects Determination (PED) 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 PED, but any measures necessary to mitigate direct effects will be included as terms and conditions associated with the work approved or permitted pursuant to the *Navigation Protection Act*.

24. Mitigation Measures for Project (including Habitat Compensation):

- Reduce duration of in-water work wherever possible.
- 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.
- To avoid potential impacts to migrating salmon (smolts and adults), lobster spawning and capelin spawning, in-water work should NOT be completed during the May 1st – September 15 time frame.
- Weather conditions should be assessed daily to determine the potential risk on Project activities.
- Migratory birds, their eggs, nests, and young are protected under the *Migratory Birds Convention Act*. Under the Act and associated regulations, it is forbidden to disturb, destroy, or take a nest or egg of a migratory bird, or be in possession of a live migratory bird or its carcass, skin, nest, or egg, except under authority. Furthermore, Subsection 5.1 of the Act outlines prohibitions related to the deposit of substances that could be harmful to migratory birds:

  5.1 (2) No person or vessel shall deposit a substance or permit a substance to be deposited in any place if the substance, in combination with one or more substances, results in a substance – in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area – that is harmful to migratory birds.
- Construction activities that involve in-water work will be conducted during periods of low flow, or at low tide, to further reduce the potential for effects on fish / fish habitat and water quality.
- Schedule work to avoid wet, windy, and rainy periods that may increase erosion and sedimentation into the marine environment. Weather conditions should be checked daily to manage / prepare the site for these events.
- Project activities involving in-water work will be suspended, and/or additional mitigation measures will be implemented if ocean conditions cause sediment or turbidity within the marine environment, outside the immediate vicinity of the Project.
- Develop and implement an Erosion and Sediment Control Plan for the site that reduces risk of sedimentation of the marine environment during the Project. Erosion and sediment control measures should be maintained until disturbed ground has been permanently stabilized, suspended sediment has resettled, or settling basin and runoff water is clear.

- Develop a response plan that is to be implemented immediately in the event of an accidental sediment release or spill of a deleterious substance, and keep an emergency spill kit on site with staff trained in its use. This oil spill response plan must be reviewed and approved by the proponent (DFO-SCH) prior to commencing Project-related activities.
- Oil spill response equipment, such as adsorbents and open-ended barrels, should be available on-site in case of a spill or leak. Spills or leaks must be promptly contained, cleaned up and reported to the 24-hour environmental emergencies report system (1-800-563-2444).
- If encountered, Project staff should not approach concentrations of seabirds, sea ducks, or shorebirds. Interacting with wildlife, including feeding, is prohibited.
- Immediately before, and during pile driving activities, a bubble curtain (air compressor discharge lines or similar equipment) should be used to scare mobile fin fish from the area immediately adjacent to the pile driving activity and disrupt shock waves generated during pile driving.
- Even small spills of oil can have effects on migratory birds and fish and fish habitat. Therefore, a reasonable effort should be taken to reduce the chances of an oil spill occurring in the area. Refuelling and maintenance activities of Project equipment should be undertaken on level terrain, at least 30 m from surface water (including shorelines), on a prepared impermeable surface with a collection system to reduce the possibility of oil, gasoline, and hydraulic fluids from entering surface waters. Waste oil should be disposed of in an approved manner that complies with federal and provincial legislation.
- Where possible, Project activities should follow Environment and Climate Change Canada's *Guidelines to Avoid Disturbance to Seabird and Waterbird Colonies in Canada* (http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=E3167D46-1). These guidelines establish appropriate buffers to be maintained between human activities and seabird colonies.
- Materials and equipment used for the purpose of site preparation and Project construction are operated and stored in a manner that prevents a deleterious substance (e.g., petroleum products, silt) from entering a body of water.
- Appropriate sedimentation control measures (e.g., silt curtains, booms) should be deployed where required.
- Machinery will be checked for leakage of lubricants or fuel and will be in good working order. Refueling will be done at least 30m from a water body. Basic petroleum spill clean-up equipment will be on-site. Spills or leaks will be promptly contained, cleaned up, and reported to the 24-hour environmental emergencies report system (1-800-563-9089). DFO-SCH will develop a contingency plan specific to the proposed undertaking to enable a quick and effective response to a spill event.
- Pre-treated wood for the crib blocks should be thoroughly dried before used in construction and placed in the marine environment. Additional application of preservatives should be take place at a reasonable distance away from a waterbody, to reduce the potential of leaching deleterious substances into the marine environment.
- Treated timber wastes from the removal of the existing wharf are to be transported to the Norris Arm Regional Waste Disposal site in Norris Arm for disposal. Disposal documents confirming waste received at the landfill are to be forwarded to Joan Hann (joanhann@gov.nl.ca or 709-729-1771).
- Dredged material is to be disposed of at a gravel pit (see Appendix A) pursuant to applicable guidelines, regulations / legislation. Dredge materials are to be stockpiled on-site for a minimum of 24 hours before being transported in water-tight trucks or containers to the disposal location. Dredge materials placed in the pit are to be levelled, sloped and protected with armourstone to prevent unauthorized use of the material, in consultation with the departmental representative and Town of Trout River and in accordance with an approval letter issued by Service NL (see Appendix C). Re-use, placement or disposal of dredge spoils in any other location is NOT permitted.
- The contractor is responsible for having an established oil spill response plan in place prior to commencing Project activities, which is compliant with applicable federal and provincial legislation. This oil spill response plan will be reviewed and approved by the DFO-SCH prior to commencing Project-related activities.
- Work will be properly timed to reduce potential interference with commercial, recreational, and indigenous fisheries that may be taking place in the area.

- Trucks transporting dredge spoils must be secured against spillage. Any potential release of dredge spoils must be immediately cleaned.
- Construction materials used in a watercourse will be handled and treated in a manner to prevent the release or leaching of substances into the water that may be harmful to fish.
- Construction materials associated with the Project will be removed from site upon Project completion.
- Make a reasonable effort to confirm that machinery arriving on site is inspected and in clean condition, and is maintained free of fluid leaks.
- Whenever possible, operate machinery on land above the high-water mark in a manner that reduces disturbance to the banks and bed of the waterbody.
- Machinery will be checked for leakage of lubricants or fuel and must be in good working order. Refuelling will be done at least 100 m from a water body and on a level surface to reduce the potential for spills or leaks into the marine environment.
- Cribbing ballast material should be, to the greatest extent possible, free of fine-grained materials to help reduce sedimentation of the waterbody and must not be obtained from below the highwater mark.
- Pre-treated wood for the crib blocks should be thoroughly dried before used in construction and placed in the marine environment. Additional application of preservatives should be take place at a reasonable distance away from a waterbody, to reduce the potential of leaching deleterious substances into the marine environment.
- Rock material will be moved and installed into the marine environment in a manner that reduces the potential for sedimentation or turbidity to occur. This includes using an excavator to place rocks in their locations instead of end dumping from a truck.
- Food waste from Project staff can increase the potential for human-wildlife encounters, and increases the chance for effects to wildlife and worker safety. As a result, food scraps and litter should be properly contained in approved storage containers and not left on site by staff. Food and other non-hazardous wastes will be disposed of at an approved facility.
- If encountered, Project staff should not approach concentrations of seabirds, sea ducks, or shorebirds. Interacting with wildlife, including feeding, is prohibited.
- Machinery used for the Project will be well muffled to reduce noise for local residents, and local municipality construction by-laws will be adhered to.
- Where feasible, mitigation measures such as dust suppressors will be implemented to reduce the potential for increased dust during Project activities.
- Project employees will be equipped with the proper Personal Protective Equipment for Project tasks, and work will comply with provincial occupational health and safety regulations.
- Fuel storage tanks located on federal property must be installed/maintained in accordance with the requirements and recommendations outlined in the federal Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations and the Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products.
- If using a floating barge, vessels should be compliant with all *Canada Shipping Act, 2001*, requirements for inspection, which includes certification of the vessel and adequate training and appropriate certificate of competency for the operators.
- Ensure that all vessels will have procedures in place to ensure safeguards against marine pollution: awareness training of all employees, means of retention of waste oil on board and discharge to shore based reception facilities, capacity of responding to and clean-up of accidental spill caused by vessels involved in any particular project.
- Food waste from Project staff can increase the potential for human-wildlife encounters and increases the chance for effects to wildlife and worker safety. As a result, food scraps and litter will be properly

contained in approved storage containers and not left on site by staff. Food and other non-hazardous wastes will be removed from the site to be disposed of at an approved facility.

- Machinery used for the Project should be well muffled to reduce noise for local residents, and local municipality construction by-laws will be adhered to.
- Project employees will be equipped with the proper Personal Protective Equipment for Project tasks, and work will comply with provincial Occupational Health and Safety Regulations.
- DFO-SCH, and the successful contractor, will keep copies of regulatory approvals available on-site during Project activities.

25. Significance of Adverse Environmental Effects of Project:

Taking into account the proposed mitigation measures for the Project, significant adverse environmental effects from Project activities are not anticipated.

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

Public Consultation

The proposed Project will provide safer conditions and extra protection for the facility users. Negative public concern is not expected as a result of this Project. Public consultation was not deemed necessary as part of this determination.

Indigenous Engagement

Indigenous fishers do not utilize this facility. As such, Indigenous engagement 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 Services and Procurement 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 (DFO FPP)
- Transport Canada – Navigation Protection Program (TC NPP)
- Transport Canada - Environmental Affairs and Aboriginal Consultation Unit (TCEA)
- NL Department of Environment and Municipal Affairs, Water Resources (NLDEMA WR)
- NL Department of Environment and Municipal Affairs, Pollution Prevention (NLDEMA PPD)
- Service NL

DFO FPP determined that 'Serious Harm' to fish could be avoided by following mitigations as described within Appendix C.

TC NPP determined that an approval would be required under the *Navigation Protection Act*.

NLDEMA WR has issue an approval (ALT9715-2018) under the provincial *Water Resources Act* (Appendix C).

NLDEMA PP has issued an email approval for the disposal of treated timber (Appendix C).

Service NL has issued an approval for the disposal of dredge spoils at a nearby gravel pit (Appendix C).

All expert advice/specialist information provided by the above noted departments has been incorporated into this document.

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 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 Authorities have evaluated the Project in accordance with Section 67 of *Canadian Environmental Assessment Act (CEAA), 2012*. On the basis of this evaluation, the departments have 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: _____ **32. Date:** October 25, 2018

33. Name: Mark McNeil

34. Title: Senior Environmental Specialist, PSPC-ES

35. 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

36. Approved by: _____ **37. Date:** Oct 25/18

38. Name: Paul Curran

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

40. TRANSPORT CANADA RECOMMENDATION		
Project Title:	Trout River, NL – Wharf reconstruction and dredging	
TC File No.:	NEATS: 48481	
NPP File No.:	NPP # 8200-03-1681	
Environmental Review Decision:	Taking into account the implementation of any mitigation measures that Transport Canada considers appropriate, the project **is not likely** to cause significant adverse environmental effects and, as such, Transport Canada may exercise any power or perform any duty or function that would permit the project to be carried out in whole or in part.	
Prepared by:	**Melissa Ginn** Environmental Officer Environmental Affairs and Aboriginal Consultation Unit	
Signature:		**Date:** Oct. 30, 2018
Mailing Address:	10 Barter's Hill, St. John', NL	
Tel:	709-772-3088	
Fax:	709-772-3072	
Email:	melissa.ginn@tc.gc.ca	
Recommended by:	**J. Jason Flanagan** Senior Environmental Assessment Officer Environmental Affairs and Aboriginal Consultation Unit	
Signature:		**Date:** October 31, 2018
Approved by:	**Kevin LeBlanc** Regional Manager Environmental Affairs and Aboriginal Consultation Unit	
Signature:	Kevin LeBlanc	**Date:** November 2, 2018

List of Appendices:

APPENDIX A

Topographic map and photos of project site

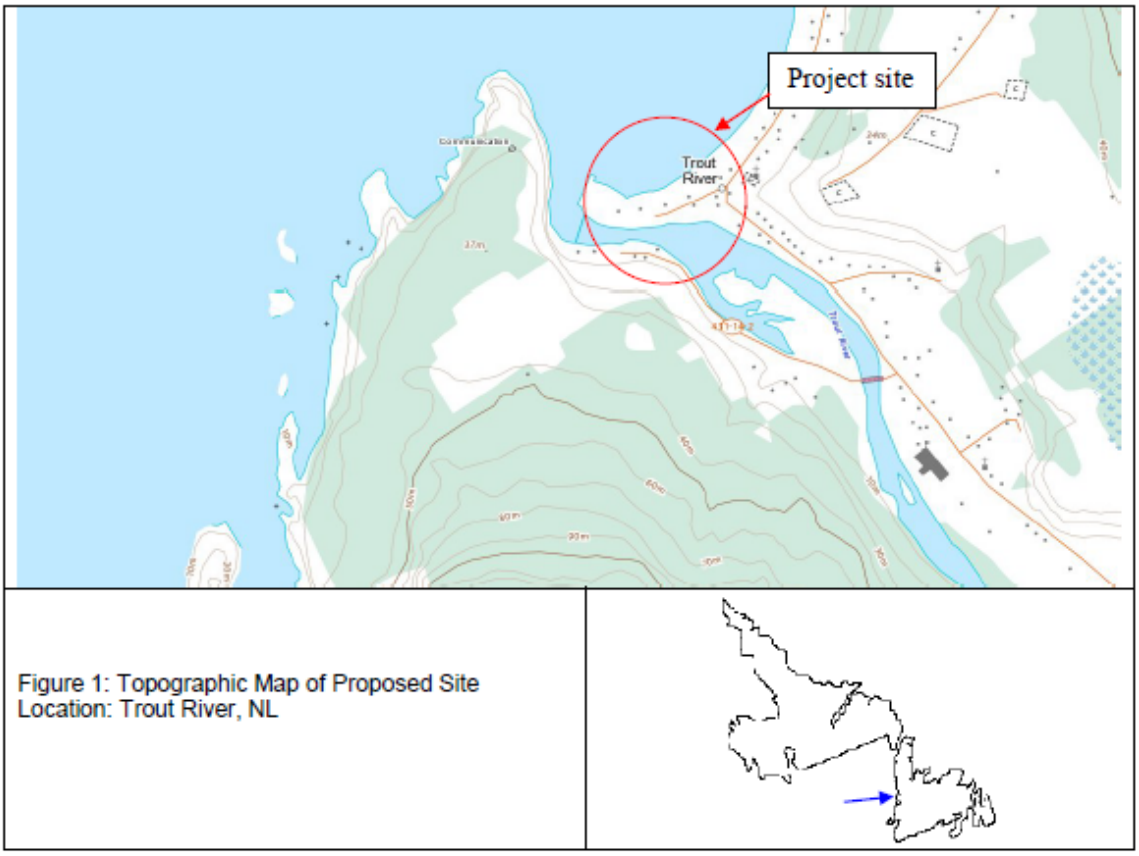


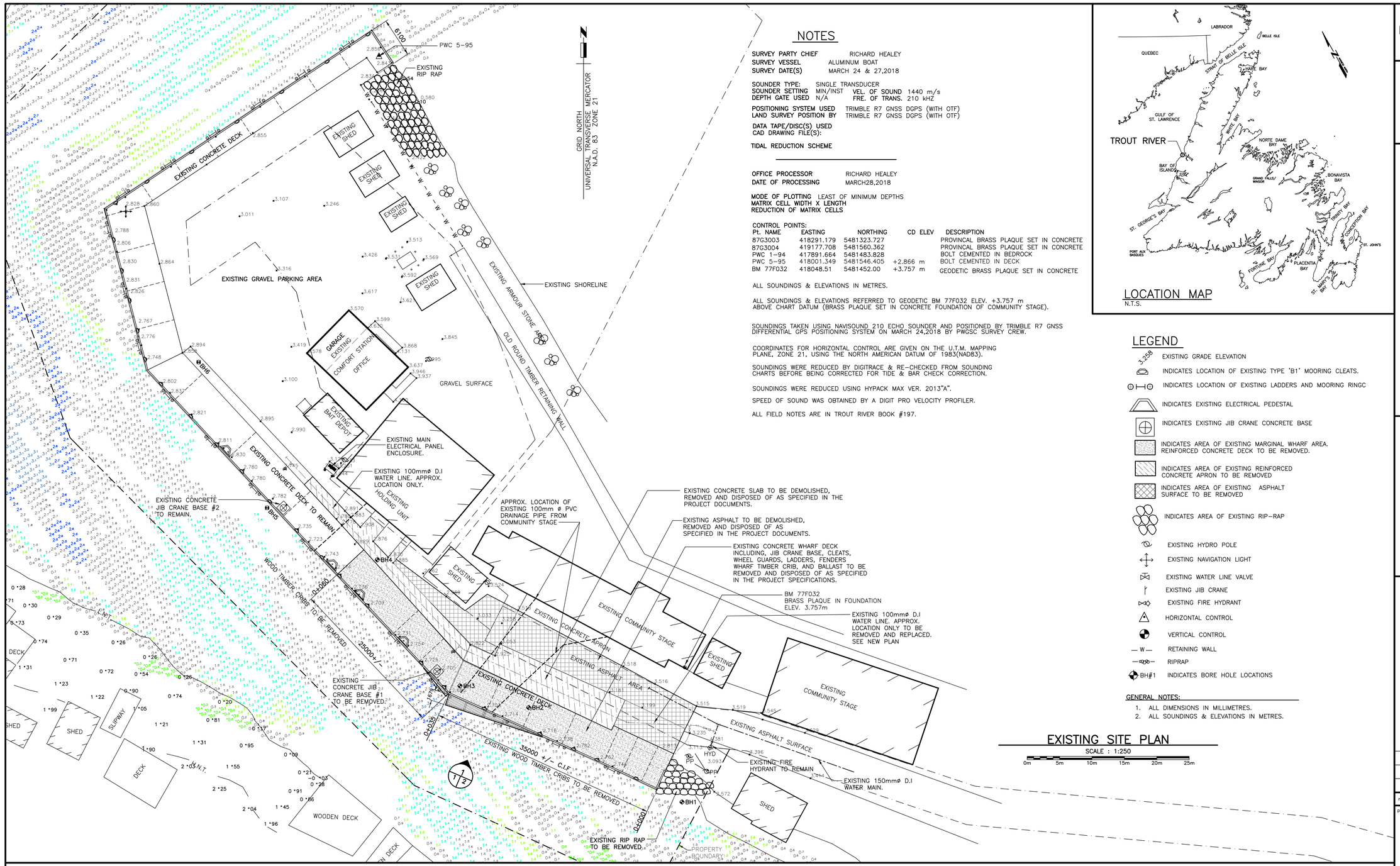
Figure 1: Topographic Map of Proposed Site
Location: Trout River, NL

Figure 2. Google Earth imagery of approximate footprint of project. Wharf reconstruction (yellow). Target dredge area (red). Google Earth.

Figure 3. Dredge spoil placement site (red) relative to project site.

APPENDIX B

Site Plans



NOTES

SURVEY PARTY CHIEF RICHARD HEALEY
SURVEY VESSEL ALUMINUM BOAT
SURVEY DATE(S) MARCH 24 & 27,2018

SOUNDER TYPE: SINGLE TRANSDUCER
SOUNDER SETTING MIN/INST VEL. OF SOUND 1440 m/s
DEPTH GATE USED N/A FRE. OF TRANS. 210 kHZ

POSITIONING SYSTEM USED TRIMBLE R7 GNSS DGPS (WITH OTF)
LAND SURVEY POSITION BY TRIMBLE R7 GNSS DGPS (WITH OTF)

DATA TAPE/DISC(S) USED
CAD DRAWING FILE(S):

TIDAL REDUCTION SCHEME

OFFICE PROCESSOR RICHARD HEALEY
DATE OF PROCESSING MARCH28,2018

MODE OF PLOTTING LEAST OF MINIMUM DEPTHS
MATRIX CELL WIDTH X LENGTH
REDUCTION OF MATRIX CELLS

CONTROL POINTS:

PL NAME	EASTING	NORTHING	CD ELEV	DESCRIPTION
87G3003	418291.179	5481323.727		PROVINCAL BRASS PLAQUE SET IN CONCRETE
87G3004	419177.708	5481560.362		PROVINCAL BRASS PLAQUE SET IN CONCRETE
PWC 1-94	417891.664	5481483.828		BOLT CEMENTED IN BEDROCK
PWC 5-95	418001.349	5481546.405	+2.866 m	BOLT CEMENTED IN DECK
BM 77F032	418048.51	5481452.00	+3.757 m	GEODETIC BRASS PLAQUE SET IN CONCRETE

ALL SOUNDINGS & ELEVATIONS IN METRES.

ALL SOUNDINGS & ELEVATIONS REFERRED TO GEODETIC BM 77F032 ELEV. +3.757 m ABOVE CHART DATUM (BRASS PLAQUE SET IN CONCRETE FOUNDATION OF COMMUNITY STAGE).

SOUNDINGS TAKEN USING NAVISOUND 210 ECHO SOUNDER AND POSITIONED BY TRIMBLE R7 GNSS DIFFERENTIAL GPS POSITIONING SYSTEM ON MARCH 24,2018 BY PWGSC SURVEY CREW.

COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE U.T.M. MAPPING PLANE, ZONE 21, USING THE NORTH AMERICAN DATUM OF 1983(NAD83).

SOUNDINGS WERE REDUCED BY DIGITRACE & RE-CHECKED FROM SOUNDING CHARTS BEFORE BEING CORRECTED FOR TIDE & BAR CHECK CORRECTION.

SOUNDINGS WERE REDUCED USING HYPACK MAX VER. 2013"A".

SPEED OF SOUND WAS OBTAINED BY A DIGIT PRO VELOCITY PROFILER.

ALL FIELD NOTES ARE IN TROUT RIVER BOOK #197.

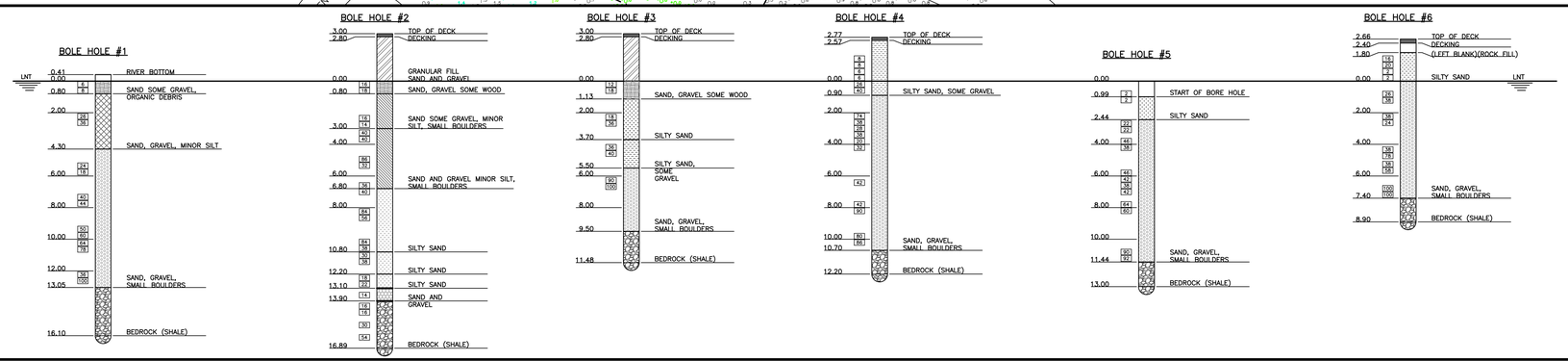
LOCATION MAP
N.T.S.

LEGEND

- 3.258 EXISTING GRADE ELEVATION
- INDICATES LOCATION OF EXISTING TYPE 'B1' MOORING CLEATS.
- INDICATES LOCATION OF EXISTING LADDERS AND MOORING RINGC
- INDICATES EXISTING ELECTRICAL PEDESTAL
- INDICATES EXISTING JIB CRANE CONCRETE BASE
- INDICATES AREA OF EXISTING MARGINAL WHARF AREA. REINFORCED CONCRETE DECK TO BE REMOVED.
- INDICATES AREA OF EXISTING REINFORCED CONCRETE APRON TO BE REMOVED
- INDICATES AREA OF EXISTING ASPHALT SURFACE TO BE REMOVED
- INDICATES AREA OF EXISTING RIP-RAP
- EXISTING HYDRO POLE
- EXISTING NAVIGATION LIGHT
- EXISTING WATER LINE VALVE
- EXISTING JIB CRANE
- EXISTING FIRE HYDRANT
- HORIZONTAL CONTROL
- VERTICAL CONTROL
- — W — RETAINING WALL
- RIPRAP
- BH#1 INDICATES BORE HOLE LOCATIONS

GENERAL NOTES:
1. ALL DIMENSIONS IN MILLIMETRES.
2. ALL SOUNDINGS & ELEVATIONS IN METRES.

EXISTING SITE PLAN
SCALE : 1:250
0m 5m 10m 15m 20m 25m



Plot Scale: 1:1

PWGSC B1

Fisheries and Oceans Canada / Pêches et Océans Canada

SMALL CRAFT HARBOURS

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER
This Permit Allows
ANDERSON ENGINEERING CONSULTANTS LTD.
To practice Professional Engineering in Newfoundland and Labrador.
Permit No. as issued by APEGN R0092
which is valid for the year 2018

REGISTERED PROFESSIONAL ENGINEER
W. J. ANDERSON
SIGNATURE
DATE
PROVINCE OF NEWFOUNDLAND

revisions		date
B	ISSUED FOR 66% REVIEW	03/05/18
A	ISSUED FOR 33% REVIEW	12/04/18

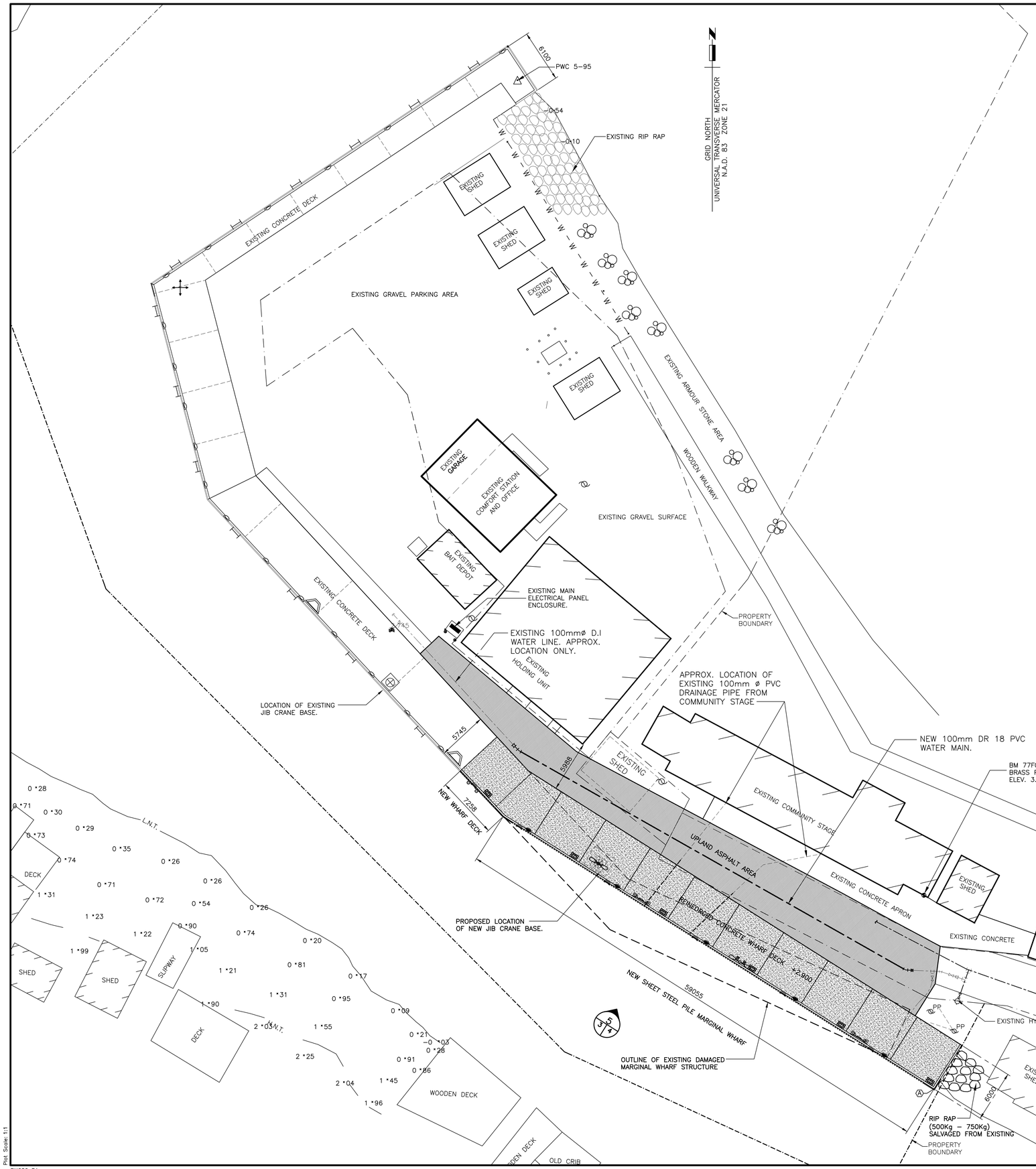
project / projet
WHARF RECONSTRUCTION TROUT RIVER, NL.

drawing / dessin
LOCATION MAP, EXISTING SITE PLAN, SOUNDINGS AND BORE HOLE DATA

designed W.J.ANDERSON / concu
date MAY 2018
drawn R.S.H / dessine
date MAY 2018
approved / approuve
date
Tender / Soumission
DFO Project Manager
project number / no. du projet
drawing no. / no. du dessin

1 of 9

EDRM Document No. Not in System



LEGEND

- INDICATES LOCATION OF EXISTING TYPE 'B1' MOORING CLEATS.
- INDICATES LOCATION OF EXISTING LADDERS.
- 3.258 EXISTING GRADE ELEVATION
- INDICATES LOCATION OF EXISTING WHARF ELECTRICAL PEDESTAL
- INDICATES LOCATION OF NEW TYPE 'B1' MOORING CLEATS.
- INDICATES LOCATION OF NEW LADDER AND MOORING RINGS.
- NEW JIB CRANE BASE LOCATION C/W 2 LIGHT FIXTURES
- NEW LIGHT POLE C/W BOLLARDS
- NEW ELECTRICAL PEDESTAL (TYP.)
- INDICATES AREA OF NEW ASPHALT SURFACE
- INDICATES AREA PROPOSED NEW SSP MARGINAL WHARF REINFORCED CONCRETE DECK (EL. +2.90)
- INDICATES CONTROL POINT LOCATIONS
- CONTROL JOINT
- INDICATES AREA OF NEW RIP RAP
- EXISTING HYDRO POLE
- NAVIGATION LIGHT
- WATER VALVE
- JIB CRANE
- FIRE HYDRANT
- HORIZONTAL CONTROL
- VERTICAL CONTROL
- — W — RETAINING WALL
- RIPRAP

NOTE:
CONTRACTOR TO VERIFY THE LOCATION OF UNDERGROUND ELECTRICAL CONDUIT LOCATION FOR THE EXISTING ELECTRICAL SERVICE PANEL. CONTRACTOR TO KEEP THE ELECTRICAL PANELS IN FULL OPERATION DURING CONSTRUCTION.

HORIZONTAL CONTROL POINTS

MARK	EASTING	NORTHING
A	418049.597	5481429.469
B		
C		
D		
E		
F		

GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETERS.
2. MINIMUM CONCRETE STRENGTH 35 MPa @28 DAYS
3. REINFORCING STEEL YIELD STRENGTH 400 MPa
4. REINFORCING STEEL SPLICES SHALL CONFORM TO A23.3, LATEST EDITION.
   REINFORCING STEEL TO BE LAPPED 900mm FOR LONGITUDINAL BARS
   REINFORCING STEEL TO BE LAPPED 600mm FOR TRANSVERSE BARS
5. ALL REBAR TO HAVE MIN. COVER OF 75mm.
6. ALL LAG SCREWS TO BE GALVANIZED AND SIZED AS PER FOLLOWING:
   LADDER UPRIGHTS – 19mmø
   FENDERING – 16mmø
7. CONTRACTOR TO VERIFY ALL FIELD MEASUREMENTS FOR REQUIRED TIMBER PRIOR TO ORDERING.
8. DECK DESIGN LOAD:
   – CL-625 FOR NEW WHARF DECK.

NEW SITE PLAN

SCALE: 1:200

0m 5m 10m 15m 20m 25m

Plot Scale: 1:1

PWGSC B1

Fisheries and Oceans Canada / Pêches et Océans Canada

SMALL CRAFT HARBOURS

PROVINCE OF NEWFOUNDLAND
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This Permit Allows
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REGISTERED PROFESSIONAL ENGINEER
W. J. ANDERSON
SIGNATURE
DATE
PROVINCE OF NEWFOUNDLAND

B	ISSUED FOR 66% REVIEW	03/05/18
A	ISSUED FOR 33% REVIEW	12/04/18
revisions		date

project / projet

WHARF RECONSTRUCTION TROUT RIVER, NL.

drawing / dessin

NEW SITE PLAN

designed W.J.ANDERSON / concu
date MAY 2018
drawn R.S.H / dessine
date MAY 2018
approved / approuve
date
Tender / Soumission
DFO Project Manager
project number / no. du projet
drawing no. / no. du dessin

3 of 9

EDRM Document No. Not in System


GREEN BUOY XT3
BEDROCK
BEDROCK
L.N.T.
TOE OF STEEP CLIFF
BEDROCK
EDGE OF BEDROCK
L.N.T.
BEDROCK
TOE OF STEEP CLIFF
L.N.T.
PWC 1-94
BOLT CEMENTED IN BEDROCK
ELEV.+5.170 m
SLIPWAY
PWC 5-95
CONCRETE DECK
SHED
SHED
SHED
SHED
ARMOUR STONE
GRAVEL SURFACE
BUILDING
GRAVEL SURFACE
BAIT DEPOT
HOLDING UNIT
CONCRETE DECK
BOAT TIED UP
DECK
DECK
SLIPWAY
DECK
SHED
SHED
SHED
SHED
SHED
SLIPWAY
DECK
H.N.T.
L.N.T.
BOAT TIED UP
WOODEN DECK
WOODEN DECK
OLD CRIB
OLD CRIB
SHED
WOODEN DECK
HOUSE
COMMUNITY STAGE
GEODETIC BM 77F032
BRASS PLAQUE IN CONCRETE
ELEV.+3.757 m
CONC. SLAB
B.M.
SHED
DAMAGED AREA
CRIBBING FELL OUT
CONCRETE DECK
COMMUNITY STAGE
TOP OF ARMOURSTONE
CONCRETE DECK
DAMAGED AREA
GRAVEL SURFACE
SHED
TOP OF BANK
TOP OF ARMOURSTONE
L.N.T.
CRIB
WHARF
DECK
SLIPWAY
WHARF
GRAVEL PILE
APPROX +0.8m ELEV
RIVER

APPENDIX C

Regulatory Approvals and Responses

Fisheries and Oceans Canada | Pêches et Océans Canada

P.O. Box 5667
St. John's, NL A1C 5X1

Your file *Votre référence*

JUL 27 2018

Our file *Notre référence*
18-HNFL-00302

Paul Curran
DFO – Small Craft Harbours Branch
John Cabot Building
10 Barters Hill
St. John's, NL
A1C 5X1

Subject: SCH Wharf Replacement and Dredging in Trout River, NL – Implementation of Measures to Avoid and Mitigate Serious Harm to Fish and Prohibited Effects on Listed Aquatic Species at Risk

Dear Mr. Curran:

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on May 15, 2018. We understand that you propose to:

- Remove an existing timber crib marginal wharf (60 m x 5.3 m) and adjacent rock fill with concrete and asphalt cover;
- Construct a new marginal sheet pile wharf (66.3 m x 6.0 m) within the same approximate footprint as the existing marginal wharf;
- Relocate existing rip rap (~ 6 m x 6 m) to the eastern end of the new marginal wharf for erosion protection; and
- Dredge adjacent to the new marginal wharf and along the existing SCH property, the access channel at the mouth of the river, and into Trout River Cove (~6,722 m^2).

Our review considered the following information:

- Request for Review received on May 15th, 2018;
- Email correspondence and supporting information received from Mark McNeil on May 16th, June 13th and June 14th, 2018;
- Full-scale engineering drawings received on June 6th, 2018;
- Information received from local fishery officer on June 21st, 2018;
- Email correspondence with Mark McNeil on request for benthic survey on June 25th, 2018; and
- Benthic survey report and videos received July 19&20th, 2018.

Your proposal has been reviewed to determine whether it is likely to result in serious harm to fish which is prohibited under subsection 35(1) of the *Fisheries Act* unless

authorized. Your proposal has also been reviewed to determine whether it is likely to affect listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act,* unless authorized.

To avoid and mitigate the potential for serious harm to fish, we recommend implementing the measures listed below:

- To avoid conflict with salmon migration (smolts and adults) and lobster spawning it is recommended that the proposed project (i.e. wharf demolition, reconstruction and dredging) not be carried out between May 1st and September 15th. This timing window will also avoid conflict with capelin spawning between June and July;

- The project should be carried out in a manner that minimizes the release of sediment and/or other project related material into the waters of Trout River and any other adjacent waterbody (e.g. use of a floating sediment curtain or similar device to control and limit sedimentation to the immediate project footprint);

- Project related activity should be suspended, and/or additional mitigation measures taken if flow, wind/wave or tide conditions cause sediment/turbid water to be visible outside the immediate project area;

- Duration of in-water works should be minimized;

- Machinery should be operated from dry stable locations – e.g., existing wharf decks, shorelines, and/or floating barge;

- To the extent possible, project related activity – e.g. wharf demolition, wharf construction, dredging and temporary road construction – should be carried out during periods of low flow, low tide, low wind/wave conditions and avoid heavy precipitation;

- Shoreline disturbance should be restricted to the immediate work area. Any shoreline areas disturbed by project activities should be stabilized as soon as possible to prevent erosion;

- Rock material for wharf infill and temporary road construction should be clean quarry material free of fine erodible material. Rock material should not be obtained below the high water mark of any water body;

- Rock material should not be end dumped; rather it should be placed on station using an excavator or similar equipment;

- Immediately before, and during, pile driving, a bubble curtain (air compressor discharge lines or similar equipment) should be used to scare mobile fin fish from the area immediately adjacent to the pile driving activity and disrupt shock waves generated during pile driving.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal will not result in serious harm to fish or prohibited effects on listed aquatic species at risk. As such, an authorization under the *Fisheries Act* or a permit under the *Species at Risk Act* is not required.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to avoid causing serious harm to fish and avoid prohibited effects on listed aquatic species at risk, any part of their critical habitat or the residences of their individuals.

It is also your *Duty to Notify* DFO if you have caused, or are about to cause, serious harm to fish that are part of or support a commercial, recreational or Aboriginal fishery. Such notifications should be directed to http://www.dfo-mpo.gc.ca/pnw-ppe/violation-infraction/index-eng.html.

Please notify this office at least 10 days before starting your project. A copy of this letter should be kept on site while the work is in progress. It remains your responsibility to meet all other federal, territorial, provincial and municipal requirements that apply to your proposal.

If you have any questions with respect to this letter please contact me by phone (709.772.2583), fax (709.772.5562), or email (Kimberley.Keats@dfo-mpo.gc.ca). Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

Kimberley Keats

Kimberley Keats
A/Senior Biologist, Coastal, Marine, Oil & Gas Development
Fisheries Protection Program – Regulatory Reviews
Ecosystems Management Branch, NL Region

Cc. Mark McNeil – Public Works and Government Services Canada, Corner Brook

Newfoundland Labrador

Government of Newfoundland and Labrador
Department of Municipal Affairs and Environment
Water Resources Management Division

PERMIT TO ALTER A BODY OF WATER

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 48

Date: **JUNE 08, 2018**

File No: **526**
Permit No: **ALT9715-2018**

Permit Holder: **Fisheries and Oceans Canada - Small Craft Harbours**
P.O. Box 5667
10 Barters Hill - John Gabot Building
St. John's, NL, A1C 5X1

Attention: **Mr. Paul Curran**

Re: **Town of Trout River (Trout River) - Dredging to Remove Accumulated Sediment**

Permission is hereby given for : **the dredging of the mouth of Trout River and the adjacent shoreline of ocean to remove approximately 5000 cubic metres of accumulated sediment to provide safe access of vessels to the DFO Small Craft Harbours Facility in the Town of Trout River, with reference to the application dated June 6, 2018.**

- This Permit does not release the Permit Holder from the obligation to obtain appropriate approvals from other concerned municipal, provincial and federal agencies.
- The Permit Holder must obtain the approval of the Crown Lands Administration Division if the project is being carried out on Crown Land.
- This Permit is subject to the terms and conditions indicated in Appendices A and B (attached).
- It should be noted that prior to any significant changes in the design or installation of the proposed works, or in event of changes in ownership or management of the project, an amendment to this Permit must be obtained from the Department of Municipal Affairs and Environment under Section 49 of the *Water Resources Act*.
- Failure to comply with the terms and conditions will render this Permit null and void, place the Permit Holder and their agent(s) in violation of the *Water Resources Act* and make the Permit Holder responsible for taking any remedial measures as may be prescribed by this Department.

MINISTER

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Municipal Affairs and Environment

File No: 526
Permit No: ALT9715-2018

APPENDIX A

Terms and Conditions for Permit

Dredging

1. Alteration of the natural minimum streamflow is not permitted in order to preserve aquatic life.

2. The natural course of any stream must not be altered.

3. Dredging activity must only be carried out during periods when wind, wave and tide conditions minimize the dispersion of silt and sediment from the work site.

4. A water quality monitoring program is not required at this time. However, the Department reserves the right to require that the Permit Holder sample, analyse, and submit results of water quality tests, for the purpose of ensuring that the water quality is maintained within acceptable guidelines. All analyses must be undertaken by a CALA accredited laboratory.

5. The area to be dredged must be enclosed and isolated from the rest of the body of water through the use of a filter fabric curtain or similar method.

6. This Permit is valid for two (2) years from the date of issue. If required, an application for Permit renewal must be submitted prior to the expiry date.

7. Dredged material must be disposed of in accordance with the regional Service NL Centre of the Department of Service NL. The Department of Service NL may require samples to be submitted for testing and analysis.

8. Dredged material must be disposed of in accordance with the regional Service NL Centre of the Department of Service NL. The Department of Service NL may require samples to be submitted for testing and analysis. Only suitable, rocky material dredged may be used for breakwater construction as it will not be susceptible to erosion.

General Alterations

9. Any work that must be performed below the high water mark must be carried out during a period of low water levels.

10. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.

11. Water pumped from excavations or work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations, 2003*.

12. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.

13. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment must be confined to dry stable areas.

14. All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.

15. During the construction of concrete components, formwork must be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.

16. Wood preservatives such as penta, CCA or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed.

17. Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of this Department.

18. The bed, banks and floodplains of watercourses, or other vulnerable areas affected by this project, must be adequately protected from erosion by seeding, sodding or placing of rip-rap.

19. All waste materials resulting from this project must be disposed of at a site approved by the Department of Service NL.

20. Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.

21. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.

22. Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.

23. Fill material must be of good quality, free of fines or other substances including metals, organics, or chemicals that may be harmful to the receiving waters.

24. The attached Completion Report (Appendix C) for Permit No. 9715 must be completed and returned to this Department upon completion of the approved works. Pictures must be submitted along with the completion report, showing the project site prior to and after development.

25. This Permit is valid for two years from the date of issue. Work must be completed by that date or the application and approval procedure must be repeated.

26. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.

27. All work must be carried out within the Permit Holder's legal property boundaries.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Municipal Affairs and Environment

File No: **526**
Permit No: **ALT9715-2018**

APPENDIX B

Special Terms and Conditions for Permit

1. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall keep all systems and works in good condition and repair and in accordance with all laws, by-laws, directions, rules and regulations of any governmental authority. The Permit Holder or its agent(s), subcontractor(s), or consultant(s) shall immediately notify the Minister if any problem arises which may threaten the structural stability of the systems and works, endanger public safety and/or the environment or adversely affect others and/or any body of water either in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for all damages suffered by the Minister and Government resulting from any defect in the systems and works, operational deficiencies/inadequacies, or structural failure.

2. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall operate the said Project and its systems and works in a manner which does not cause any water related and/or environmental problems, including but not limited to problems of erosion, deposition, flooding, and deterioration of water quality and groundwater depletion, in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for any and all damages associated with these problems caused as a result of changes, deficiencies, and inadequacies in the operational procedures by the Permit Holder or its agent (s), subcontractor(s), or consultant(s).

3. If the Permit Holder or its agent(s), subcontractor(s), or consultant(s) fails to perform, fulfil, or observe any of the terms and conditions, or provisions of this Permit and/or Ministerial orders and guidelines, as determined by this Department, the Minister may, after providing ten (10) day notice to the Permit Holder, amend, modify, suspend or cancel this Permit in accordance with the *Water Resources Act*.

4. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) indemnify and hold the Minister and Government harmless against any and all liabilities, losses, claims, demands, damages or expenses including legal expenses of any nature whatsoever whether arising in tort, contract, statute, trust or otherwise resulting directly or indirectly from granting this Permit, systems and works in or outside the said Project areas, or any act or omission of the Permit Holder or its agent(s), subcontractor(s), or consultant (s) in or outside the said Project areas, or arising out of a breach or non-performance of any of the terms and conditions, or provisions of this Permit by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).

5. This Permit is subject to all provisions of the *Water Resources Act* and any regulations in effect either at the date of this Permit or hereafter made pursuant thereto or any other relevant legislation enacted by the Province of Newfoundland and Labrador in the future.

6. This Permit shall be construed and interpreted in accordance with the laws of the Province of Newfoundland and Labrador.

File No: **526**
Permit No: **ALT9715-2018**

cc: Amir Ali Khan, Ph.D., P.Eng.
Manager, Water Rights, Investigations and Modelling Section
Water Resources Management Division
Department of Municipal Affairs and Environment
P.O. Box 8700
4th Floor, West Block, Confederation Building
St. John's, NL A1B 4J6
akhan@gov.nl.ca

cc: File Copy for Binder

cc: Dave Mercer (Western)
Land Management Specialist, Crown Land - Gander
Municipal Affairs
davemercer@gov.nl.ca

cc: Fisheries Protection Division
Ecosystem Management Branch
Fisheries and Oceans Canada
P.O. Box 5667
St. John's, NL A1C 5X1
FPP-NL@dfo-mpo.gc.ca

cc: Town of Trout River
Ms. Lorraine Barnes
P.O. Box 89
Trout River, NL A0K 5P0
townclerk@townoftroutriver.com

cc: Mark McNeil
Public Works and Government Service Canada
Suite 204, 1 Regent Square
Corner Brook, NL A2H 7K6
mark.mcneil@pwgsc-tpsgc.gc.ca

Newfoundland Labrador

Government of Newfoundland and Labrador
Department of Municipal Affairs and Environment
Water Resources Management Division

Appendix C - Completion Report

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 48

Date: **JUNE 08, 2018**

File No: **526**
Permit No: **ALT9715-2018**

Permit Holder: **Fisheries and Oceans Canada - Small Craft Harbours**
P.O. Box 5667
10 Barters Hill - John Cabot Building
St. John's, NL, A1C 5X1

Attention: **Mr. Paul Curran**

Re: **Town of Trout River (Trout River) - Dredging to Remove Accumulated Sediment**

Permission was given for : **the dredging of the mouth of Trout River and the adjacent shoreline of ocean to remove approximately 5000 cubic metres of accumulated sediment to provide safe access of vessels to the DFO Small Craft Harbours Facility in the Town of Trout River, with reference to the application dated June 6, 2018.**

I (the Permit Holder named above or agent authorized to represent the Permit Holder) do hereby certify that the project described above was completed in accordance with the plans and specifications submitted to the Department of Municipal Affairs and Environment and that the work was carried out in strict compliance with the terms and conditions of the Permit issued for this project.

Date: _____ Signature: _____

This completion report must be completed and forwarded to the following address upon completion of the approved work.

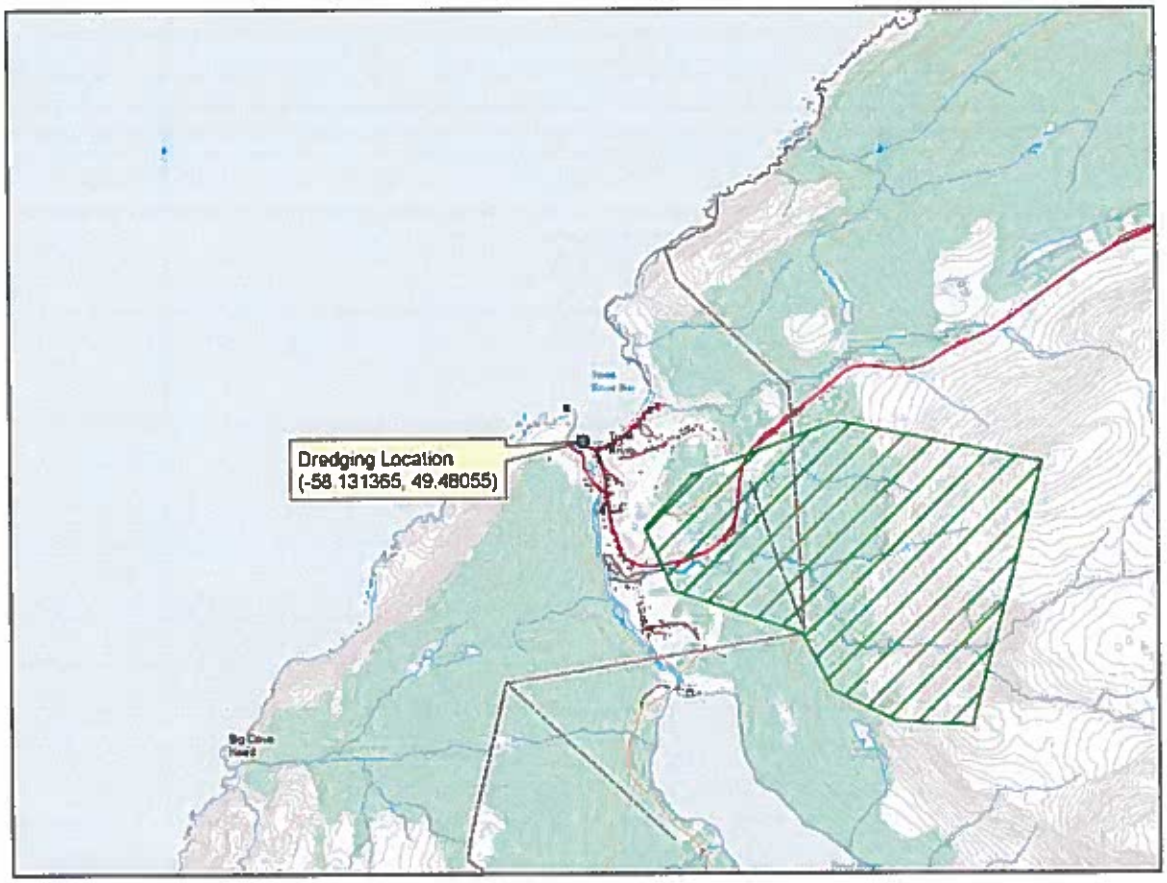
Department of Municipal Affairs and Environment
Water Resources Management Division
PO Box 8700
St. John's NL A1B 4J6

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR
Department of Municipal Affairs and Environment

File No: **526**
Permit No: **ALT9715-2018**

APPENDIX D

Location Map for Permit



From: Hann, Joan
To: Mark McNeil
Cc: Simms, Tanya J.; Ryan, Marie
Subject: FW: Service NL Referral for Treated Timber Disposal - DFO SCH Western Area - Trout River, NL
Date: June-07-18 3:19:06 PM

Mark see below – incorrect address

Joan Hann
Environmental Scientist
Pollution Prevention Division
Department of Municipal Affairs and Environment
4th Floor, Confederation Building, West Block
P.O. Box 8700
St. John's, NL, Canada A1B 4J6
Email: Joanhann@gov.nl.ca
Phone: 709-729-1771

From: Hann, Joan
Sent: Thursday, June 07, 2018 3:15 PM
To: 'McNeil@pwgsc-tpsgc.gc.ca'
Cc: Simms, Tanya J.; Ryan, Marie
Subject: FW: Service NL Referral for Treated Timber Disposal - DFO SCH Western Area - Trout River, NL

Hello Mark and Tanya
Based upon results the TWW has to be transported/disposed to Norris Arm WDS. Please ensure disposal documents confirming waste received at the landfill are forwarded to my attention from the contractor.
Regard

Joan Hann
Environmental Scientist
Pollution Prevention Division
Department of Municipal Affairs and Environment
4th Floor, Confederation Building, West Block
P.O. Box 8700
St. John's, NL, Canada A1B 4J6
Email: Joanhann@gov.nl.ca
Phone: 709-729-1771

From: Mark McNeil [mailto:Mark.McNeil@pwgsc-tpsgc.gc.ca]
Sent: Thursday, June 07, 2018 2:54 PM
To: Hann, Joan
Cc: Simms, Tanya J.
Subject: Service NL Referral for Treated Timber Disposal - DFO SCH Western Area - Trout River, NL

Good afternoon Joan,

Please find attached an application for approval to dispose of creosote treated timber from the demolition of a wharf located at the DFO SCH site in Trout River, NL.

If you need anything else just let me know.

Thanks,
Mark

Mark McNeil, M.Sc.

Environmental Services | *Services écologiques*
Public Services and Procurement Canada | Services Publics et Approvisionnement Canada
Suite 204, 1 Regent Square, Corner Brook, NL A2H 7K6 | *Pièce 204, 1 Place Regent, Corner Brook, TN A2H 7K6*

mark.mcneil@pwgsc-tpsgc.gc.ca

Tel: (709) 637-4481 | *facsimile/télécopieur (709) 637-4566*
Mobile: (709) 632-8516 | *cellulaire (709) 632-8516*
Government of Canada | *Gouvernment du Canada*

Newfoundland Labrador

Government of Newfoundland and Labrador
Service NL

July 20, 2018

Mr. Mark McNeil
Environmental Services
Public Works and Government Services Canada
1 Regent Square, Suite 204
Corner Brook, NL A2H 7K6

RE: Dredge Disposal – Disposal of Marine Sediments from dredging, Trout River, NL

Dear Mr. McNeil:

The Government Service Centre has reviewed your request submitted on May 11, 2018 regarding the disposal of dredged materials from dredging at Trout River, NL.

The Government Service Centre has approved your request to utilize 5000m^3 of dredged material at the pit you have identified following approval of the applicant, the Town of Trout River, to do so if/when they are successful in obtaining this piece of property through Crown Lands. This approval is subject to the following stipulations:

1. Dredged materials are to be utilized at this location as per the 'Conditions of Placement" in your agreement with the Town of Trout River.

2. Dredged materials are to be stockpiled on site for a minimum of 24 hours before transportation to allow for the drainage of water. The stockpile area is to be located as close as possible to the high water mark. Care is to be taken in choosing this site to limit the negative effect of odors emitting from the stockpile.

3. Dredged materials are to be transported in water tight trucks or containers to prevent leakage.

4. The re-use of dredged materials for other purposes is not permitted under this approval.

5. It is the responsibility of the proponent to obtain any other necessary permits or approvals from federal, provincial, or municipal authorities.

6. The Department reserves the right to cancel this approval at any time for non-compliance with any of the above conditions or for another reason that the Department deems to warrant such action.

If you have any questions, please call (709) 637-2454.

Sincerely,

Tanya Simms

Tanya Simms
Environmental Protection Officer

Transport Canada / Transports Canada

Navigation Protection Program
95 Foundry Street, 6th Floor
Moncton N.B. E1C 8K6

Your file

Our file
8200-03-1621

November 8, 2018

Fisheries and Oceans Canada - SCH
10 Barter's Hill
P.O. Box 5667
St. John's, NL
A1C 5X1

Attention: Paul Curran

RE: Notice to the Minister under the *Navigation Protection Act* for review of the Wharf Reconstruction and Dredging located at approximately: 48° 28' 48" N, 058° 07' 54"W in Trout River in the Province of Newfoundland and Labrador

Our assessment of your work has determined that it is not likely to substantially interfere with navigation.

Therefore your work is permitted under **Section 9(1) – Rebuild** of the *Navigation Protection Act* (NPA) and you may proceed per the attached plans reviewed on **November 8, 2018** in accordance with the following terms and conditions:

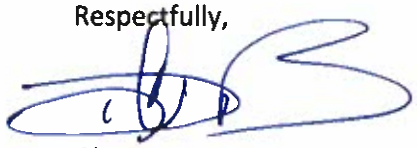
1. The project is to be removed, constructed and maintained in accordance with the approved plans.
2. All dredge material must be disposed of above the high-water mark, or at an approved waste disposal site.
3. Any cables, equipment or temporary hazards resulting from the construction activities are to be clearly marked so they are visible to vessels operating in the area.
4. If a containment device is placed in the water it must be market at 25 meter intervals by 0.4 meter yellow cautionary floats.

5. Construction material and debris are not to become waterborne. During construction all floating debris must be contained in the immediate area and removed from the water in a timely manner.
6. A "Notice to Shipping" is to be requested ten (10) days prior to the commencement of any work; or deploying or removing site markings and again upon completion of the work; or anytime its location is changed for any reason to alert vessel operators in the area. Contact the Canadian Coast Guard's Marine Communications & Traffic Services (MCTS) Centre by telephone at (709) 695-2168 or email to: notshippax@dfo-mpo.gc.ca to arrange this.

Please note that permission relates only to the effect of your work on navigation under the NPA. It is the owner's responsibility to comply with any other applicable laws and regulations.

Should you have any questions, please do not hesitate to contact our office in Moncton by phone at (506) 851-3113, by fax at (506) 851-7542 or by e-mail at NPPATL-PPNATL@tc.gc.ca.

Respectfully,



Glen Rowe
Officer
Navigation Protection Program
Programs Group
Transport Canada
Atlantic Region

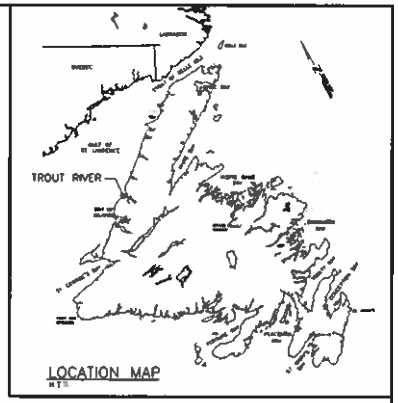
cc. Mark McNeil, PSPC
Carrie Brayall, CHS

Fisheries and Oceans Canada | Pêches et Océans Canada

Small Craft Harbours | Ports Pour Petits Bateaux

Newfoundland Region

St. John's, NL.



WHARF RECONSTRUCTION
Trout River, NL
Long Range Mountains
Newfoundland and Labrador
Canada

PROJECT NO. 722866

JULY 2018

NOT TO BE USED FOR TENDERING OR CONSTRUCTION

99% REVIEW

2018.07.12

DRAWING LIST

DRAWING NO.	TITLE
	COVER AND LOCATION MAP
1 OF 10	EXISTING SITE PLAN, DREDGE AREA
2 OF 10	EXISTING SITE PLAN, SOUNDINGS AND BORE HOLE DATA
3 OF 10	EXISTING WHARF ELEVATION AND WHARF SECTIONS
4 OF 10	NEW SITE PLAN
5 OF 10	NEW WHARF PLAN AND WHARF ELEVATION
6 OF 10	SHEET PILE / TIE PLAN AND SECTIONS
7 OF 10	WHARF SECTION AND DETAILS
8 OF 10	MISC. DETAILS
9 OF 10	MISC. DETAILS
10 OF 10	MISC. DETAILS
E1	SITE PLAN DEMOLITION
E2	SITE PLAN NEW
E3	WHARF PLAN AND DETAILS
E4	ELECTRICAL DETAILS

Reviewed / Examiné

Page 1 of/de 6

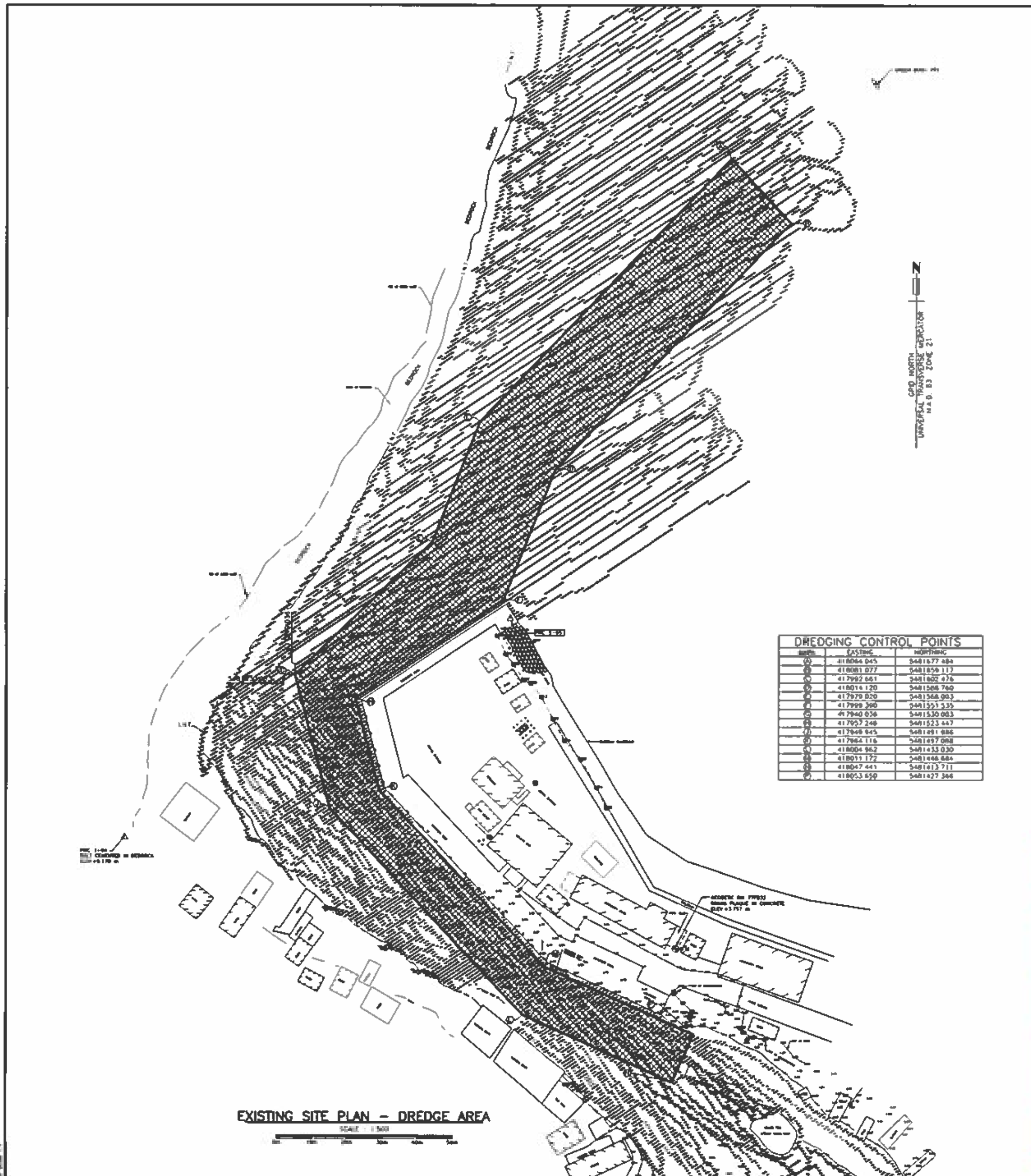
NOV 08 2018

By/par:

GLEN ROWE

Navigation Protection Program / Programme de protection de la navigation

Canada



EXISTING SITE PLAN – DREDGE AREA

SCALE 1:500

DREDGING CONTROL POINTS

	EASTING	NORTHING
A	418044 045	5481677 484
[illegible]	418081 077	5481859 117
[illegible]	417992 661	5481802 476
[illegible]	418014 120	5481588 760
[illegible]	417979 020	5481568 003
[illegible]	417999 390	5481551 535
[illegible]	417940 036	5481530 003
[illegible]	417957 248	5481523 447
[illegible]	417948 945	5481491 886
[illegible]	417964 116	5481497 098
[illegible]	418004 962	5481433 030
[illegible]	418011 172	5481446 884
[illegible]	418047 441	5481413 711
[illegible]	418053 650	5481427 346

LEGEND

SYMBOLS

- ACQUACULTURE
- ANCHOR BLOCK
- BOLLARD
- BOREHOLE
- BOUNDARY MARKER
- CARD POSITION BUOY
- CATCH BASIN
- CLEAT
- CULVERT
- DERRICK
- DISPOSAL
- DREDGE CONTROL
- ELECTRICAL OUTLET
- ELECTRICAL OUTLET/PEDESTAL
- FIRE HYDRANT
- FIRST AID
- FISH HANDLING EQUIP
- FOG HORN
- FUEL PUMP
- H PILE
- HORIZONTAL CONTROL
- ICE PLANT
- INVERT PIPE
- JIB CRANE
- FLAG POLE
- LADDER
- LIFE RING
- LIGHT STANDARD
- MANHOLE
- MARSH
- MAST/TOWER
- NAVIGATION LIGHT
- OBSERVED BUOY
- OBSERVED SPAR BUOY
- PIPE PILE
- RANGE LIGHT
- SAFETY POST
- SEWER OUTFLOW PIPE
- SIGN
- TELEPHONE
- TELEPHONE POLE
- TIDE GUAGE/STAFF
- TREE
- UTILITY POLE
- VERTICAL CONTROL
- WATER TAP/OUTLET
- WATER VALVE
- WATER WELL
- WOOD PILE

LINETYPE

- ARMOUR STONE
- CL RAILROAD
- DRAIN PIPE
- EDGE ROAD / SHOULDER
- FENCE LINE
- FLOATING WAVEBREAK
- GUARD RAIL
- HIGH WATER MARK
- LOW WATER MARK
- MARSH OUTLINE
- PROPERTY BOUNDARY
- RANGE LIGHT EXTENSION
- RETAINING WALL
- RIPRAP
- TOE OF BANK
- TREE LINE
- UNDERGROUND CABLE

NOTES

SURVEY PARTY CHIEF RICHARD HEALEY
SURVEY VESSEL ALUMINUM BOAT
SURVEY DATE(S) MARCH 24 & 27,2018

SOUNDER TYPE SINGLE TRANSDUCER
SOUNDER SETTING MIN/INST VEL OF SOUND 1440 m/s
DEPTH GATE USED N/A FRE. OF TRANS.

POSITIONING SYSTEM USED TRIMBLE R7 GNSS DGPS (WITH OTF)
LAND SURVEY POSITION BY TRIMBLE R7 GNSS DGPS (WITH OTF)

DATA TAPE/DISC(S) USED
CAD DRAWING FILE(S)

TIDAL REDUCTION SCHEME

OFFICE PROCESSOR RICHARD HEALEY
DATE OF PROCESSING MARCH28,2018

MATRIX CELL WIDTH X LENGTH
REDUCTION OF MATRIX CELLS

87G3004 419177 708 5481560 362 PROVINCIAL BRASS PLAQUE SET IN CONCRETE
PWC 1-94 417891 664 5481483 828 BOLT CEMENTED IN BEDROCK
PWC 5-95 5481546 406 +2.866 m BOLT CEMENTED IN DECK
BM 77F032 5481452 +3.757 m GEODETIC BRASS PLAQUE SET IN CONCRETE

ALL SOUNDINGS & ELEVATIONS REFERRED TO GEODETIC BM 77F032 ELEV +3.757 m ABOVE CHART DATUM (BRASS PLAQUE SET IN CONCRETE FOUNDATION OF COMMUNITY STAGE).

COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE UTM MAPPING PLANE, ZONE 21, USING THE NORTH AMERICAN DATUM OF 1983(NAD83)

Reviewed / Examiné

Page 2 of/de 6

NOV 0 8 2018

By/par [illegible]

GLEN ROWE

Navigation Protection Program /
Programme de protection de la navigation

SMALL CRAFT HARBOURS

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER

C	ISSUED FOR 99% REVIEW	
B	ISSUED FOR 66% REVIEW	
A	ISSUED FOR 33% REVIEW	

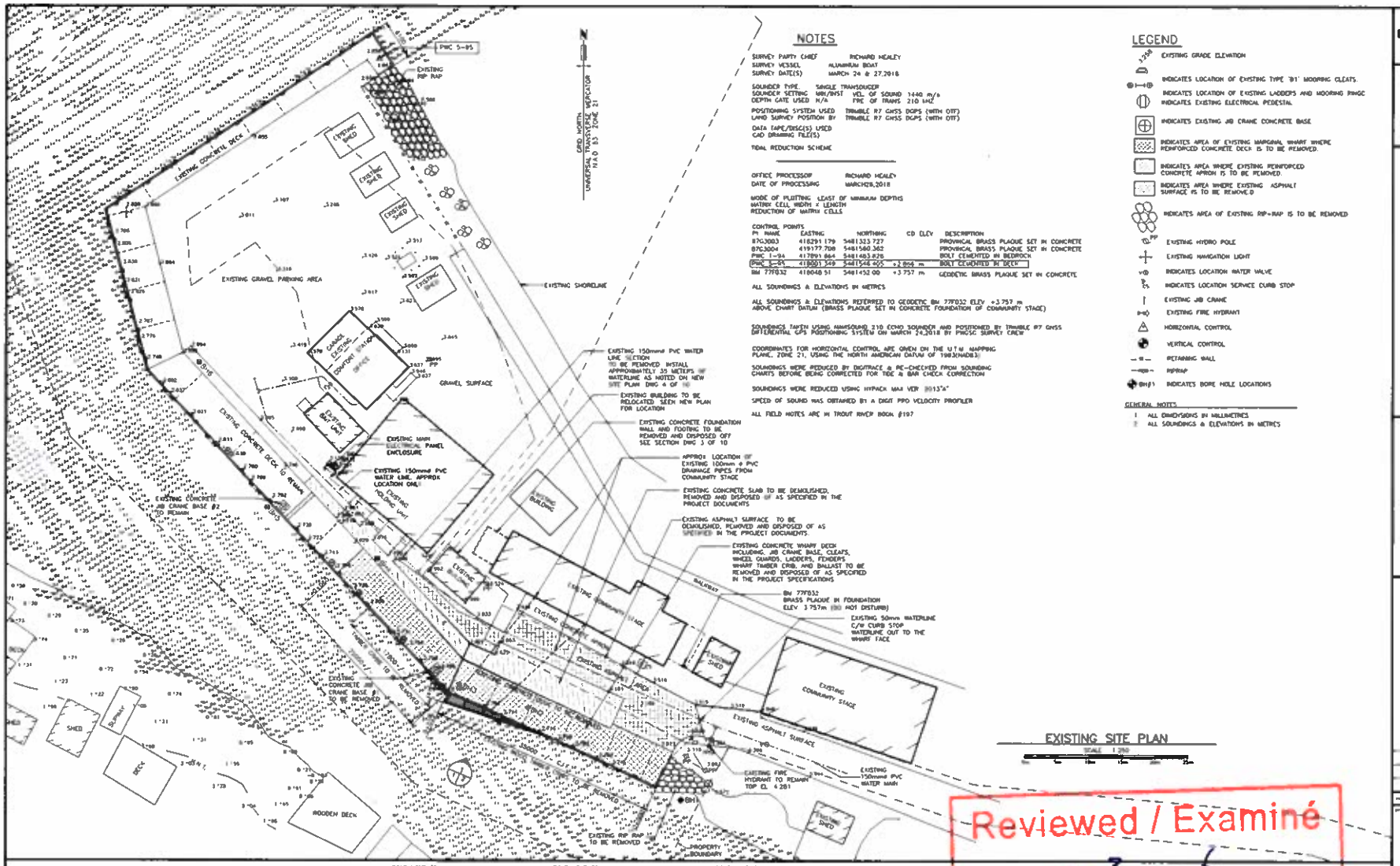
WHARF
RECONSTRUCTION
TROUT RIVER, NL.

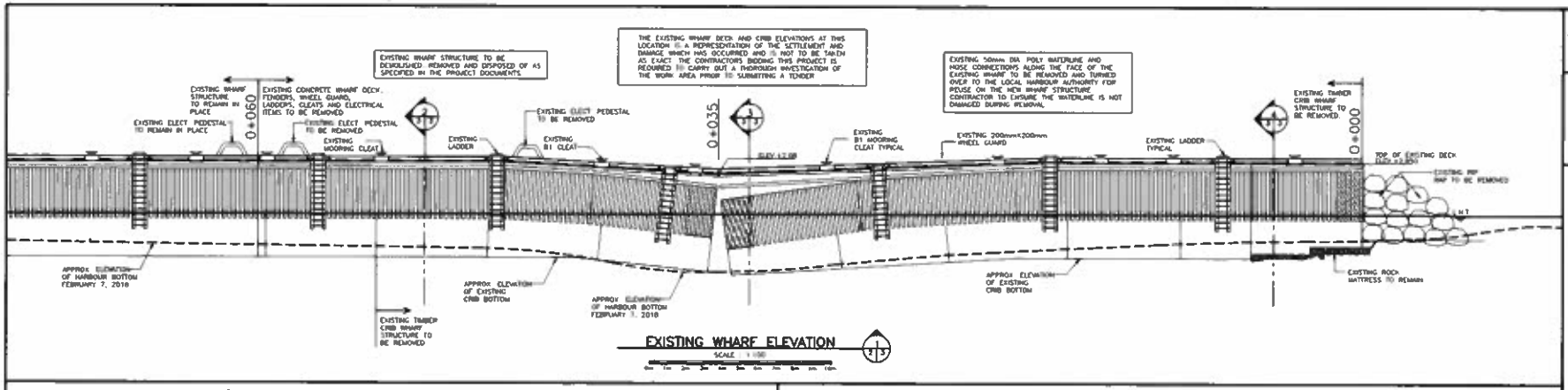
EXISTING SITE PLAN
DREDGE AREA

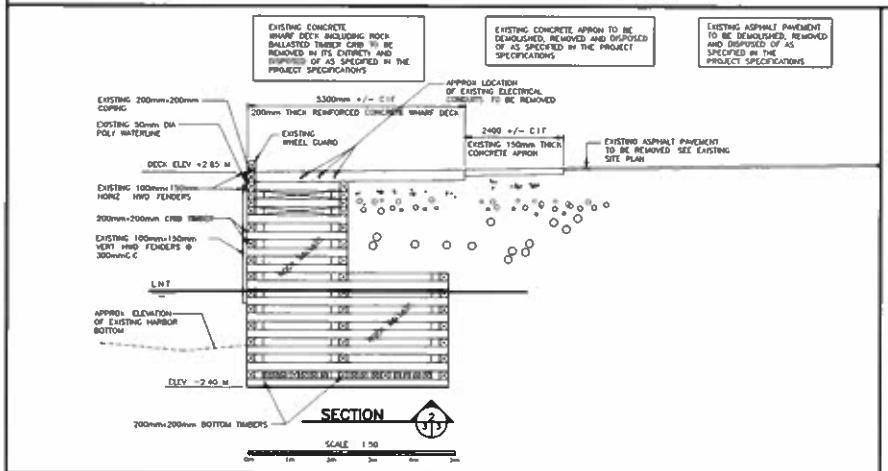
R.J. ANDERSON
JULY 2018
R S H
JULY 2018

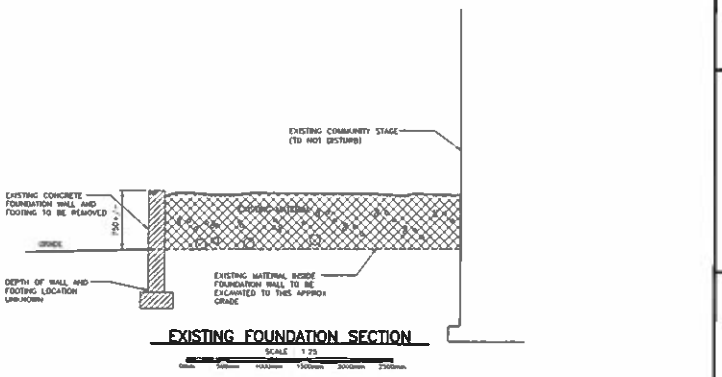
722866

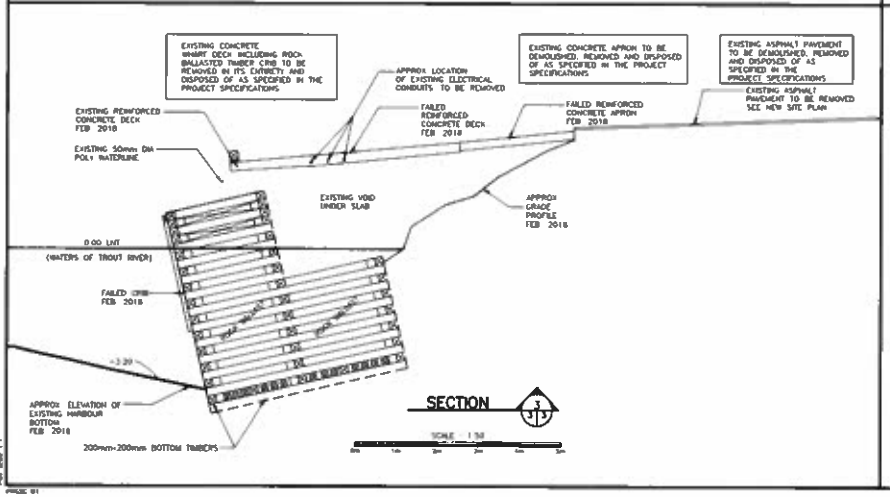
1 of 10

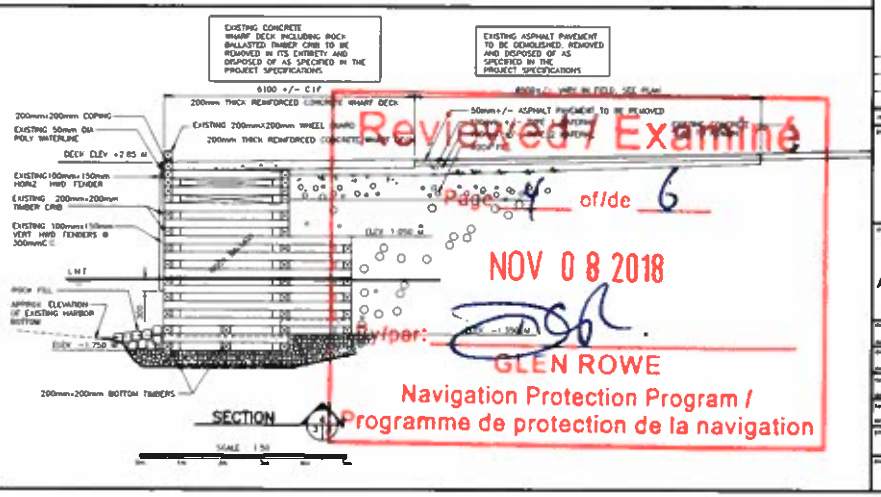

NOTES
SURVEY PARTY CHIEF RICHARD HEALEY
SURVEY VESSEL ALUMINUM BOAT
SURVEY DATE(S) MARCH 24 & 27,2018
SOUNDER TYPE SINGLE TRANSDUCER
SOUNDER SETTING MIN/MAX VEL OF SOUND 1440 m/s
DEPTH GATE USED N/A FRE OF TRANS 210 kHz
POSITIONING SYSTEM USED TRIMBLE R7 GNSS DGPS (WITH OTF)
LAND SURVEY POSITION BY TRIMBLE R7 GNSS DGPS (WITH OTF)
DATA TAPE/DISC(S) USED
CAD DRAWING FILE(S)
TIDAL REDUCTION SCHEME
OFFICE PROCESSOR RICHARD HEALEY
DATE OF PROCESSING MARCH28,2018
MODE OF PLOTTING (LEAST OF MINIMUM DEPTHS
MATRIX CELL WIDTH x LENGTH
REDUCTION OF MATRIX CELLS
CONTROL POINTS
Pt NAME EASTING NORTHING CD ELEV DESCRIPTION
87GJ003 418291.179 5481323.727 PROVINCIAL BRASS PLAQUE SET IN CONCRETE
87GJ004 419177.708 5481560.362 PROVINCIAL BRASS PLAQUE SET IN CONCRETE
PWC 1-94 417891.864 5481483.826 BOLT CEMENTED IN BEDROCK
PWC 5-94 418001.349 5481548.405 +3.866 m BOLT CEMENTED IN DECK
BM 77F032 418048.51 5481452.00 +3.757 m GEODETIC BRASS PLAQUE SET IN CONCRETE
ALL SOUNDINGS & ELEVATIONS IN METRES
ALL SOUNDINGS & ELEVATIONS REFERRED TO GEODETIC BM 77F032 ELEV +3.757 m ABOVE CHART DATUM (BRASS PLAQUE SET IN CONCRETE FOUNDATION OF COMMUNITY STAGE)
SOUNDINGS TAKEN USING AMADSOUND 210 ECHO SOUNDER AND POSITIONED BY TRIMBLE R7 GNSS DIFFERENTIAL GPS POSITIONING SYSTEM ON MARCH 24,2018 BY PWGSC SURVEY CREW
COORDINATES FOR HORIZONTAL CONTROL ARE GIVEN ON THE U.T.M. MAPPING PLANE, ZONE 21, USING THE NORTH AMERICAN DATUM OF 1983(NAD83)
SOUNDINGS WERE REDUCED BY DIGITRACE & RE-CHECKED FROM SOUNDING CHARTS BEFORE BEING CORRECTED FOR TIDE & BAR CHECK CORRECTION
SOUNDINGS WERE REDUCED USING HYPACK MAX VER [illegible]"a"
SPEED OF SOUND WAS OBTAINED BY A DIGIT PPO VELOCITY PROFILER
ALL FIELD NOTES ARE IN TROUT RIVER BOOK #197
LEGEND
EXISTING GRADE ELEVATION
INDICATES LOCATION OF EXISTING TYPE 'B1' MOORING CLEATS.
INDICATES LOCATION OF EXISTING LADDERS AND MOORING RINGS
INDICATES EXISTING ELECTRICAL PEDESTAL
INDICATES EXISTING JIB CRANE CONCRETE BASE
INDICATES AREA OF EXISTING WHARF DECK WHERE REINFORCED CONCRETE DECK IS TO BE REMOVED.
INDICATES AREA WHERE EXISTING REINFORCED CONCRETE APRON IS TO BE REMOVED.
INDICATES AREA WHERE EXISTING ASPHALT SURFACE IS TO BE REMOVED.
INDICATES AREA OF EXISTING RIP-RAP IS TO BE REMOVED
EXISTING HYDRO POLE
EXISTING NAVIGATION LIGHT
INDICATES LOCATION WATER VALVE
INDICATES LOCATION SERVICE CURB STOP
EXISTING JIB CRANE
EXISTING FIRE HYDRANT
HORIZONTAL CONTROL
VERTICAL CONTROL
RETAINING WALL
RIPRAP
INDICATES BORE HOLE LOCATIONS
GENERAL NOTES
1 ALL DIMENSIONS IN MILLIMETRES
2 ALL SOUNDINGS & ELEVATIONS IN METRES
EXISTING SITE PLAN
SCALE 1:250
BORE HOLE #1
BORE HOLE #2
BORE HOLE #3
BORE HOLE #4
BORE HOLE #5
EXISTING CONCRETE DECK
EXISTING RIP RAP
EXISTING SHED
EXISTING GRAVEL PARKING AREA
EXISTING SHORELINE
EXISTING GARAGE
EXISTING BAIT LOCKER
GRAVEL SURFACE
EXISTING MAIN ELECTRICAL PANEL ENCLOSURE
EXISTING 150mmø PVC WATER LINE. APPROX LOCATION ONLY
EXISTING CONCRETE JIB CRANE BASE #2 TO REMAIN
EXISTING CONCRETE DECK TO REMAIN
EXISTING CONCRETE JIB CRANE BASE # TO BE REMOVED
EXISTING 150mmø PVC WATER LINE SECTION TO BE REMOVED INSTALL APPROXIMATELY 35 METERS OF WATERLINE AS NOTED ON NEW SITE PLAN DWG 4 OF 10
EXISTING BUILDING TO BE RELOCATED SEEN NEW PLAN FOR LOCATION
EXISTING CONCRETE FOUNDATION WALL AND FOOTING TO BE REMOVED AND DISPOSED OFF SEE SECTION DWG 3 OF 10
APPROX LOCATION OF EXISTING 100mm ø PVC DRAINAGE PIPES FROM COMMUNITY STAGE
EXISTING CONCRETE SLAB TO BE DEMOLISHED, REMOVED AND DISPOSED OF AS SPECIFIED IN THE PROJECT DOCUMENTS
EXISTING ASPHALT SURFACE TO BE DEMOLISHED, REMOVED AND DISPOSED OF AS SPECIFIED IN THE PROJECT DOCUMENTS
EXISTING CONCRETE WHARF DECK INCLUDING JIB CRANE BASE, CLEATS, WHEEL GUARDS, LADDERS, FENDERS WHARF TIMBER CRIB, AND BALLAST TO BE REMOVED AND DISPOSED OF AS SPECIFIED IN THE PROJECT SPECIFICATIONS
BM 77F032 BRASS PLAQUE IN FOUNDATION ELEV 3.757m (DO NOT DISTURB)
EXISTING 50mm WATERLINE C/W CURB STOP WATERLINE CUT TO THE WHARF FACE
EXISTING COMMUNITY STAGE
EXISTING ASPHALT SURFACE
EXISTING FIRE HYDRANT TO REMAIN TOP EL 4.281
EXISTING 150mmø PVC WATER MAIN
EXISTING RIP RAP TO BE REMOVED
PROPERTY BOUNDARY
SHED
DECK
WOODEN DECK
Reviewed / Examiné
Page 3 of/de 6
NOV 08 2018
By/par:
GLEN ROWE
Navigation Protection Program /
Programme de protection de la navigation
SMALL CRAFT HARBOURS
PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER
C ISSUED FOR 99% REVIEW 11/09/18
B ISSUED FOR 66% REVIEW 05/09/18
A ISSUED FOR 33% REVIEW 02/09/18
WHARF RECONSTRUCTION TROUT RIVER, NL.
EXISTING SITE PLAN, SOUNDINGS AND BORE HOLE DATA
722866
2 of 10











SMALL CRAFT HARBOURS

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER

C	ISSUED FOR 99% REVIEW	11/09/18
B	ISSUED FOR 66% REVIEW	08/08/18
A	ISSUED FOR 33% REVIEW	03/07/18

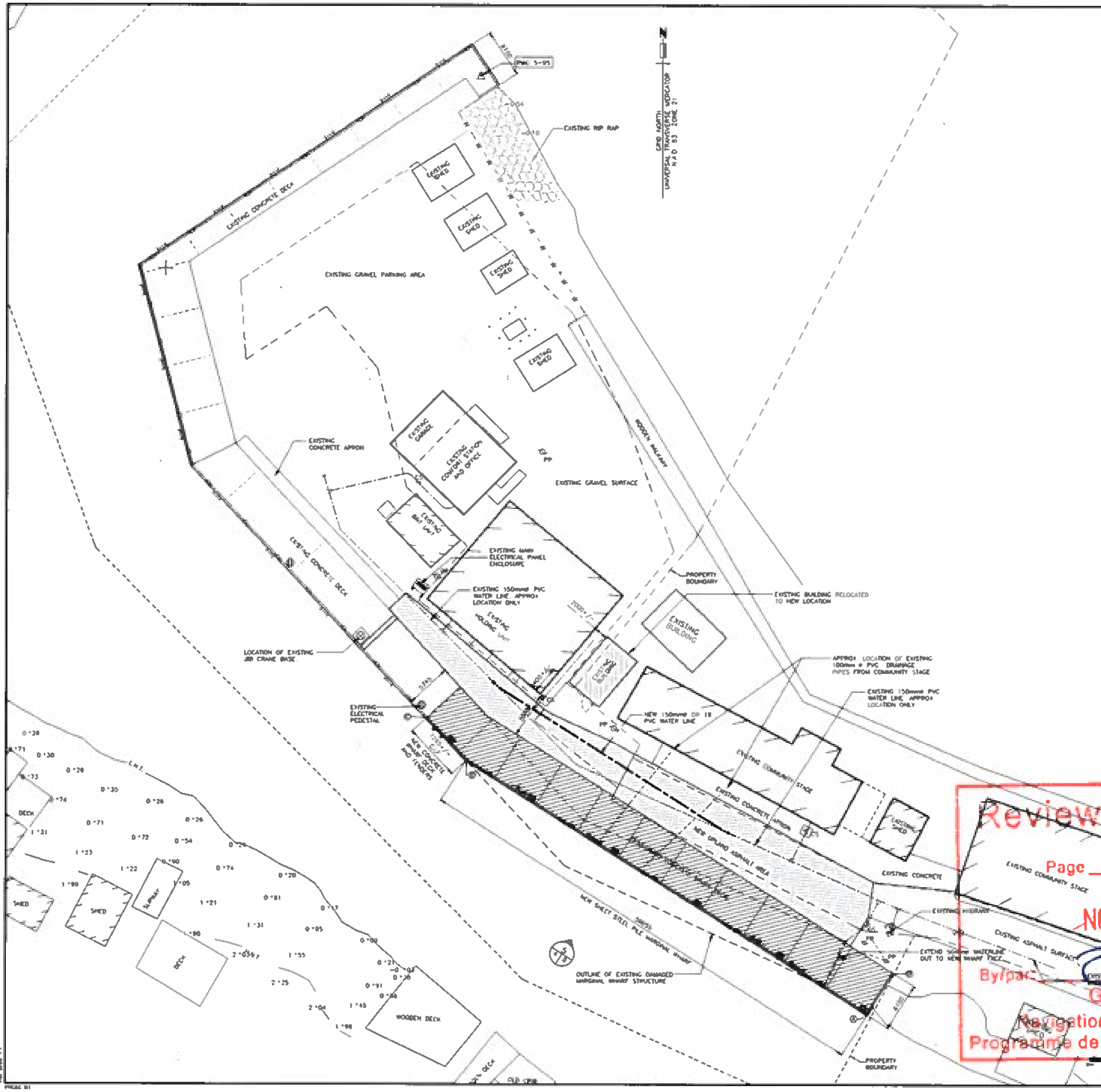
WHARF RECONSTRUCTION TROUT RIVER, NL.

EXISTING WHARF ELEVATION AND WHARF SECTIONS

designed M J ANDERSON JULY 2018
drawn RSM JULY 2018

722866

3 of 10



LEGEND

⬭	INDICATES LOCATION OF EXISTING TYPE 'B1' MOORING CLEATS.
⊢	INDICATES LOCATION OF EXISTING LADDERS
	EXISTING GRADE ELEVATION
	INDICATES LOCATION OF EXISTING WHARF ELECTRICAL PEDESTAL
●	INDICATES LOCATION OF NEW TYPE 'B1' MOORING CLEATS
	INDICATES LOCATION OF NEW LADDER AND MOORING RINGS.
	NEW LIGHT POLE C/W BOLLARDS
	NEW ELECTRICAL PEDESTAL (TYP.)
☐	INDICATES AREA OF NEW ASPHALT SURFACE
▨	INDICATES AREA PROPOSED NEW SSP MARGINAL WHARF REINFORCED CONCRETE DECK (EL +2.90)
	INDICATES CONTROL POINT LOCATIONS
	CONTROL JOINT
	EXISTING HYDRO POLE
✛	NAVIGATION LIGHT
	JIB CRANE
	FIRE HYDRANT
	INDICATES LOCATION WATER VALVE
	INDICATES LOCATION SERVICE CURB STOP
△	HORIZONTAL CONTROL
●	VERTICAL CONTROL
	RETAINING WALL
	INDICATES AREA OF EXISTING RIP RAP

NOTE
CONTRACTOR TO VERIFY THE LOCATION OF UNDERGROUND ELECTRICAL CONDUIT LOCATION FOR THE EXISTING ELECTRICAL SERVICE PANEL. CONTRACTOR TO KEEP THE ELECTRICAL PANELS IN FULL OPERATION DURING CONSTRUCTION

HORIZONTAL CONTROL POINTS		
MARK	EASTING	NORTHING
A	418049.597	5481429.469
B	419997.080	5481410.703
C	417994.734	5481466.357
D	418057.841	5481434.822

GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETERS
2. MINIMUM CONCRETE STRENGTH 35 MPa @28 DAYS
3. REINFORCING STEEL YIELD STRENGTH 400 MPa
4. REINFORCING STEEL SPLICES SHALL CONFORM TO A23.3, LATEST EDITION
   REINFORCING STEEL TO BE LAPPED 900mm FOR LONGITUDINAL BARS
   REINFORCING STEEL TO BE LAPPED 600mm FOR TRANSVERSE BARS
5. ALL REBAR TO HAVE MIN. COVER OF 75mm
6. ALL LAG SCREWS TO BE GALVANIZED AND SIZED AS PER FOLLOWING
   LADDER UPRIGHTS = 19mm
   FENDERING = 16mm
7. CONTRACTOR TO VERIFY ALL FIELD MEASUREMENTS FOR REQUIRED TIMBER PRIOR TO ORDERING
8. DECK DESIGN LOAD
   - CL-625 FOR NEW WHARF DECK

Reviewed / Examiné
Page 5 of/de 6
NOV 08 2018
By/par: [illegible]
GLEN ROWE
Navigation Protection Program /
Programme de protection de la navigation

SMALL CRAFT HARBOURS

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER

C	ISSUED FOR 99% REVIEW	18/8/16
B	ISSUED FOR 66% REVIEW	8/8/8
A	ISSUED FOR 33% REVIEW	8/8/8

WHARF
RECONSTRUCTION
TROUT RIVER, NL

NEW SITE PLAN

W J ANDERSON
JULY 2018
RSH
JULY 2018

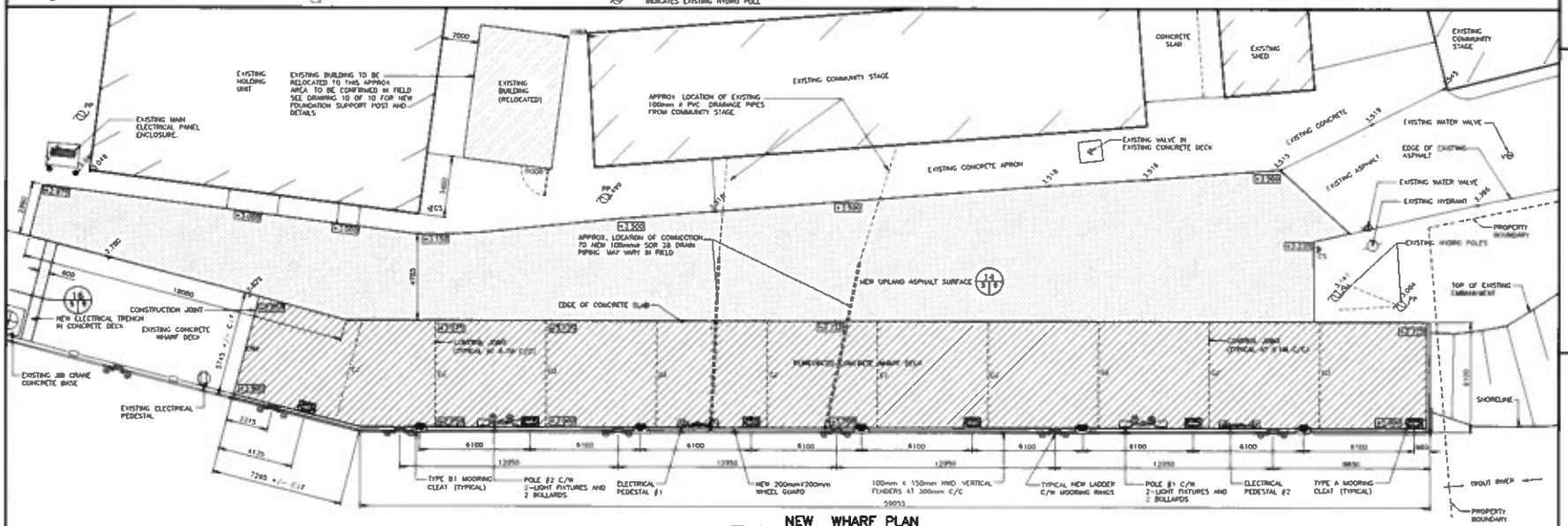
722866

4 of 10

Not in System

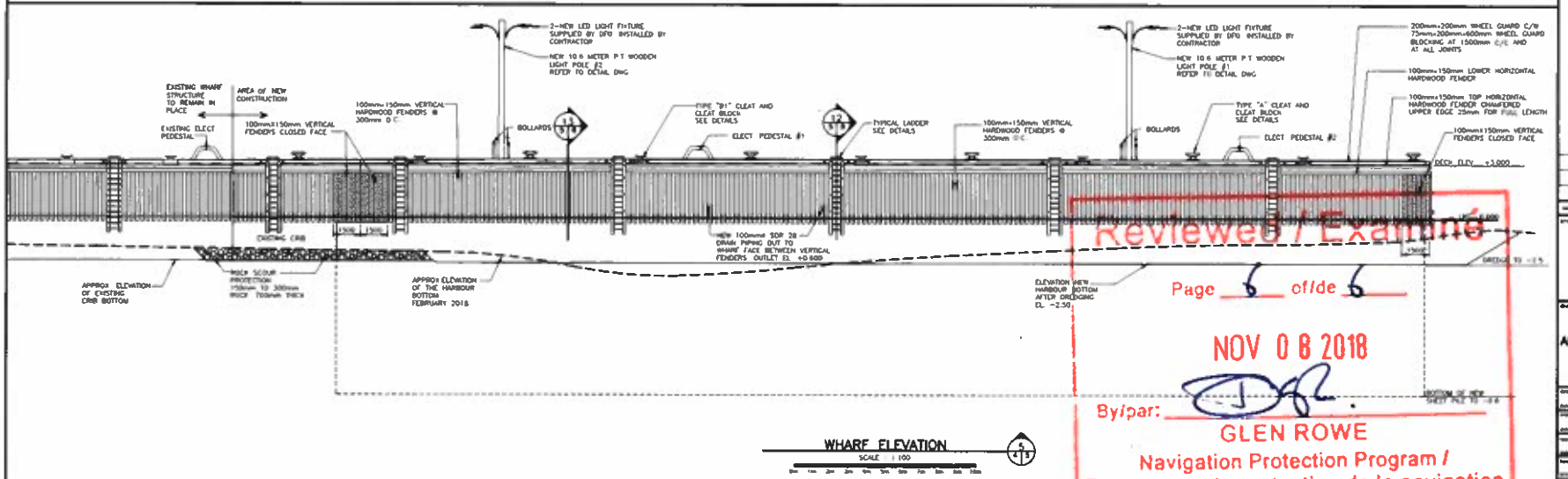
LEGEND

- INDICATES LOCATION OF EXISTING ELECTRICAL PEDESTAL
- INDICATES LOCATION OF EXISTING B1 MOORING CLEAT
- INDICATES LOCATION OF EXISTING LADDERS.
- INDICATES LOCATION OF NEW TYPE B1 MOORING CLEAT
- INDICATES LOCATION WATER VALVE
- INDICATES LOCATION OF NEW TYPE A MOORING CLEATS
- INDICATES LOCATION OF NEW LADDERS WITH HANDGRIP AND 2 MOORING RINGS
- INDICATES LOCATION OF NEW ELECTRICAL SERVICE PEDESTAL
- INDICATES LOCATION SERVICE CURB STOP
- INDICATES LOCATION OF NEW POWER POLE C/W BOLLARDS AND 2-LIGHT FIXTURES
- INDICATES LOCATION OF CONSTRUCTION JOINTS
- INDICATES LOCATION OF CONTROL JOINTS
- FINISHED GRADE ELEVATION
- INDICATES EXISTING HYDRO POLE
- INDICATES AREA OF NEW CONCRETE WHARF DECK
- INDICATES AREA OF NEW ASPHALT SURFACE



NEW WHARF PLAN

SCALE 1:100



WHARF ELEVATION

SCALE 1:100

SMALL CRAFT HARBOURS

PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER

C	ISSUED FOR 90% REVIEW	
B	ISSUED FOR 66% REVIEW	
A	ISSUED FOR 33% REVIEW	

WHARF RECONSTRUCTION TROUT RIVER, NL.

NEW WHARF PLAN AND WHARF ELEVATION

W. J. ANDERSON
JULY 2018
RSN
JULY 2018

722866

5 of 10