

- 1.1 Description of Work
- .1 Site of work is at various locations within PEI National Park sites, namely: Ardgowan, Brackley Beach, Cavendish Beach, Grahams Lane, Green Gables, MacMillan Road and Fort Amherst.
 - .2 A Department Representative and weighers will be and available to work collaboratively and jointly with the Contractor to determine field quantities.
 - .3 The work of this contract includes the provision of all materials, labour, equipment, and ancillaries, all as necessary for the completion of the work as indicated on the drawings and as described in the specifications and notes. Work on this project consists generally of, but not limited to, the following:
 - .1 Mill existing asphalt and remove from site. Dispose of surplus millings off site.
 - .2 Excavating till and fill as required to facilitate construction as shown on the drawings.
 - .3 Relocate existing directional signs as required.
 - .4 Replace existing culverts with new, as indicated on drawing.
 - .5 Supply, install and remove all environmental protection measures required, such as silt fences, diversion ditches and check dams.
 - .6 Topsoil and hydro-seed all vegetated areas disturbed by construction.
 - .7 Supply, placing and compacting new granular Class A base.
 - .8 Blending of Class A base with asphalt millings where indicated on drawings.
 - .9 Construct asphalt and concrete curb.
 - .10 Remove existing wheelstops and supply and install precast concrete wheel stops.
 - .11 Supply, placing and compacting asphalt as shown on drawings.
 - .12 Supply and install new temporary and permanent pavement markings.
 - .13 Supply all necessary temporary road signs and traffic control.
 - .14 All other labour, materials and work necessary to complete the project to the Department Representative's full satisfaction.
 - .4 All work to be carried out in accordance with applicable federal and provincial regulations for those agencies having jurisdiction for the work. The work is subject to the National Park Act and Regulations, Canadian Environmental

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- 1.1 Description of Work
(Cont'd)
- .4 (Cont'd)
Protection Act, and the PEI Occupational and Safety Act and Regulations.
- .5 The Contractor is advised that other construction work may be being performed at several different locations by others during the time frame of this contract.
- .6 Maintain work during construction. Undertake continuous and effective maintenance work day by day, with adequate equipment and forces so that the work is continuously kept in a condition satisfactory to Department Representatives.
- 1.2 Familiarization With Site
- .1 Before submitting a bid, it is recommended that bidders visit the site to review and verify the form, nature and extent of the work, materials needed, the means of access and the temporary facilities required to perform the Work.
- .2 Obtain prior permission from the Departmental Representative before carrying out such site inspection.
- 1.3 Codes And Standards
- .1 Perform work in accordance with the 2010 National Building Code of Canada and any other code of provincial or local application, including all amendments up to bid closing date, provided that in any case of conflict or discrepancy, the more stringent requirement shall apply.
- .2 Materials and workmanship must meet or exceed requirements of specified standards, codes and referenced documents.
- 1.4 Interpretation of Documents
- .1 Supplementary to the Order of Precedence article of the General Conditions of the Contract, the Division 01 sections take precedence over the technical specification sections in other Divisions of the Project Manual.
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- 1.5 Term Engineer .1 Unless specifically stated otherwise, the term Engineer where used in the Specifications and on the Drawings shall mean the Department Representative as defined in the General Conditions of the Contract.
- 1.6 Setting Out Work.1 Assume full responsibility for and execute layout of work to locations, lines and elevations indicated.
- .2 Provide devices needed to lay out and construct work.
- .3 Supply such devices as straight edges and templates required to facilitate Departmental Representative's inspection of work.
- .4 Supply stakes and other survey markers required for laying out work.
- 1.7 Measurement For Payment .1 Notify Departmental Representative sufficiently in advance of operations to permit required measurements for payment.
- 1.8 Maintenance of Work During Construction .1 Maintain work during construction. Undertake continuous and effective maintenance work day by day, with adequate equipment and forces so that the roadway or structures are continuously kept in a condition satisfactory to Department Representative.
- 1.9 Codes .1 Perform work in accordance with National Parks Act, Code of Practice of the Department of Labour, as it pertains to the Temporary Workplace Traffic Control Manual (Department of Transportation, Infrastructure and Energy) and any other code of federal, provincial or local application provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.
- .2 Materials and workmanship must conform to or exceed applicable standards of Canadian General Standards Board (CGSB), Canadian Standards Association (CSA), American Society for Testing
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| 1.9 Codes (Cont'd) | .2 | (Cont'd) and Materials (ASTM) and other standards organizations. |
| | .3 | Conform to latest revision of any referenced standard as re-affirmed or revised to date of specification. Standards or codes not dated shall be deemed editions in force on date of tender advertisement. |
| 1.10 Work Within Park Boundaries | .1 | <p>The project is within a national park and it is essential that lands remain as undisturbed as possible. The Contractor will be expected to use standards and methods beyond those for normal construction in order to protect the environment and ensure the aesthetics of the work. Contract limits shall be strictly adhered to and every precaution shall be taken to minimize environmental damage and disruption to vegetation, wildlife habitat, and structures or existing services, both on construction and storage sites.</p> <p>.1 If any damage occurs during construction, the Contractor is responsible to bear the expense to immediately restore such damaged areas to the satisfaction of the Department Representative.</p> <p>.2 If Contractor fails to repair damage to the satisfaction of the Department Representative, the Department Representative may complete repairs at the Contractor's expense.</p> <p>.3 The Contractor shall ensure that contracted work meets the standards outlined in the contract specification and drawings.</p> <p>.4 The Contractor shall ensure that no damage will be done to underground telephone cables.</p> <p>.5 All sources of aggregate and asphalt cement must be submitted to the Department Representative for approval at least two weeks prior to the start of any work.</p> |
| 1.11 Documents Required | .1 | <p>Maintain at job site, one copy each of following:</p> <p>.1 Contract drawings</p> <p>.2 Specifications</p> <p>.3 Addenda and Amendments</p> <p>.4 Reviewed shop drawings</p> <p>.5 List of outstanding shop drawings</p> <p>.6 Change orders</p> |

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| 1.11 Documents Required <u>(Cont'd)</u> | .1 | (Cont'd) .7 Other modifications to Contract .8 Field test reports .9 Copy of approved work schedule .10 Health and Safety Plan and other safety related documents |
| 1.12 Site Conditions <u> </u> | .1 | The Contractor will be responsible to visit the roadway and review existing site conditions. |
| 1.13 Department Representative <u> </u> | .1 | Department Representatives can be contacted at: |

1.1 SUBMITTALS

- .1 Upon acceptance of bid and prior to commencement of work, submit to Departmental Representative the following work management documents:
 - .1 Work Schedule as specified herein.
 - .2 Shop Drawing Submittal Schedule specified in section 01 33 00.
 - .3 Waste Management Plan specified in section 01 74 22.
 - .4 Environmental Plan specified in section 01 35 44.
 - .5 Health and Safety Plan specified in section 01 35 29.
 - .6 Dust Control Plan specified in section 01 50 00.

1.2 WORK SCHEDULE

- .1 Upon acceptance of bid submit:
 - .1 Work schedule within 7 calendar days of contract award.
- .2 Schedule to indicate all calendar dates from commencement to completion of all work within the time stated in the accepted bid.
- .3 Provide sufficient details in schedule to clearly illustrate entire implementation plan, depicting efficient coordination of tasks and resources, to achieve completion of work on time and permit effective monitoring of work progress in relation to established milestones.
- .4 Work schedule content to include as a minimum the following:
 - .1 Bar (GANTT) Charts, indicating all work activities, tasks and other project elements, their anticipated durations, planned dates for achieving key activities and major project milestones supported with;
 - .2 Written narrative on key elements of work illustrated in bar chart, providing sufficient details to demonstrate a reasonable implementation plan for completion of project within designated time.
 - .3 Generally Bar Charts derived from commercially available computerized project management system are preferred but not mandatory.
- .5 Work schedule must take into consideration and reflect the work phasing, required sequence of work, special conditions and operational

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- 1.2 WORK SCHEDULE (Cont'd)
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- .5 (Cont'd)
restrictions as specified below and indicated on drawings.
- .6 Schedule work in cooperation with the Departmental Representative.
- .7 Completed schedule shall be approved by Departmental Representative. When approved, take necessary measures to complete work within scheduled time. Do not change schedule without Departmental Representative's approval.
- .8 Ensure that all subtrades and subcontractors are made aware of the work restraints and operational restrictions specified.
- .9 Schedule Updates:
.1 Submit on a when requested by Departmental Representative.
.2 Provide information and pertinent details explaining reasons for necessary changes to implementation plan.
.3 Identify problem areas, anticipated delays, impact on schedule and proposed corrective measures to be taken.
- .10 Departmental Representative will make interim reviews and evaluate progress of work based on approved schedule. Frequency of such reviews will be as decided by Departmental Representative. Address and take corrective measures on items identified by reviews and as directed by Departmental Representative. Update schedule accordingly.
- .11 In every instance, change or deviation from the Work Schedule, no matter how minimal the risk or impact on safety or inconvenience to tenant or public might appear, will be subject to prior review and approval by the Departmental Representative.
- 1.3 OPERATIONAL RESTRICTIONS
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- .1 Contractor to meet with the Departmental Representative on a weekly basis to identify intended work areas, activities and scheduling for the coming week.
- .2 Work on Brackley Beach Parking cannot commence until October 19, 2015.
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1.3 OPERATIONAL
RESTRICTIONS
(Cont'd)

- .3 The following sites could be left unpaved for winter 2015 as long as the granular base material is in place:
 - .1 Fort Amherst
 - .2 Brackley Beach
 - .3 Cavendish Beach
- .4 Tree cutting shall be done after August 15, 2015 and before April 1, 2016.
- .5 There is critical habitat identified on the west approach to Covehead Bridge. Do not work within ____ m of this habitat between April 1, 2016 and September 16, 2016.

1.4 PROJECT
MEETINGS

- .1 Schedule and administer project meetings, held on a minimum monthly bi-weekly weekly basis, for entire duration of work and more often when directed by Departmental Representative as deemed necessary due to progress of work or particular situation.
- .2 Prepare agenda for meetings.
- .3 Notify participants in writing 4 days in advance of meeting date.
 - .1 Ensure attendance of all subcontractors.
 - .2 Departmental Representative will provide list of other attendees to be notified.
- .4 Hold meetings at project site or where approved by Departmental Representative.
- .5 Preside at meetings and record minutes.
 - .1 Indicate significant proceedings and decisions. Identify action items by parties.
 - .2 Distribute to participants by mail or by facsimile within 3 calendar days after each meeting.
 - .3 Make revisions as directed by Departmental Representative.

1.5 OTHER CONTRACTS

- .1 Another contract will be in progress near the site during the course of this work.
- .2 The project title and subject matter of these contracts are:
 - .1 Covehead Bridge Widening - contract to commence in October 2015 and scheduled completion is spring 2016.

1.5 OTHER CONTRACTS .3
(Cont'd)

The General Contractor is:

.1 To Be Determined.

- .4 Further contracts may be let during the period that this contract is in progress.
- .5 Cooperate with other Contractors in carrying out their respective works and carry out all instructions from the Departmental Representative in this regard.
- .6 Connect properly and coordinate work with that of other Contractors. If any part of the work under this Contract depends for its proper execution or result upon the work of another Contractor, report promptly to the Departmental Representative, in writing, any defects in the work of such other Contractors as may interfere with the proper execution of this work.

PART 1 - GENERAL

1.1 Measurement .1 All measurement shall be along a horizontal plane unless otherwise indicated.

1.2 Pay Items .1 Contract Overhead, Including but not limited to: Site Office, Traffic Control, Erosion and Sedimentation Control, Relocation of Existing Services and Mobilization Unit of Measurement: Lump Sum (L.S.) Method of Measurement: Payment to be made on a percentage completion basis for each section of reconstructed roadway and parking area.

Earthwork

- .2 Mass Excavation-Common:
 - .1 Unit of Measurement: cubic metre (m3)
 - .2 Method of Measurement: average end area method between cross sections taken after grubbing and/or topsoil removal and to the lines and elevations indicated.
 - .3 This item includes: excavation, movement/transporting, placement as fill and compaction to the lines and elevations indicated. This item includes unsuitable material not suitable for re-use as fill, and disposal off site. Written authorization required from Department Representative for unsuitable material. This item includes removals, disposal off site or re-use in the work, of all existing stone walls, gabion walls, boulder walls, concrete and other sidewalks, curbs/gutters, duct banks/duct-runs where applicable, boulders: non-reused manholes, catch basins, concrete pipes; and other structures and items required to be removed and not specifically included in other pay items.
- .3 Premium Borrow:
 - .1 Unit of Measurement:tonne.
 - .2 This item includes: transportation, supply, placement and compaction in layers including compaction and materials testing.

1.2 Pay Items
(Cont'd)

- .3 Premium Borrow:(Cont'd)
.2 This item includes:(Cont'd)

Storm Sewer

- .4 Catch Basins:
.1 Installation of New Catch basins
.2 Unit of Measurement: Each.
.3 Method of Measurement: number of units installed by type and size.
.4 This item includes: excavation, granular bedding and backfilling, compaction, supply and placement of catch basins, frames and grates as specified. Includes adjustment to finished grade.
- .5 Culverts:
.1 Unit of Measurement: metre (m).
.2 Method of Measurement: along centreline of new culvert pipe, from end to end of culvert, or extension, as laid and as accepted by the Department Representative.
.3 This item includes: pipe, excavation, granular pipe bedding and backfilling, compaction, bar screen, reinstatement and hand-laid stone headwall at each end.
.4 This item includes excavation and removal of existing CSP culverts, and disposal of all old culvert material for which there is no direct payment.

Road Construction

- .6 Asphalt Milling:
.1 Unit of Measurement: square metre (m²).
.2 Method of measurement: plan measurement from width and length of existing asphalt surfaces.
.3 This item includes: milling of the asphalt as indicated on the plan or as directed by the Department Representative.
- .7 Gravels:
.1 Class A - Base Material.
.2 Class B - Shoulder Material.
.3 Crusher fines.
.4 Unit of Measurement: Metric Tonne (1000 kg).
.5 Method of Measurement: from accepted truck slips, except as provided below.
.6 There shall be no payment for extra thickness of gravels placed or gravels placed outside of limits. Whenever in the opinion of

1.2 Pay Items
(Cont'd)

- .7 Gravels:(Cont'd)
.6 (Cont'd)
the Department Representative there is extra thickness, the appropriate weight will be deducted.
.7 This item includes: supply, placement and compaction of gravel as indicated for roadway, shoulder and parking areas including compaction and materials testing. It excludes gravels at structures and where included in other pay items, e.g. culverts and pipes, manholes and catchbasins, etc. It excludes any gravels for temporary traffic routes/widening.
- .8 Asphaltic Concrete:
.1 Type A - Base Course. Type B - Surface Course.
.2 Unit of Measurement: Metric Tonne (1000 kg)
.3 Method of Measurement: from accepted truck slips, except as provided below.
.4 There shall be no payment for extra thickness or extra width of asphalt placed. Wherever in the opinion of the Department Representative there is extra thickness, the appropriate weight will be deducted.
.5 Tack coat and pavement markings included.
.6 Materials testing included.
- .9 Rip-Rap:
.1 Unit of Measurement: cubic metre (m3)
.2 Method of Measurement: volume of Rip-Rap acceptably placed as accepted by Department Representative, from front face of Rip-Rap to face of geotextile.
.3 This item includes: supply and placing hard durable Rip-Rap, backup granulars and geotextile. This item includes any related excavation of in-situ soil or backfill, which is incidental and not separately measured, and associated grading, shaping and fill, plus reinstatement to produce the finished product.

1.2 Pay Items
(Cont'd)

- .9 Rip-Rap:(Cont'd)
.3 This item includes:(Cont'd)

Landscaping & Miscellaneous

- .10 Placing Topsoil:
.1 Unit of Measurement: square metre (m2)
.2 Method of Measurement: plan area measure.
.3 This item includes: excavation, grading, topsoil, lime and fertilizer, required accessories, and maintenance, if any areas are designated by the Department Representative during construction. It excludes reinstatement of existing grassed areas, for which there is no direct payment.
- .11 Hydroseeding:
.1 Unit of Measurement: square metre (m2)
.2 Method of Measurement: slope measure, from slope height and horizontal length of sections.
.3 This item includes: hydroseed mix, mulch, erosion control agent, water and fertilizer as specified and maintenance to ensure successful growth, with re-seeding if required for which there is no direct payment.
- .12 Concrete wheelstops:
.1 Unit of Measurement: Each(Ea)
.2 Method of measurement: number of units installed
.3 This item includes: supply and installation of curbs and reinforcing bar.
- .13 Granular trail:
.1 Unit of Measurement: square metre(m2)
.2 Method of measurement: measured area of horizontal or sloped surface.
.3 This item includes: excavation, removal of existing, compaction, levelling, and supply/installation of granular base/topping.
- .14 Concrete curb:
.1 Unit of Measurement: metre(m)
.2 Method of measurement: length of horizontal or sloped surface.
.3 This item includes: excavation installation of granular base and supply/installation of concrete curb and associated formworks.
- .15 Asphalt Curb:
.1 Unit of Measurement: metre (m)
.2 Method of measurement: length of curb measured along centerline.

1.2 Pay Items
(Cont'd)

- .15 Asphalt Curb:(Cont'd)
 - .3 This item includes: removal of existing curb, supply and installation of new asphalt curb.
- .16 Project Sign:
 - .1 The removal, storage and replacement of existing signs within the limits of construction is considered incidental, to be included in overall tender price.
 - .2 No separate measurement for payment will be made for this work.
- .17 All and any items not specifically included in the Measurement for Payment and Pay Item List are considered a part of the work and are to be included in the tendered price for related work.

1.1 RELATED
SECTIONS

- .1 Section 01 78 00: Closeout Submittals.

1.2 SUBMITTAL
GENERAL
REQUIREMENTS

- .1 Submit to Departmental Representative for review requested submittals specified in various sections of the specifications including shop drawings, samples, permits, compliance certificates, test reports, work management plans and other data required as part of the work.
- .2 Submit with reasonable promptness and in orderly sequence so as to allow for Departmental Representative's review and not cause delay in Work. Failure to submit in ample time will not be considered sufficient reason for an extension of Contract time and no claim for extension by reason of such default will be allowed.
- .3 Do not proceed with work until relevant submissions have been reviewed.
- .4 Present shop drawings, product data, samples and mock-ups in SI Metric units.
- .5 Where items or information is not produced in SI Metric units, provide soft converted values.
- .6 Review submittals prior to submission. Ensure that necessary requirements have been determined and verified and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents.
.1 Submittals not stamped, signed, dated and identified as to specific project will be returned unexamined by Departmental Representative and considered rejected.
- .7 Verify field measurements and affected adjacent Work are coordinated.
- .8 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .9 Contractor's responsibility for errors, omissions or deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative's review.

1.2 SUBMITTAL
GENERAL
REQUIREMENTS
(Cont'd)

- .10 Submittal format:
- .1 Submit paper originals, or alternatively clear and fully legible photocopies of originals. Facsimiles are not acceptable, except in special circumstances pre-approved by Departmental Representative. Poorly printed non-legible photocopies or facsimiles will not be accepted and be returned for resubmission.
- .2 Submit in electronic format as pdf files. Forward pdf and in the native program format, NMS Edit Professional spp, MS Word, MS Excel, MS Project and Autocad dwg and photograph jpg files on USB compatible with Public Works and Government Services Canada encryption requirements or through email or alternate electronic file sharing service such as ftp, as directed by Departmental Representative.
- .11 Make changes or revision to submissions which Departmental Representative may require, consistent with Contract Documents and resubmit as directed by Departmental Representative. When resubmitting, identify in writing of any revisions other than those requested.
- .12 Keep one reviewed copy of each submittal document on site for duration of Work.

1.3 SHOP DRAWINGS
AND PRODUCT DATA

- .1 The term "shop drawings" means fabrication drawings, erection drawings, diagrams, illustrations, schedules, performance charts, technical product data, brochures, specifications, test reports installation instructions and other data which are to be provided by Contractor to illustrate compliance with specified materials and details of a portion of work.
- .2 Shop Drawing Quantities: submit sufficient copies required by the General Contractor and sub-contractors plus 3 4 copies which will be retained by Departmental Representative.
- .1 Ensure sufficient copies are submitted to enable one complete set to be included in each of the maintenance manuals specified in 01 78 00.

1.4 SAMPLES

- .1 Submit for review samples as specified in respective specification Sections. Label samples with origin and intended use.
- .2 Deliver samples to Departmental Representative's office or to other address as directed. Do not drop off samples at construction site except for pre-approved circumstances previously approved by Departmental Representative.
- .3 Notify Departmental Representative in writing, at time of submission of deviations in samples from requirements of Contract Documents.
- .4 Where colour, pattern or texture is criterion, submit full range of samples.
- .5 Adjustments made on samples by Departmental Representative are not intended to change Contract Amount. If adjustments will result in a cost increase to the Contract notify Departmental Representative in writing prior to proceeding with Work.
- .6 Make changes in samples which Departmental Representative may require, consistent with Contract Documents.
- .7 Reviewed and accepted samples will become standard of workmanship and material against which installed Work will be verified.

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| <u>1.1 RELATED SECTIONS</u> | .1 | Section 01 35 29: Health and Safety Requirements. |
| <u>1.2 REFERENCES</u> | .1 | Fire Protection Standards issued by Fire Protection Services, Labour Program Division of Service Canada: .1 FCC No. 301-June 1982 Standard for Construction Operations. .2 FCC No. 302-June 1982 Standard for Welding and Cutting. |
| | .2 | FCC standards may be viewed at: http://www.hrsdc.gc.ca/eng/labour/fire_protection/policies_standards/commissioner/index.shtml .1 Fire Protection Services - Atlantic Region office, Halifax, N.S, Tel. 902-426-6053. |
| <u>1.3 FIRE SAFETY REQUIREMENTS</u> | .1 | Implement and follow fire safety measures during Work. Comply with following: .1 National Fire Code 2010. .2 Fire Protection Standards FCC 301 and FCC 302. .3 Federal and Provincial Occupational Health and Safety Acts and Regulations. |
| | .2 | In event of conflict between any provisions of above authorities the most stringent provision will apply. Should a dispute arise in determining the most stringent requirement, Departmental Representative will advise on the course of action to be followed. |

1.1 RELATED
SECTIONS

- .1 Section 01 35 24: Special Procedures on Fire Safety Requirements.

1.2 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.

1.3 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 5 work days of notification of Bid Acceptance. Provide 3 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

1.3 SUBMITTALS
(Cont'd)

- .2 (Cont'd)
- .4 (Cont'd)
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.
- .3 Submit name of designated Health and 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.

1.4 COMPLIANCE
REQUIREMENTS

- .1 Comply with Occupational Health and Safety Act for Province of Prince Edward Island, and Occupational Health and Safety 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 as well as any other regulations made pursuant to the Act.
 - .1 The Canada Labour Code can be viewed at: [www.http://laws-lois.justice.gc.ca/eng/acts/L-2/fulltext.html](http://laws-lois.justice.gc.ca/eng/acts/L-2/fulltext.html).
 - .2 Canadian Occupational Health and Safety Regulations can be viewed at: <http://laws-lois.justice.gc.ca/eng/regulations/SOR-86-304/index.html>.
 - .3 A copy may be obtained at: Canadian Government Publishing Public Works & Government Services Canada Ottawa, Ontario, K1A 0S9 Tel: 819-956-4800 or 1-800-635-7943 Publication No. L31-85/2000 (E or F).

1.4 COMPLIANCE
REQUIREMENTS
(Cont'd)

- .3 Treasury Board of Canada Secretariat (TBS):
 - .1 Treasury Board, Fire Protection Standard April 1, 2010 www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=17316§ion=text.
- .4 Canadian Standards Association (CSA):
 - .1 CSA S350-M1980(R2003), Code of Practice for Safety in Demolition of Structures.
- .5 In case of conflict or discrepancy between above specified requirements, the more stringent shall apply.
- .6 Maintain Workers Compensation Coverage in good standing for duration of Contract. Provide proof of clearance through submission of Letter in Good Standing.

1.5 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.

1.6 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

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| 1.6 SITE CONTROL AND ACCESS (Cont'd) | .2 | (Cont'd) |
| | .1 | (Cont'd) |
| | | 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. See Section 01 50 00 for minimum acceptable requirements. |
| | .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. Provide security guard where adequate protection cannot be achieved by other means. |
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| 1.7 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. |
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| 1.8 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. |
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1.9 PERMITS

- .1 Post permits, licenses and compliance certificates, specified in section 01 10 10, at Work Site.
- .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.

1.10 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.

1.11 PROJECT/SITE
CONDITIONS

- .1 Following are potential health, environmental and safety hazards at the site for which Work may involve contact with:
 - .1 Existing hazardous and controlled products stored on site:
 - .1 Petroleum products and fuels for equipment.
- .2 Above items shall not be construed as being complete and inclusive of potential health and safety hazards encountered during Work.
- .3 Include above items in the hazard assessment of the Work.
- .4 MSDS Data sheets of pertinent hazardous and controlled products stored on site can be obtained from Departmental Representative.

1.12 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

1.12 MEETINGS
(Cont'd)

- .1 (Cont'd)
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.

1.13 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.

1.13 HEALTH AND
SAFETY PLAN
(Cont'd)

- .3 (Cont'd)
 - .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 Public Works and Government Services Canada 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.

1.14 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

1.14 SAFETY
SUPERVISION
(Cont'd)

- .2 (Cont'd)
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.
- .6 Cooperate with Facility's Occupational Health and Safety representative should one be designated by Departmental Representative.
- .7 Keep inspection reports and supervision related documentation on site.

1.15 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.

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- 1.15 TRAINING .3 When unforeseen or peculiar safety-related
(Cont'd) 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.
- 1.16 MINIMUM .1 Notwithstanding requirement to abide by federal
SITE SAFETY RULES 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.
- 1.17 CORRECTION OF .1 Immediately address health and safety
NON-COMPLIANCE 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.
- 1.18 INCIDENT .1 Investigate and report the following incidents
REPORTING 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,
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- | | | |
|-----------------------------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>1.18 INCIDENT REPORTING (Cont'd)</u> | .1 | (Cont'd) .4 Interruptions to Facility operations resulting in an operational lost to a Federal department in excess of \$5,000.00. |
| | .2 | Submit report in writing. |
| | | |
| <u>1.19 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. |
| | | |
| <u>1.20 CONFINED SPACES</u> | .1 | Abide by occupational health and safety regulations regarding work in confined spaces. |
| | .2 | Safety for Inspectors: .1 Provide PPE and training to Departmental Representative and other persons who require entry into confined space to perform inspections. .2 Be responsible for efficacy of equipment and safety of persons during their entry and occupancy in the confined space. |
| | | |
| <u>1.21 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. |
| | .2 | Upon request, make available to Departmental Representative or authorized Safety Officer for inspection. |
| | | |
| <u>1.22 POSTING OF DOCUMENTS</u> | .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. |
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- | | | |
|------------------------------------------|----|---------------------------------------------------------|
| 1.22 POSTING OF DOCUMENTS (Cont'd) | .2 | Post other documents as specified herein, including: |
| | .1 | Site specific Health and Safety Plan. |
| | .2 | WHMIS data sheets. |

1.1 RELATED WORK

- .1 Waste Management and Disposal: Section 01 74 22.

1.2 REFERENCES

- .1 WHMS: 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

1.3 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.

1.3 DEFINITIONS
(Cont'd)

- .5 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.

1.4 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.

1.5 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.

1.6 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 No fuel or petroleum products shall be stored on site. Do not fuel or lubricate equipment within buffer zones.
- .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.

1.7 DISPOSAL OF
WASTES

- .1 Do not bury rubbish, demolition debris and waste materials on site.
- .2 Dispose and recycle demolition debris and waste materials in accordance with project waste management requirements specified in section 01 74 22.
- .3 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.
- .4 Dispose of hazardous waste in accordance with applicable federal and provincial laws, regulations, codes and guidelines.

1.7 DISPOSAL OF
WASTES
(Cont'd)

- .5 Any construction, contaminated soil or demolition debris will be disposed of in a Provincially approved manner (Either a permit or receipts for tippage must be submitted to the departmental representative to verify that the material was disposed of in a provincially approved manner).

1.8 VEGITATION

- .1 Work should be scheduled to avoid periods of heavy precipitation. Short-term erosion and sediment control measures (i.e. silt fence, straw bales, temporary matting, geotextile filter fabric) must be installed to prevent runoff from entering any adjacent waterway. These structures will remain in place until natural vegetation has been established.
- .2 Fill material used in construction must be clean and non-toxic (free from fuel, oil, grease and/or contaminates).
- .3 Any exposed soil area must be minimized by limiting the area that is exposed at one time and by limiting the time that any one area is exposed. All stockpiled material must be covered and/or dyked to prevent erosion or silty runoff from leaving the site. Exposed soil should be replanted or sodded to ensure soil stabilization.
- .4 Avoid disturbance of vegetation and natural features where possible. All work is to be confined to the site limits delineated and/or directed by the Departmental Representative.
- .5 Restore disturbed areas as close as possible to natural conditions. Backfill excavate, grade and contour soil, replace topsoil, fertilize and reseed with approved seed mixture.
- .6 No cutting of vegetation will take place between May 15th and August 31st.
- .7 No staging of materials/equipment will take place on any environmentally sensitive areas, beaches or dunes. All staging area sites, if required, will be determined by the Departmental Representative.

1.8 VEGITATION
(Cont'd)

.7 (Cont'd)

- .8 If materials of potential historical or cultural interest are encountered, work will cease at that location and the Departmental Representative will be notified.

1.9 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.
- .4 Adequate signage and safety measures must be supplied during transportation of materials and equipment to and within the site.

1.10 WATER QUALITY

- .1 Maintenance of equipment must be carried out on a regular basis.
- .2 The construction material must be clean and non-toxic (free of fuel, oil, grease, and/or any contaminants).
- .3 Remove any accidental release of concrete on site prior to solidification.
- .4 Ensure concrete trucks are clean and will not release any material during transport to the site.
- .5 Do not discharge residual or rejected concrete on site. Do not wash and clean concrete vehicles on site. Carryout all dumping and cleaning operations at the concrete plant according to all provincially approved practices/regulations.

1.10 WATER QUALITY .6
(Cont'd)

Follow any sediment and erosion control plan and an emergency response plan provided by the Departmental Representative.

1.11 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.
- .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.
- .7 Ensure that food scraps and garbage are not left at the work site.

1.12 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

1.12 FISH AND
FISH HABITAT
(Cont'd)

- .2 (Cont'd)
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 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 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.

1.12 FISH AND
FISH HABITAT
(Cont'd)

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

1.13 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.
- .5 All construction equipment must be fitted with standard and well-maintained noise suppression devices. Construction activities must respect appropriate time restriction and use smaller, less disturbing equipment where possible.

1.14 FIRES

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

1.15 SPECIFIC
RESTRICTIVE AREA

- .1 Specific Restricted areas for access during construction activities identified in Section 01 14 10.

1.1 RELATED
SECTIONS

- .1 Section 01 33 00 - Submittal Procedures.

1.2 INSPECTION

- .1 Give timely notice requesting inspection of Work designated for special tests, inspections or approvals by Departmental Representative or by inspection authorities having jurisdiction.
- .2 In accordance with the General Conditions, Departmental Representative may order any part of Work to be examined if Work is suspected to be not in accordance with Contract Documents.
- .3 If Contractor covers or permits to be covered Work designated for special tests, inspections or approvals before such is made, uncover Work until particular inspections or tests have been fully and satisfactorily completed and until such time as Departmental Representative gives permission to proceed.
- .4 Pay costs to uncover and make good work disturbed by inspections and tests.

1.3 TESTING

- .1 Tests on materials, equipment and building systems as specified in various sections of the Specifications is the responsibility of the Contractor except where stipulated otherwise.
.1 Provide all necessary instruments, equipment and qualified personnel to perform tests.
- .2 At completion of tests, turn over 2 sets of fully documented tests reports to the Departmental Representative. Submit in accordance with Section 01 33 00.
.1 Obtain additional copies for inclusion of a complete set in each of the maintenance manuals specified in Section 01 78 00.
- .3 Unspecified tests may also be made by Departmental Representative, at the discretion of the Departmental Representative. The costs of these tests will be paid for by the Departmental Representative.
- .4 Where tests or inspections reveal work not in accordance with contract requirements, Contractor shall pay costs for additional tests and inspections incurred by Departmental

1.3 TESTING
(Cont'd)

- .4 (Cont'd)
Representative as required to verify
acceptability of corrected work.

1.4 INDEPENDENT
INSPECTION AGENCIES

- .1 Departmental Representative will engage and pay
for service of Independent Inspection and
Testing Agencies for purpose of inspecting and
testing portions of Work except for the
following which remain part of Contractor's
responsibilities:
.1 Inspection and testing required by laws,
ordinances, rules, regulations or orders of
public authorities.
.2 Inspection and testing performed
exclusively for Contractor's convenience.
.3 Testing, adjustment and balancing of
mechanical and electrical equipment and other
building systems.
.4 Tests as specified within various sections
designated to be carried out by Contractor under
the supervision of Departmental Representative.
- .2 Provide sufficient advance notice to
Departmental Representative of time when the
Work will be ready for testing by designated
Testing Agency in order for Departmental
Representative to make attendance arrangements
with such Agency. When directed by Departmental
Representative notify the Agency directly.
- .3 When specified or directed, submit
Representative samples of materials, in required
quantities, to Testing Agency for testing
purposes. Submit with reasonable promptness and
in an orderly sequence so as not to cause delay
in Work.
- .4 Provide labour and facilities to obtain, handle
and deliver samples.
- .5 Provide sufficient space on site for Testing
Agency's exclusive use to store equipment and
cure test samples.
- .6 Employment of Independent Inspection and
Testing Agencies by Departmental Representative
does not relax responsibility to perform Work in
accordance with Contract Documents.

- 1.5 ACCESS TO WORK .1 Facilitate Departmental Representative's access to Work. If part of Work is being fabricated at locations other than construction site, make preparations to allow access to such Work whenever it is in progress.
- .2 Furnish labour and facility to provide access to the work being inspected and tested.
- .3 Co-operate to facilitate such inspections and tests.
- 1.6 REJECTED WORK .1 Remove and replace defective Work, whether result of poor workmanship, use of defective or damaged products and whether incorporated in Work or not, which has been identified by Departmental Representative as failing to conform to Contract Documents.
- .2 Make good damages to new and existing construction and finishes resulting from removal or replacement of defective work.

1.1 SITE ACCESS
AND PARKING

- .1 The Departmental Representative will designate Contractor's access to project site as well as parking facilities for equipment and workers.
- .2 The Contractor is advised that while parking facilities for his workers and subcontractors will be on property, such parking facilities may be remote from the actual site of the work. In any case, follow all instructions from the Departmental Representative in regards to parking facilities.
- .3 Build and maintain temporary access roads and provide snow removal and dust control during period of work.
- .4 Maintain new and existing roads and parking areas at site, where used by Contractor, for duration of contract.
 - .1 Keep clean and free of mud and dirt by washing on a regular basis.
 - .2 Provide snow removal in areas located within construction site or enclosed by work.
 - .3 Make good and repair damage resulting from Contractor's use of existing roads, asphalted areas and lawns on site.

1.2 CONTRACTOR'S
SITE OFFICE

- .1 Be responsible for and provide own site office, if required, including electricity, heat, lights and telephone. Locate site office as directed by Departmental Representative.

1.3 MATERIAL
STORAGE

- .1 Material storage space on site is limited . Coordinate delivery to minimize storage period on site before being needed for incorporation into work.

1.4 SANITARY
FACILITIES

- .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.

1.5 CONSTRUCTION
SIGN AND NOTICES

- .1 Upon request by Departmental Representative, erect a self supporting project sign in location indicated.

- 1.5 CONSTRUCTION SIGN AND NOTICES
(Cont'd)
- .2 Departmental Representative will provide a vinyl sign facing for installation by Contractor on sign framework. Sign frame to be plywood face of approximately 1200 x 2400 mm in size complete with required wood framing at 400 mm o.c and support posts.
- .3 Install sign plumb and level in neat wood framework and securely anchor in ground by posts to withstand wind pressure of 160 km/h.
- .4 Contractor or subcontractor advertisement signboards are not permitted on site.
- .5 Safety and Instruction Signs and Notices:
.1 Signs and notices for safety and instruction shall be in both official languages or commonly understood graphic symbols conforming to CAN/CSA-Z321-96(R2006).
- .6 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 Departmental Representative.
- 1.6 REMOVAL OF TEMPORARY FACILITIES
- .1 Remove temporary facilities from site when directed by Departmental Representative.

PART 1 - GENERAL

- | | | |
|-----------------------------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>1.1 DESCRIPTION</u> | .1 | This section is to provide traffic control pursuant to Section 6 of the Provincial Roads Act as stipulated in the PEI Temporary Workplace Traffic Control Manual (TWTCM). |
| <u>1.2 RELATED WORK</u> | .1 | General Instructions - Section 01 10 10 |
| | .2 | Health and Safety Requirements - Section 01 35 29 |
| <u>1.3 REFERENCE STANDARD</u> | .1 | Regulate traffic in accordance with the Roads Act (Prince Edward Island) as stipulated in the TWTCM distributed by the Prince Edward Island Department of Transportation, Infrastructure and Energy and Parks Canada regulations. |
| | .2 | The Departmental Representative reserves the right to direct the contractor to reduce either the number or length of traffic control work areas during peak traffic volumes or when cumulative delays exceed the specified maximum. |
| <u>1.4 MEASUREMENT FOR PAYMENT</u> | .1 | See Section 01 29 00 - Project Particulars and Measurement. |
| <u>1.5 PROTECTION OF PUBLIC TRAFFIC</u> | .1 | Comply with requirements of Acts, Regulations and By-Laws in force for regulation of traffic or use of roadways upon or over which it is necessary to carry out work or haul materials or equipment. |
| | .2 | When working on travelled way: <ul style="list-style-type: none"> .1 Place equipment in position to present minimum of interference and hazard to travelling public. .2 Keep equipment units as close together as working conditions will permit and preferably on same side of travelled way. .3 Do not leave equipment on travelled way overnight. |
-

1.5 PROTECTION OF
PUBLIC TRAFFIC
(Cont'd)

- .3 Do not close any lanes of roadway without approval of Department Representative. Before re routing traffic, erect suitable signs and devices in accordance with instructions contained in the TWTCM. Provide sufficient crushed gravel to ensure a smooth riding surface during work.
- .4 Keep travelled way well graded, free of pot holes and of sufficient width that required number of lanes of traffic may pass.
- .5 Limit construction to maintain at least one lane of traffic at all times.
- .6 When directed by Department Representative, provide well graded, detours or temporary roads to facilitate passage of traffic around restricted construction area. Provide and maintain signs and lights and maintain roadway.
- .7 Provide and maintain reasonable road access and egress to property fronting along or in vicinity of work under Contract unless approved otherwise by Department Representative.
- .8 Contractor must make provisions to transport cyclists and their bicycles thru activity work zones while pilot vehicle operations are in place.

1.6 INFORMATIONAL &
WARNING DEVICES

- .1 Provide and maintain signs and other devices required to indicate construction activities or other temporary and unusual conditions resulting from project work which may require road user response.
- .2 All traffic signs are to be bilingual or symbolic and shall be Level 1 reflectivity.
- .3 Supply and erect signs, declinators, barricades and miscellaneous warning devices as specified in TWTCM.
- .4 Place signs and other devices in locations recommended in the TWTCM.
- .5 The contractor shall provide an Accredited Sign Supervisor, who has successfully completed the Temporary Workplace Traffic Control Training Course, to be on site at all times when active construction is taking place. The Accredited

1.6 INFORMATIONAL & .5
WARNING DEVICES
(Cont'd)

(Cont'd)

Traffic Control Sign Supervisor will be responsible to supervise the placement and dismantling of all temporary condition signs and devices that indicate to the road user that highway construction activity exist and also to ensure that proper traffic control procedures are carried out in accordance with the TWTCM. The Accredited Sign Supervisor is considered part of the contractors supervision and administration staff and compensation the provision this individual is considered incidental to the work.

- .6 A traffic control plan must be approved by the Departmental Representative prior to commencing any work.
- .7 Continually maintain traffic control devices in use by:
 - .1 Checking signs daily for legibility, damage, suitability and location. Clean, repair or replace to ensure clarity and reflectance.
 - .2 Removing or covering signs which do not apply to conditions existing from day to day.

1.7 CONTROL OF
PUBLIC TRAFFIC

- .1 Provide traffic control personnel who have a valid provincial license and trained in accordance with and properly equipped as specified in the TWTCM, in following situations:
 - .1 When public traffic is required to pass working vehicles or equipment which may block all or part of travelled roadway.
 - .2 When it is necessary to institute one way traffic system through construction area or other blockage where traffic volumes are heavy, approach speeds are high and traffic signal system is not in use.
 - .3 When workers or equipment are employed on travelled way over brow of hills, around sharp curves or at other locations where oncoming traffic would not otherwise have adequate warning.
 - .4 Where temporary protection is required while other traffic control devices are being erected or taken down.
 - .5 For emergency protection when other traffic control devices are not readily available.
 - .6 In situations where complete protection for workers, working equipment and public

1.7 CONTROL OF
PUBLIC TRAFFIC
(Cont'd)

- .1 (Cont'd)
.6 (Cont'd)
traffic is not provided by other traffic control devices.
- .2 All Traffic Control Personnel shall be equipped with portable radios of sufficient range to ensure continuous communication within the traffic control zone.
- .3 All construction vehicles shall operate in accordance with and are subject to traffic control restrictions and operations in place on the project.

1.8 TRAFFIC
MANAGEMENT
PLAN REQUIREMENT

- .1 Contractor to provide a detailed traffic management plan, prior to construction.
- .2 Two way, one lane traffic is to be maintained for duration of project.
- .3 Culvert placement to proceed as a separate operation throughout the length of the project.
- .4 The road work to proceed in approximately 2.5 kilometre (max) sections.
- .5 Traffic control measures are summarized as follows:
 - .1 Single lane traffic will be maintained at all times and will be a contract obligation.
 - .2 Complete road closures will not be permitted, unless some exceptional circumstances arise.
 - .3 Radio communications and one-way traffic controls will be used during the shoulder seasons.
- .6 The required traffic measures will be included in the construction contract. A detailed construction sequencing and Traffic Management Plan will be required prior to construction. On-going information and communications will be maintained throughout the construction period.

1.1 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.

1.2 WASTE
MANAGEMENT

- .1 Incorporate environmental and sustainable practises in managing waste resulting from work.
- .2 Divert as much waste as possible from landfill.
- .3 Coordinate work of subtrades and subcontractors to ensure all possible waste reduction and recycling opportunities are taken. Follow waste management requirements specified in trade sections of the Specifications.
- .4 Reduce waste during installation of new materials. Undertake practices which will optimize full use of materials and minimize waste.
- .5 Provide on-site facilities to collect, handle and store anticipated quantities of reusable, salvageable and recyclable materials.
- .6 Establish methods whereby hazardous and toxic materials, and their containers used on site are properly handled, stored and disposed in accordance with applicable federal, provincial and municipal laws and regulations.

1.3 DISPOSAL
REQUIREMENTS

- .1 Burying or burning of rubbish and waste materials is prohibited.
- .2 Disposal of volatile materials, mineral spirits, oil, paint, and other hazardous materials into waterways, storm, or sanitary sewers is prohibited.
- .3 Dispose of waste only at approved waste processing facility or landfill sites approved by authority having jurisdiction.
- .4 Contact the authority having jurisdiction prior to commencement of work, to determine what, if any, demolition and construction waste materials have been banned from disposal in landfills and

1.3 DISPOSAL
REQUIREMENTS
(Cont'd)

- .4 (Cont'd)
at transfer stations. Take appropriate action to isolate such banned materials at site of work and dispose in strict accordance with provincial and municipal regulations.
- .5 Transport and dispose of waste intended for waste processing plant or landfill facility in separated condition and to Operator's rules and recommendations in support of their effort to recycle, reduce and divert certain waste stream from general landfill.
- .6 Collect, bundle and transport salvaged materials to be recycled in separated categories and condition as directed by recycling facility. Ship materials only to approved recycling facilities.
- .7 Sale of salvaged items by Contractor to other parties not permitted on site.

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| <u>1.1 WORK INCLUDED</u> | .1 | Administrative procedures preceeding inspection and acceptance of Work by Departmental Representative. |
| | | |
| <u>1.2 RELATED SECTIONS</u> | .1 | Section 01 78 00: Closeout Submittals. |
| | | |
| <u>1.3 INSPECTION AND DECLARATION</u> | .1 | Contractor's Inspection: Coordinate and perform, in concert with subcontractors, an inspection and check of all Work. Identify and correct deficiencies, defects, repairs and perform outstanding items as required to complete work in conformance with Contract Documents. .1 Notify Departmental Representative in writing when deficiencies from Contractor's inspection have been rectified and that Work is deemed to be complete and ready for Departmental Representative's inspection of the completed work. |
| | .2 | Departmental Representative's Inspection: Accompany Departmental Representative during all substantial and final inspections of the Work. .1 Address defects, faults and outstanding items of work identified by such inspections. .2 Advise Departmental Representative when all deficiencies identified have been rectified. |
| | .3 | Note that Departmental Representative will not issue a Certificate of Substantial Performance of the work until such time that Contractor performs following work and turns over the specified documents: .1 Project record as-built documents; .2 Compliance certificates from applicable authorities; .3 Reports resulting from designated tests. |
| | .4 | Correct all discrepancies before Departmental Representative will issue the Certificate of Completion. |

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| <u>1.1 WORK INCLUDED</u> | .1 | Project Record Documents. |
| | .2 | Operations and Maintenance Data. |
| | | |
| <u>1.2 RELATED SECTIONS</u> | .1 | Section 01 33 00 - Submittal Procedures |
| | | |
| <u>1.3 PROJECT RECORD DOCUMENTS</u> | .1 | Departmental Representative will provide 2 white print sets of contract drawings and 2 copies of Specifications Manual specifically for "As-Built" purposes. |
| | .2 | Maintain at site one set of the contract drawings and specifications to record actual As-Built site conditions. |
| | .3 | Maintain up-to-date, real time as-built drawings and specifications in good condition and make available for inspection by the Departmental Representative upon request. |
| | .4 | As-Built Drawings: .1 Record changes in red ink on the prints. Mark only on one set of prints and at completion of work, neatly transfer notations to second set (also by use of red ink). .2 Submit both sets to Departmental Representative prior to application for Certificate of Substantial Performance. .3 Stamp all drawings with "As-Built". Label and place Contractor's signature and date. .4 Show all modifications, substitutions and deviations from what is shown on the contract drawings. .5 All change orders issued over the course of the contract must be documented on the finished As-Built documents, accurately and consistently depicting the changed condition as it applies to all affected drawing details. |
| | .5 | As-Built Specifications: legibly mark in red each item to record actual construction, including: .1 Manufacturer, trade name, and catalogue number of each product actually installed, particularly items substituted from that specified. .2 Changes made by Addenda and Change Orders. |
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1.3 PROJECT RECORD .5
DOCUMENTS
(Cont'd)

As-Built Specifications:(Cont'd)

.3 Mark up both copies of specifications;
stamp "As-Built", sign and date similarly to
drawings as per above clause.

.6 Maintain As-Built documents current as the
contract progresses. Departmental Representative
will conduct reviews and inspections of the
documents on a regular basis. Failure to
maintain as-builts current and complete to
satisfaction of the Departmental Representative
shall be subject to financial penalties in the
form of progress payment reductions and holdback
assessments.

.7 Submit on paper and in electronic format as pdf
files. Forward pdf and in the native program
format, NMSEdit Professional spp, MS Word, MS
Excel, MS Project and Autocad dwg and photograph
jpg files on USB compatible with Public Works
and Government Services Canada encryption
requirements or through email or alternate
electronic file sharing service such as ftp, as
directed by Departmental Representative.

1.4 REVIEWED .1
SHOP DRAWINGS

Provide a complete set of all shop drawings
reviewed for project to incorporate into each
copy of the Operations and Maintenance Manuals.