

1.01 GENERAL

- .1 Work under this contract is for Barge-mounted excavator and/or mechanical dredge and dump scow or barge to perform dredging operations. There is a side casting to the South side of the channel portion to be completed in the spring and then a excavating, transporting and disposing of excavated materials at the ocean disposal site located at 2.5Km's from the channel portion to be completed in the summer located at Pigeon Hill Fox Den Gully Channel, Gloucester County, NB. As shown on the plan and described herein.

1.02 PERMITS CERTIFICATES AND FEES

- .1 CEPA Permit, Quarry permit and license to occupy have been obtained.

1.03 DATUM

- .1 All elevations shown on plans submitted at the time of the tender, or mentioned in the specifications are expressed in "Meters" and are referred to chart datum or Low Normal Tide (L.N.T.) which is taken as elevation 0.0 meter.

1.04 FAMILIARIZATION WITH SITE

- .1 Before submitting a bid, it is recommended that Bidders inspect and examine the site of work and satisfy themselves as to the form and nature of the work, materials, the means of access to the site, and the temporary facilities required for completion of the work. Ignorance of local conditions shall not at any time constitute a valid reason for claiming extra costs.
- .2 Bidders should review specification Section 01 35 29 - Health and Safety Requirements, before visiting site. Take all appropriate safety measures for any visit to site, either before or after acceptance of bid.

1.05 WORK SCHEDULE

- .1 Prepare and submit to the Departmental Representative within ten (10) days of notification of Contract award, a construction schedule showing commencement and completion of all work within the time stated in the accepted tender. The schedule shall be in a format acceptable to the Departmental Representative and the Contractor shall plan, monitor and coordinate tasks and resources efficiently to achieve completion of the work on time.
- .2 Submit updates of the work schedule when requested by Departmental Representative and as a minimum on a monthly basis. Provide an explanation of necessary changes.
- .3 The Pigeon Hill outside Gully channel is expected to be navigable (ice out) with a 150m long by 30m wide to elevation -1.8m below chart datum elevation by April 23 2021, this work to be completed by the side casting method.

- .1 Side casting operations will consist of excavating the Class "B" underwater material to elevation -1.80m below Chart Datum or rock if encountered first. The material is to be side casted on south side next to channel and leveled below low water mark upon completion in the spring.
- .4 The Ocean Disposal portion of the Pigeon Hill outside Gully channel dredging is to be completed no later than September 10 2021. The work will consist of excavating 14,000m3 Class "B" underwater materials from Pigeon Hill's Fox Den Gully Channel, Gloucester County, NB, transporting and disposing of the excavated materials at the ocean disposal site located 2.5Km's from the channel as shown on the DWG's.
- .5 The work must be completed:
 - .1 For Spring Side Casting by April 23 2021.
 - .2 For ocean disposal site (2.5Km's) from July 05 2021 to be completed no later than September 10 2021.

1.06 PROJECT MEETINGS

- .1 The Departmental Representative will arrange project meetings and assume responsibility for setting times.
- .2 The contractor will be responsible of recording and distributing the meeting minutes.

1.07 PROTECTION OF SERVICES AND FACILITIES

- .1 It will be the responsibility of the Contractor to become fully acquainted with the existing services and facilities and take necessary steps to protect them during the work.
- .2 The Contractor will bear the cost of making good all damages to existing structures and facilities at the site resulting from his operations under this standing offer. All repairs will be with new materials approved by the Departmental Representative.
- .3 The Contractor will immediately restore any existing service disrupted as a result of his operations at no cost to the Departmental Representative.

1.08 HARBOUR AUTHORITY

- .1 Contractor to contact the Wharf Manager or representatives of the Harbour Authority prior to begin work.
- .2 Contact Harbour Authority in advance of mobilization and negotiate berthage fees and access at facility.

1.09 TAXES

- .1 Pay applicable Federal, Provincial and Municipal taxes. Refer to the "Notice to Tenderers" regarding the Goods and Services tax.

1.10 DOCUMENTS REQUIRED

- .1 Maintain at job site, one copy each of the following:
 - .1 Contract Drawings
 - .2 Specifications
 - .3 Addenda
 - .4 Other modifications to Contract
 - .5 CEPA Permit, Quarry permit and other approvals
 - .6 A copy of the construction safety plan.
 - .7 Copy of New Brunswick Occupational Health and Safety Act.
 - .8 DAS Permit's and Mitigation Plans

1.11 CONTRACTOR'S USE OF SITE

- .1 The Contractor's use of site is limited to the locations of the dredging operations and as specified herein.

1.12 CLEANING

- .1 Before work can be accepted, the Contractor must clean up the site and leave it in a condition which is acceptable to the Departmental Representative.

END OF SECTION

1.01 DEFINITIONS

- .1 COSH: Canada Occupational Health and Safety Regulations made under Part II of the Canada Labour Code.
- .2 Competent Person: means a person who is:
 - .1 Qualified by virtue of personal knowledge, training and experience to perform assigned work in a manner that will ensure the health and safety of persons in the workplace, and;
 - .2 Knowledgeable about the provisions of occupational health and safety statutes and regulations that apply to the Work and;
 - .3 Knowledgeable about potential or actual danger to health or safety associated with the Work.
- .3 Medical Aid Injury: any minor injury for which medical treatment was provided and the cost of which is covered by Workers' Compensation Board of the province in which the injury was incurred.
- .4 PPE: personal protective equipment
- .5 Work Site: where used in this section shall mean areas, located at the premises where Work is undertaken, used by Contractor to perform all of the activities associated with the performance of the Work.

1.02 SUBMITTALS

- .1 Submit site-specific Health and Safety Plan prior to commencement of Work.
 - .1 Submit within five 5 work days of notification of Bid Acceptance. Provide 2 copies.
 - .2 Departmental Representative will review Health and Safety Plan and provide comments.
 - .3 Revise the Plan as appropriate and resubmit within 5 work days after receipt of comments.
 - .4 Departmental Representative's review and comments made of the Plan shall not be construed as an endorsement, approval or implied warranty of any kind by Canada and does not reduce Contractor's overall responsibility for Occupational Health and Safety of the Work.
 - .5 Submit revisions and updates made to the Plan during the course of Work.
- .2 Submit name of designated Health & Safety Site Representative and support documentation specified in the Safety Plan.
- .3 Submit building permit, compliance certificates and other permits obtained.
- .4 Submit copy of Letter in Good Standing from Provincial Workers Compensation or other department of labour organization.
 - .1 Submit update of Letter of Good Standing whenever expiration date occurs during the period of Work.
- .5 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.

- .6 Submit copies of incident reports.
- .7 Submit WHMIS MSDS - Material Safety Data Sheets.

1.03 COMPLIANCE REQUIREMENTS

- .1 Comply with Occupational Health and Safety Act for Province of New Brunswick, and General Regulations made pursuant to the Act.
- .2 Comply with Canada Labour Code - Part II (entitled Occupational Health and Safety) and the Canada Occupational Health and Safety Regulations (COSH) as well as any other regulations made pursuant to the Act.
 - .1 The Canada Labour Code can be viewed at:
[www.http://laws.justice.gc.ca/en/L-2/](http://laws.justice.gc.ca/en/L-2/)
 - .2 COSH can be viewed at: [www.http://laws.justice.gc.ca/eng/SOR-86-304/n e .html](http://laws.justice.gc.ca/eng/SOR-86-304/n_e.html)
 - .3 A copy may be obtained at: Canadian Government Publishing Public Works & Government Services Canada Ottawa, Ontario, K1A 0S9 Tel: (819) 956-4800 (1-800-635-7943) Publication No. L31-85/2000 E or F)
- .3 Observe construction safety measures of:
 - .1 Part 8 of National Building Code
 - .2 Municipal by-laws and ordinances.
- .4 In case of conflict or discrepancy between above specified requirements, the more stringent shall apply.
- .5 Maintain Workers Compensation Coverage in good standing for duration of Contract. Provide proof of clearance through submission of Letter in Good Standing.
- .6 Medical Surveillance: Where prescribed by legislation or regulation, obtain and maintain worker medical surveillance documentation.

1.04 RESPONSIBILITY

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons and environment adjacent to the site to extent that they may be affected by conduct of Work.
- .2 Comply with and enforce compliance by all workers, sub-contractors and other persons granted access to Work Site with safety requirements of Contract Documents, applicable federal, provincial, and local by-laws, regulations, and ordinances, and with site-specific Health and Safety Plan.

1.05 SITE CONTROL AND ACCESS

- .1 Control the Work and entry points to Work Site. Approve and grant access only to workers and authorized persons. Immediately stop and remove non-authorized persons.

- .1 Departmental Representative will provide names of those persons authorized by Departmental Representative to enter onto Work Site and will ensure that such authorized persons have the required knowledge and training on Health and Safety pertinent to their reason for being at the site, however, Contractor remains responsible for the health and safety of authorized persons while at the Work Site.
- .2 Isolate Work Site from other areas of the premises by use of appropriate means.
 - .1 Erect fences, hoarding, barricades and temporary lighting as required to effectively delineate the Work Site, stop non-authorized entry, and to protect pedestrians and vehicular traffic around and adjacent to the Work and create a safe environment.
 - .2 Post signage at entry points and other strategic locations indicating restricted access and conditions for access.
 - .3 Use professionally made signs with bilingual message in the 2 official languages or international known graphic symbols.
- .3 Provide safety orientation session to persons granted access to Work Site. Advise of hazards and safety rules to be observed while on site.
- .4 Ensure persons granted site access wear appropriate PPE. Supply PPE to inspection authorities who require access to conduct tests or perform inspections.
- .5 Secure Work Site against entry when inactive or unoccupied and to protect persons against harm.

1.06 PROTECTION

- .1 Give precedence to safety and health of persons and protection of environment over cost and schedule considerations for Work.
- .2 Should unforeseen or peculiar safety related hazard or condition become evident during performance of Work, immediately take measures to rectify situation and prevent damage or harm. Advise Departmental Representative verbally and in writing.

1.07 FILING OF NOTICE

- .1 File Notice of Project with pertinent provincial health and safety authorities prior to beginning of Work.
 - .1 Departmental Representative will assist in locating address if needed.

1.08 PERMITS

- .1 Post permits, licenses and compliance certificates.
- .2 Where a particular permit or compliance certificate cannot be obtained, notify Departmental Representative in writing and obtain approval to proceed before carrying out applicable portion of work.

1.09 HAZARD ASSESSMENTS

- .1 Perform site specific health and safety hazard assessment of the Work and its site.
- .2 Carryout initial assessment prior to commencement of Work with further assessments as needed during progress of work, including when new trades and subcontractors arrive on site.
- .3 Record results and address in Health and Safety Plan.
- .4 Keep documentation on site for entire duration of the Work.

1.10 PROJECT/SITE CONDITIONS

- .1 Following are potential health, environmental and safety hazards at the site for which Work may involve contact with:
- .2
 - .1 Existing hazardous and controlled products stored on site:
 - .1 none identified
 - .2 Existing hazardous substances or contaminated materials:
 - .1 none identified
 - .3 Known latent site and environmental conditions:
 - .1 Working near and over water.
 - .2 Cold weather and exposure.
 - .3 Public access to the site.
 - .4 Heavy Equipment.
 - .5 Working with lights.
 - .6 Load losses Roll overs.
 - .4 Facility on-going operations:
 - .1 none identified
- .3 Above items shall not be construed as being complete and inclusive of potential health and safety hazards encountered during Work.
- .4 Include above items in the hazard assessment of the Work.
- .5 MSDS Data sheets of pertinent hazardous and controlled products stored on site can be obtained from Departmental Representative.

1.11 MEETINGS

- .1 Attend pre-construction health and safety meeting, convened and chaired by Departmental Representative, prior to commencement of Work, at time, date and location determined by Departmental Representative. Ensure attendance of:
 - .1 Superintendent of Work
 - .2 Designated Health & Safety Site Representative
 - .3 Subcontractors
- .2 Conduct regularly scheduled tool box and safety meetings during the Work in conformance with Occupational Health and Safety regulations.
- .3 Keep documents on site.

1.12 HEALTH AND SAFETY PLAN

- .1 Prior to commencement of Work, develop written Health and Safety Plan specific to the Work. Implement, maintain, and enforce Plan for entire duration of Work and until final demobilization from site.
- .2 Health and Safety Plan shall include the following components:
 - .1 List of health risks and safety hazards identified by hazard assessment.
 - .2 Control measures used to mitigate risks and hazards identified.
 - .3 On-site Contingency and Emergency Response Plan as specified below.
 - .4 On-site Communication Plan as specified below.
 - .5 Name of Contractor's designated Health & Safety Site Representative and information showing proof of his/her competence and reporting relationship in Contractor's company.
 - .6 Names, competence and reporting relationship of other supervisory personnel used in the Work for occupational health and safety purposes.
- .3 On-site Contingency and Emergency Response Plan shall include:
 - .1 Operational procedures, evacuation measures and communication process to be implemented in the event of an emergency.
 - .2 Evacuation Plan: site and floor plan layouts showing escape routes, marshalling areas. Details on alarm notification methods, fire drills, location of fire fighting equipment and other related data.
 - .3 Name, duties and responsibilities of persons designated as Emergency Warden(s) and deputies.
 - .4 Emergency Contacts: name and telephone number of officials from:
 - .1 General Contractor and subcontractors.
 - .2 Pertinent Federal and Provincial Departments and Authorities having jurisdiction.
 - .3 Local emergency resource organizations.
 - .5 Harmonize Plan with Facility's Emergency Response and Evacuation Plan. Departmental Representative will provide pertinent data including name of PWGSC and Facility Management contacts.
- .4 On-site Communication Plan:
 - .1 Procedures for sharing of work related safety information to workers and subcontractors, including emergency and evacuation measures.
 - .2 List of critical work activities to be communicated with Facility Manager which have a risk of endangering health and safety of Facility users.
- .5 Address all activities of the Work including those of subcontractors.
- .6 Review Health and Safety Plan regularly during the Work. Update as conditions warrant to address emerging risks and hazards, such as whenever new trade or subcontractor arrive at Work Site.
- .7 Departmental Representative will respond in writing, where deficiencies or concerns are noted and may request re-submission of the Plan with correction of deficiencies or concerns.
- .8 Post copy of the Plan, and updates, prominently on Work Site.

1.13 SAFETY SUPERVISION

- .1 Employ Health & Safety Site Representative responsible for daily supervision of health and safety of the Work.
- .2 Health & Safety Site Representative may be the Superintendent of the Work or other person designated by Contractor and shall be assigned the responsibility and authority to:
 - .1 Implement, monitor and enforce daily compliance with health and safety requirements of the Work
 - .2 Monitor and enforce Contractor's site-specific Health and Safety Plan.
 - .3 Conduct site safety orientation session to persons granted access to Work Site.
 - .4 Ensure that persons allowed site access are knowledgeable and trained in health and safety pertinent to their activities at the site or are escorted by a competent person while on the Work Site.
 - .5 Stop the Work as deemed necessary for reasons of health and safety.
- .3 Health & Safety Site Representative must:
 - .1 Be qualified and competent person in occupational health and safety.
 - .2 Have site-related working experience specific to activities of the Work.
 - .3 Be on Work Site at all times during execution of the Work.
- .4 All supervisory personnel assigned to the Work shall also be competent persons.
- .5 Inspections:
 - .1 Conduct regularly scheduled safety inspections of the Work on a minimum bi-weekly basis. Record deficiencies and remedial action taken.

1.14 TRAINING

- .1 Use only skilled workers on Work Site who are effectively trained in occupational health and safety procedures and practices pertinent to their assigned task.
- .2 Maintain employee records and evidence of training received. Make data available to Departmental Representative upon request.
- .3 When unforeseen or peculiar safety-related hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

1.15 MINIMUM SITE SAFETY RULES

- .1 Notwithstanding requirement to abide by federal and provincial health and safety regulations; ensure the following minimum safety rules are obeyed by persons granted access to Work Site:

- .1 Wear appropriate PPE pertinent to the Work or assigned task; minimum being hard hat, safety footwear, safety glasses and hearing protection.
 - .2 Immediately report unsafe condition at site, near-miss accident, injury and damage.
 - .3 Maintain site and storage areas in a tidy condition free of hazards causing injury.
 - .4 Obey warning signs and safety tags.
 - .5 Wear appropriate personal floatation devices.
- .2 Brief persons of disciplinary protocols to be taken for non-compliance. Post rules on site.

1.16 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Departmental Representative will stop Work if non-compliance of health and safety regulations is not corrected in a timely manner.

1.17 INCIDENT REPORTING

- .1 Investigate and report the following incidents to Departmental Representative:
 - .1 Incidents requiring notification to Provincial Department of Occupational Safety and Health, Workers Compensation Board or to other regulatory Agency.
 - .2 Medical aid injuries.
 - .3 Property damage in excess of \$10,000.00,
 - .4 Interruptions to Facility operations resulting in an operational lost to a Federal department in excess of \$5000.00.
- .2 Submit report in writing.

1.18 HAZARDOUS PRODUCTS

- .1 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS).
- .2 Keep MSDS data sheets for all products delivered to site.
 - .1 Post on site.
 - .2 Submit copy to Departmental Representative.

1.19 BLASTING

- .1 Blasting or other use of explosives is not permitted on site without prior receipt of written permission and instructions from Departmental Representative.

1.20 POWDER ACTUATED DEVICES

- .1 Use powder actuated fastening devices only after receipt of written permission from Departmental Representative.

1.21 CONFINED SPACES

- .1 Abide by occupational health and safety regulations regarding work in confined spaces.

1.22 SITE RECORDS

- .1 Maintain on Work Site copy of safety related documentation and reports stipulated to be produced in compliance with Acts and Regulations of authorities having jurisdiction and of those documents specified herein.
- .2 Upon request, make available to Departmental Representative or authorized Safety Officer for inspection.

1.23 POSTING OF DOCUMENTS

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on Work Site in accordance with Acts and Regulations of Province having jurisdiction.
- .2 Post other documents as specified herein, including:
 - .1 Site specific Health and Safety Plan.
 - .2 WHMIS data sheets.

END OF SECTION

1.01 DEFINITIONS

- .1 Hazardous Materials: product, substances or organism that is used for its original purpose; that is either dangerous goods or a material that may cause adverse health of persons, animals, or plant life when released into the environment.
- .2 Watercourse: Refers to the bed and shore of the river, estuary, stream, lake pond, marsh, or salt-water body that contains water for part of the year.
- .3 Invasive or alien species: refers to a species or subspecies introduced outside its normal distribution whose establishment and spread threaten ecosystems, habitats or species with economic or environmental harm.
- .4 Buffer zone: a vegetated land that protects watercourses from adjacent land uses. It refers to the land adjacent to watercourses, such as streams, rivers, lakes, ponds, oceans, and wetlands, including the floodplain and the transitional lands between the watercourse and the drier upland areas.

1.02 TRANSPORTATION

- .1 Transport hazardous materials and hazardous waste in compliance with Federal Transportation of Dangerous Goods Act.
- .2 Do not overload trucks when hauling material. Secure contents against spillage.
- .3 Maintain trucks clean and free of mud, dirt and other foreign matter.
- .4 Avoid potential release of contents and of any foreign matter onto highways, roads and access routes used for the Work. Take extra care when hauling dredged material and other hazardous materials. Immediately clean any spillage and soils.

1.03 HAZARDOUS MATERIAL HANDLING

- .1 Handle and store hazardous materials on site in accordance with WHMIS procedures and requirements.
- .2 Store all hazardous liquids in location and manner to prevent their spillage into the environment.
- .3 Maintain written inventory of all hazardous materials kept on site. List product name, quantity and storage date.
- .4 Keep MSDS data sheets on site for all items

1.04 PETROLEUM, OIL AND LUBRICANTS

- .1 Comply with Federal and Provincial laws, regulations, codes and guidelines for the storage of fuel and petroleum products on site.

- .2 Do not place fuel storage tanks and store fuel or other petroleum products within a 30 meter buffer zone of watercourses and wetlands. Do not fuel or lubricate equipment within this 30 meter buffer zone. Obtain approval from Departmental Representative of acceptable location on site for fuel storage and equipment service.
- .3 Do not dump petroleum products or any other deleterious substances on ground or in the water.
- .4 Be diligent and take all necessary precautions to avoid spills and contaminate the soil and water (both surface and subsurface) when handling petroleum products on site and during fueling and servicing of vehicles and equipment.
- .5 Maintain on site appropriate emergency spill response equipment consisting of at least one 250-litre (55 gallon) over pack spill kit for containment and cleanup of spills.
- .6 Maintain vehicles and equipment in good working order to prevent leaks on site.
- .7 In the event of a petroleum spill, immediately notify the Departmental Representative and the Canadian Coast Guard (CCG) at 1-800-565-1633 (24 hour report line). Perform clean-up in accordance with all regulations and procedures stipulated by authority having jurisdictions.

1.05 DISPOSAL OF DREDGE MATERIAL

- .1 Stringently follow all directives and procedures stipulated in permit for transportation and disposal of dredged material to approved disposal site.
 - .1 **Dispose of dredge material at the approved Disposal at Sea (DAS)** site in accordance with any/all conditions of the Canadian Environmental Protection Act (CEPA)
 - .2 A copy of the CEPA Disposal at Sea Permit must be kept on site and in the dredge at all times.
 - .3 A CEPA Disposal at Sea Permit has been applied for and it is anticipated that a permit will be received prior to contract award. No work will commence until this permit is attained.
 - .4 A Dredge Material Disposal Plan (DMDP) required by ECCC as part of permit conditions, is to be prepared by the Contractor and submitted to the *Departmental Representative* for review by ECCC 14 days prior to commencing dredging operations.
 - .5 Contractor to provide daily disposal logs on excel sheet indicating cubic meter quantities and coordinates of the disposal location for each dump. The disposal log must be sent to Environment Canada and the Departmental Representative on a daily basis. Environment Canada's contact information will be provide with the Disposal at Sea Permit.
 - .6 Ensure Dredging Permit is kept on site at all times.

- .2 Eliminate free board spillage when excavating, loading and hauling dredged material.
- .3 Do not overload trucks when hauling dredged material or other hazardous material. Secure contents against spillage. Clean ground spills to extent as directed by authority having jurisdiction and by Departmental Representative.
- .4 Obtain approval from Departmental Representative of the proposed route to be used to haul dredged material to the disposal site.
- .5 Place and spread dredged material at the disposal field in a uniform and well graded manner. Minimize height and slopes of the disposed material. Match slopes and contours of the existing surrounding terrain as much as possible following grades as directed by Departmental Representative.
- .6 Control disposal and runoff of water containing suspended materials or other harmful substances in accordance with requirements of authority having jurisdiction.
- .7 Suction Dredging:
 - .1 Routinely inspect pipe for any potential breach in the sediment train and keep in good leak free condition at all time.
 - .2 Should leakage occur along the pipeline immediately cease dredging operations and repair leak.

1.06 DISPOSAL OF WASTES

- .1 Do not bury rubbish, demolition debris and waste materials on site.
- .2 Do not dispose of hazardous waste, volatile materials (such as mineral spirits, paints, thinners etc...) and petroleum products into waterways, storm or sanitary sewers or in waste landfill sites.
- .3 Dispose of hazardous waste in accordance with applicable federal and provincial laws, regulations, codes and guidelines.

1.07 WATER QUALITY

- .1 Conduct dredging of a watercourse in such a manner to limit turbidity and reduce sediment suspension in the water to an absolute minimum at all times. For where the permits allow.
 - .1 Maintain appropriate production speed and momentum of the dredging equipment. Make adjustments as required and as approved by Departmental Representative.
 - .2 Strategically position dredging equipment to avoid over the water swings of excavated material whenever possible.

- .2 Where work may affect the water quality adjacent to water intake lines used by Lobster Holding Facilities, Fish Processing Facilities and other harbour users, schedule work in cooperation with the Harbour Authority as directed by Departmental Representative to minimize interference and impact to harbour users.
- .3 Visually monitor the water turbidity of the surrounding areas adjacent to the dredge area on a daily basis during the in-water work periods.
 - .1 Should excessive change occur in the turbidity beyond the dredge limit which differs from existing conditions of the surrounding water bodies, such as a distinct color difference; notify the Departmental Representative to obtain appropriate mitigation measures to be followed.
- .4 Water quality during suction dredging:
 - .1 Minimize out-fall of the dredge material at the disposal site by placing the pipeline outtake at or near the water level surface.
 - .2 Restrict vessel traffic adjacent to the disposal site to an absolute minimum to avoid the re-suspension of dredged material from propeller wash.
- .5 Do not wash-down equipment within a 30 meter buffer zone of a wetland, watercourse or other identified environmentally sensitive area.

1.08 SOCIOECONOMIC RESTRICTIONS

- .1 Abide by municipal and provincial regulations for any restrictions on work performed during the night time and on flood lighting of the site. Obtain applicable permits
- .2 Place flood lights in opposite direction of adjacent residential and business areas.
- .3 Equip equipment and machinery with purposely designed mufflers to reduce noise on site to lowest possible level. Maintain mufflers in good operating condition at all times.

1.09 BIRD AND BIRD HABITAT

- .1 Become knowledgeable with abide by the Migratory Birds Convention Act (MBCA) in regards to the protection of migratory birds, their eggs, nests and their young encountered on site and in the vicinity.
- .2 Minimize disturbance to all birds on site and adjacent areas during the entire course of the Work.
- .3 Do not approach concentrations of seabirds, waterfowl and shorebirds when anchoring equipment, accessing wharves or ferrying supplies.
- .4 During night time work, position flood lights in opposite direction of nearby bird nesting habitat.

- .5 Do not use beaches, dunes and other natural previously undisturbed areas of the site to conduct work unless specifically approved by the Departmental Representative.
- .6 Should nests of migratory birds in wetlands be encountered during work, immediately notify Departmental Representative for directives to be followed.
 - .1 Do not disturb nest site and neighboring vegetation until nesting is completed.
 - .2 Minimize work immediately adjacent to such areas until nesting is completed.
 - .3 Protect these areas by following recommendations of Canadian Wildlife Service.

1.10 FISH AND FISH HABITAT

- .1 Be aware of the risk for contamination of the fish habitat at the site as a result of alien species being introduced in the water.
- .2 To minimize the possibility of fish habitat contamination, all construction equipment which will be immersed into the water of a watercourse, or has the possibility of coming into contact with such water during the course of the work, must be cleaned and washed to ensure that they are free of marine growth and alien species.
- .3 Equipment shall include boats, barges, cranes excavators, haul trucks, pumps, pipe lines and other all miscellaneous tools and equipment previously used in a marine environment.
- .4 Cleaning and washing of equipment shall be performed immediately upon their arrival at the site and before use in or over the body of water.
- .5 Conduct cleaning and washing operations as follows:
 - .1 Scrap and remove heavy accumulation of mud and dispose appropriately.
 - .2 Wash all surfaces of equipment by use of a pressurized fresh water supply.
 - .3 Immediately follow with application of a heavy sprayed coating of undiluted vinegar or other environmentally approved cleaning agent to thoroughly remove all plant matter, animals and sediments.
 - .4 Check and remove all plant, animal and sediment matter from the all bilges and filters.
 - .5 Drain standing water from equipment and let fully dry before use.
 - .6 Upon removal from the water, drain standing water from equipment and let fully dry before removal off the site
- .6 Do not perform cleaning and wash-down within a 30 meter buffer zone of a wetland, watercourse or other identified environmentally sensitive area.
- .7 Record of Assurance Logbook: Record of
 - .1 Maintain an on-going log of past and present usage and wash-downs of all equipment to illustrate mitigation measures undertaken against fish habitat contamination by alien species.
 - .2 Write data in a hard cover bound logbook,

- .3 Include the following:
 - .1 Date and location where equipment was previously used in a watercourse or wetland;
 - .2 Type of work performed.
 - .3 Dates of wash-down for each piece of equipment;
 - .4 Cleaning method and cleaning agent(s) used.
- .8 Keep Record of Assurance Logbook updated from project to project. Upon request, submit logbook to Departmental Representative for review.
- .9 Abide by requirements and recommendations of the Federal Department of Environment and the Department of Fisheries and Oceans - Habitat Protection and Sustainable Development Branch in cleaning and wash-down of equipment.

1.11 AIR QUALITY

- .1 Keep airborne dust and dirt resulting from the work on site to an absolute minimum.
- .2 Apply dust control measures to roads, parking lots and work areas.
- .3 Spray surfaces with water or other environmentally approved product. Use purposely suited equipment or machinery and apply in sufficient quantity and frequency to provide effective result and continued dust control during the entire course of the work.
- .4 Do not use oil or any other petroleum products for dust control.

1.12 FIRES

- .1 Fires and burning of rubbish on site is not permitted.

END OF SECTION