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| <u>1 General</u> | .1 | Work under this contract consists of the construction of a confined disposal facility (CDF) at Miller Brook Wharf, stockpiling material from containment, harbour dredging, placing dry spoils in the containment cell at Miller Brook, surcharging the spoils with stockpiled material upon completion of dredging, construction of berms, add granulars to parking lot and site restoration in Miller Brook, Gloucester, NB. |
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| <u>2 Permits, Certificates and Fees</u> | .1 | The Departmental Representative is responsible to obtain Quarry permit and provide Notices to Mariners for the commencement of dredging operation. |
| | .2 | The Contractor shall give all notices, obtain permits concerning the projects, except those noted above. No dredging or disposal is to be carried out until all permits are in place. |
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| <u>3 Examination of Site</u> | .1 | Parties intending to tender for work are advised to visit site and make their own estimates of facilities and difficulties attending execution of work, actual site and soil conditions, severity, exposure and uncertainty of weather and all other contingencies. |
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| <u>4 Pre-Award Meeting</u> | .1 | Within seven (7) days after the tenders have been closed, a pre-award meeting will be held with the low bidder to review his proposed method of completing the work. |
| | .2 | At the meeting the Contractor will be required to submit the following information to the department for review and approval:
.1 Equipment
.2 Sub-contractors
.3 Methodology of work. |
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| <u>5 Work Schedule</u> | .1 | The work to be carried out as per the directions of the specification and plans. |
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| 5 <u>Work Schedule</u>
(Cont'd) | .2 | Immediately upon award of contract, the Contractor will submit a schedule of work to the Departmental Representative, showing anticipated progress stages and final completion of work within time required by contract documents. All entries contained in unit price table will be entered on schedule using a horizontal bar graph method. |
| 6 <u>Measurement for</u>
<u>Payment</u> | | |
| | .1 | Before submitting first progress claim submit a breakdown of the lump sum items in detail as directed by Departmental Representative. After approval by Departmental Representative this cost breakdown will be used as basis for progress payment. |
| | .2 | Notify Departmental representative in advance, prior to submission of progress claim, to permit measurement of quantities by Departmental representative. |
| | .3 | The items for payment in this contract are:
.1 Site Work Section 31 23 13
.2 Imported Sandstone Fill , Section 31 23 13
.3 Granular Base , Section 31 23 13
.4 Filter Fabric , Section 31 23 13
.5 Geogrid , Section 31 23 13
.6 Dredging , Section 35 20 23 |
| 7 <u>Datum</u> | | |
| | .1 | All elevations shown on plans submitted or mentioned in the specifications are expressed in "Metres" and are referred to chart datum or Low Normal Tide (L.N.T.) which is taken as elevation 0.0 metre. |
| 8 <u>Project Meetings</u> | | |
| | .1 | Departmental Representative will arrange project meetings and assume responsibility for setting times and recording minutes. |
| 9 <u>Additional</u>
<u>Drawing</u> | | |
| | .1 | Departmental Representative may furnish additional drawings to assist proper execution of work. These drawings will be issued for clarification only. Such drawings shall have the same meaning and intent as if they were |
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| 9 | Additional
Drawing
<u>(Cont'd)</u> | .1 | (Cont'd)
included with plans referred to with the
call-up. |
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| 10 | Protection of
<u>Existing Services</u> | .1 | It will be the responsibility of the
Contractor to become fully acquainted with the
existing services and facilities and protect
them during the construction. |
| | | .2 | The Contractor will make repairs to the
damages caused to the structures and during the
work carried out under this contract. All
repairs done will be with approved methods,
new materials, and approved by 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. |
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| 11 | Contractor's Use
<u>of Site</u> | .1 | Plan and execute work to minimize
interference to areas outside work zone.
Consult Harbour Authorities and follow their
directions within their jurisdiction. |
| | | .2 | The Contractor will be solely responsible for
arranging the storage of equipment and
materials on or off the site, and any
materials stored at the site which interfere
with any of the day to day activities at or
near the site will be moved promptly at the
Contractor's expense upon request by the
Departmental representative. |
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| 12 | Co-operation and
Assistance to
Departmental
<u>Representative</u> | .1 | Co-operate with Departmental representative
on inspection work and provide any assistance
requested. |
| | | .2 | On request of Departmental Representative,
furnish use of such boats, equipment, labour
and materials forming ordinary and usual part
of dredging as may be reasonably necessary to |
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- 12 Co-operation and Assistance to Departmental Representative (Cont'd) .2 (Cont'd)
inspect the work. The Contractor will provide an approved duty boat under this contract. The boat will be on duty at all times throughout the duration of the contract. It will also be available for the use of the Departmental Representative or his Assistance representative when required.
- 13 Site Information .1 Results of most recent sounding are included with the drawings.
- 14 Layout of Work .1 Contractor will lay out work on ground to satisfaction of Departmental representative using base and datum information shown on drawings or as directed by Departmental representative.
- .2 Assume full responsibility for and execute complete layout of work to locations, grades, lines and elevations indicated.
- .3 Supply, install and maintain devices, survey stakes and markers required for laying out work. The method of laying out work requires the review and approval of the Departmental representative. The Contractor shall verify all dimensions in the field prior to start of work.
- .4 Obtain approval of Departmental representative for the layout established. This approval is to be obtained for each phase of the work (i.e. each item in the unit price table). Provide any assistance required for the Departmental representative in his inspection of the layout.
- 15 Documents Required.1 Maintain a copy of the following documents at the work site:
- .1 Contract Drawings
 - .2 Specifications
 - .3 Addenda
 - .4 Change Orders
 - .5 Other modifications to Contract
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15 Documents Required.1
(Cont'd)

(Cont'd)

.6 (Cont'd)

.6 Field Test Reports

.7 Copy of Approved Work Schedule

.8 Site Specific Health and Safety
Plan

.9 Copy of the New Brunswick
Occupational Health and Safety Act.

16 Acceptance .1

At completion of project, in company with the
Departmental representative, make a check of
all work and correct all discrepancies and
defects. Be aware that the Final Certificate
of Completion will not be issued until such
time that Contractor has fully completed and
turned over all specified as-built project
documents.

1.1 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.

1.2 SUBMITTALS

- .1 Make submittals in accordance with Section 01 33 00.
- .2 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.

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- 1.2 SUBMITTALS
(Cont'd)
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- .2 (Cont'd)
- .5 Submit revisions and updates made to the Plan during the course of Work.
- .3 Submit name of designated Health & Safety Site Representative and support documentation specified in the Safety Plan.
- .4 Submit building permit, compliance certificates and other permits obtained.
- .5 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.
- .6 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .7 Submit copies of incident reports.
- .8 Submit WHMIS MSDS - Material Safety Data Sheets.
- 1.3 COMPLIANCE
REQUIREMENTS
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- .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/ne.html](http://laws.justice.gc.ca/eng/SOR-86-304/ne.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.
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1.3 COMPLIANCE
REQUIREMENTS
(Cont'd)

- .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.

1.4 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.

1.5 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

1.5 SITE CONTROL
AND ACCESS
(Cont'd)

- .2 (Cont'd)
 - .1 (Cont'd)
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.

1.6 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.

1.7 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.

1.8 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

- 1.8 PERMITS
(Cont'd)
- .2 (Cont'd)
obtain approval to proceed before carrying out applicable portion of work.
- 1.9 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.
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- 1.10 PROJECT/SITE CONDITIONS
(Cont'd)
- .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.
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1.12 HEALTH AND
SAFETY PLAN
(Cont'd)

- .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.

1.12 HEALTH AND
SAFETY PLAN
(Cont'd)

- .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.

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- 1.14 TRAINING
(Cont'd)
- .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 Not withstanding 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.
- .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.
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| <u>1.17 INCIDENT
REPORTING</u> | .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. |
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| <u>1.18 HAZARDOUS
PRODUCTS</u> | .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. |
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| <u>1.19 BLASTING</u> | .1 | Blasting or other use of explosives is not permitted on site without prior receipt of written permission and instructions from Departmental Representative. |
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| <u>1.20 POWDER ACTUATED
DEVICES</u> | .1 | Use powder actuated fastening devices only after receipt of written permission from Departmental Representative. |
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| <u>1.21 CONFINED
SPACES</u> | .1 | Abide by occupational health and safety regulations regarding work in confined spaces. |
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| <u>1.22 SITE RECORDS</u> | .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. |
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1.22 SITE RECORDS .2
(Cont'd)

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.

1 REFERENCES

- .1 WHMIS: Workplace Hazardous Materials Information System, Health Canada.
- .2 Transportation of Dangerous Goods Act. Transport Canada, updated 2008-02-21.
- .3 Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters, Department of Fisheries and Oceans Canada, 1998.
- .4 MBCA: Migratory Birds Convention Act, Environment Canada, 1994.
- .5 Canadian Coast Guard Regulations, Department of Fisheries and Oceans Canada.
- .6 Canadian Shipping Act, Transport Canada, 2001.
- .7 AWWPA: American Wood Preserver Association

2 DEFINITIONS

- .1 Hazardous Material: Product, substance, or organism that is used for its original purpose; and that is either dangerous goods or a material that may cause adverse impact to the environment or adversely affect health of persons, animals, or plant life when released into the environment.
 - .2 Wetlands: land where the water table is at, near or above the surface or which is saturated for a long enough period to promote such features as wet-altered soils and water tolerant vegetation. Wetlands include organic wetlands or "peatlands," and mineral wetlands or mineral soil areas that are influenced by excess water but produce little or no peat
 - .3 Watercourse: refers to the bed and shore of a river, stream, lake, creek, pond, marsh, estuary or salt-water body that contains water for at least part of each year.
 - .4 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.
 - .5 Buffer zone: a vegetated land that protects watercourses from adjacent land uses. It
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2 DEFINITIONS
(Cont'd)

- .5 Buffer zone:(Cont'd)
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.

3 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.
- .5 Before commencement of work, advise the
Departmental Representative of the existing
roads and temporary routes proposed to be used
to access work areas and to haul material to
and from the site, including roads to the
dredged disposal field.

4 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.
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5 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 metre buffer zone of watercourses and wetlands. Do not fuel or lubricate equipment within this 30 metre 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) overpack 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 jurisdiction.

6 DISPOSAL OF
WASTES

- .1 Do not bury rubbish, demolition debris and waste materials on site.
- .2 Dispose and recycle demolition debris and waste materials to Waste Facility.
- .3 Do not dispose of hazardous waste, volatile materials (such as mineral spirits, paints, thinners etc...) and petroleum products into

6 DISPOSAL OF
WASTES
(Cont'd)

- .3 (Cont'd)
waterways, storm or sanitary sewers or in
waste landfill sites.
- .4 Dispose of hazardous waste in accordance with
applicable federal and provincial laws,
regulations, codes and guidelines.
- .5 Concrete waste:
 - .1 Do not discharge residual or rejected
concrete on site.
 - .2 Immediately clean any accidental release
of concrete on site prior to solidification.
 - .3 Do not wash and clean concrete vehicles
on site.
 - .4 Perform dumping of residual material and
truck cleaning operations only at the concrete
plant. Follow environmental regulations and
good practices as approved by the Provincial
Department of the Environment and other
authorities having jurisdiction.

7 WATER QUALITY

- .1 Conduct excavation work of a watercourse or
wetland in such a manner to limit turbidity
and reduce sediment suspension in the water to
an absolute minimum at all times.
 - .1 Maintain appropriate production speed
and momentum of the excavation equipment. Make
adjustments as required and as approved by
Departmental Representative.
 - .2 Strategically position excavator
equipment and haul vehicles 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 work and up
to the established dredge limit of 200 metre.
 - .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

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- 7 WATER QUALITY
(Cont'd)
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- .3 (Cont'd)
.1 (Cont'd)
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 outfall 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 Water contamination by preservative treated wood:
.1 Preservative treated lumber and timber, whether plant or site treated, shall be cured for a minimum of 30 days from date of the treatment application before their installation in areas which will be in contact with the water.
.2 Do not cut treated wood lumber over the surface of a watercourse or wetland.
.3 Do not use liquid applied preservative products over the surface of a watercourse or wetland.
.4 Wood treated with Chromate Copper Arsenate (CCA) or Ammoniac Copper Zinc Arsenate (ACZA) must be CSA or AWP approved.
.5 Do not use timber and lumber treated with creosote, petroleum and pentachlorophenol for any part of the Work.
- .6 Do not washdown equipment within a 30 metre buffer zone of a wetland, watercourse or other identified environmentally sensitive area.
- 8 SOCIOECONOMIC
RESTRICTIONS
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- .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.
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9 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 neighbouring 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.

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.
 - .1 Equipment shall include boats, barges, cranes, excavators, haul trucks, pumps, pipe lines and other all miscellaneous tools and

10 FISH AND
FISH HABITAT
(Cont'd)

- .2 (Cont'd)
 - .1 (Cont'd)
equipment previously used in a marine environment.
- .3 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.
- .4 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.
- .5 Do not perform cleaning and washdown within a 30 metre buffer zone of a wetland, watercourse or other identified environmentally sensitive area.
- .6 Record of Assurance Logbook:
 - .1 Maintain an on-going log of past and present usage and washdowns 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 washdown for each piece of equipment;
 - .4 Cleaning method and cleaning agent(s) used.

10 FISH AND
FISH HABITAT
(Cont'd)

- .7 Keep Record of Assurance Logbook updated from project to project. Upon request, submit logbook to Departmental Representative for review.
- .8 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 washdown of equipment.

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.

12 FIRES

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

1 Access

.1 Provide and maintain adequate access to project site.

.2 Access will be via existing roads and parking lots, and the Contractor is to maintain such roads for duration of contract and make good damage resulting from Contractor's use of roads.

2 Engineer's Site

.1 The Contractor will provide at his expense or construct a separate site Office for the exclusive use of the Departmental Representative and his representative. The building must be in place prior to commencement of work.

.2 Provide heating system to maintain 22 degrees C inside temperature at -20 degrees C outside temperature.

.3 The building will be approximately 2400mm x 3600 mm. It will have a suitable frame covered with a weatherproof siding and lined with plywood or other approved material. The floor will be of 19 mm thick material. It will be provided with suitable window with at least 1 m2 of glass and arranged to provide at least 0.5 m2 of screened opening. The door will be fitted with a lock set and two (2) keys.

.4 The office will be equipped with a drafting chair and a 900 mm by 1500 mm table having a hinged, smooth wooden top suitable for drafting.

.5 Install electrical lighting system to provide minimum 750 lux using surface mounted, shielded commercial fixtures with 10% upward light component.

.6 Maintain office in clean condition.

.7 Arrange and pay for telephone in Engineer's Office for his exclusive use. Long distance calls placed on this phone by the Engineer or his representative will be paid by the Engineer.

.8 The Harbour Authority office may be considered subject to Harbour Authority approval.

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| <u>3 Site Utilities</u> | .1 | Provide sanitary facilities, fresh water, and electricity, in accordance with governing regulations and ordinances. Contractor will make his own arrangements for utilities and they will be provided at Contractor's expense. |
| | | |
| <u>4 Removal of Temporary Facilities</u> | .1 | Remove temporary facilities from site when directed by Engineer. |
| | | |
| <u>5 Sanitary Facilities</u> | .1 | Provide sanitary facilities for work force in accordance with governing regulations and ordinances. |
| | .2 | Post notices and take such precautions as required by local health authorities. Keep area and premises in sanitary condition. |
| | | |
| <u>6 Power</u> | .1 | In general, power supply is available from the Harbour Authority. Make arrangements with the HA to continue service while the Contractor's temporary facilities are on site. Once permission is obtained, connect to existing power supply in accordance with Canadian Electrical Code. |
| | | |
| <u>7 Removal of Temporary Facilities</u> | .1 | Remove temporary facilities from site when directed by Engineer. |
| | | |
| <u>8 Construction Sign and Notices</u> | .1 | Contractor's advertisement signage is not permitted to be placed on residential properties. |
| | .2 | Safety and Instruction Signs and Notices:
.1 Provide legible, professionally made signs indicating hazards and safety instruction, of sufficient size to be clearly seen by house residents and public.
.2 Post signs in clear view.
.3 Install number and type of safety signage in accordance with Provincial and local safety regulations. |
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8 Construction
Sign and Notices
(Cont'd)

.3 Maintenance and Disposal of Site Signs:
.1 Maintain approved signs and notices in
good condition for duration of project and
dispose of off site on completion of project
or earlier if directed by Engineer.

9 Measurement
For Payment

.1 Not measured for payment.