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# SOLICITATION AMENDMENT
# MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**
**Raison sociale et adresse du fournisseur/de l'entrepreneur**

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V6Z 0B9

| | |
|---|---|
| **Title - Sujet**<br>Existing Utility Rehabilitation | |
| **Solicitation No. - N° de l'invitation**<br>EZ899-181161/A | **Amendment No. - N° modif.**<br>002 |
| **Client Reference No. - N° de référence du client** | **Date**<br>2017-10-24 |
| **GETS Reference No. - N° de référence de SEAG**<br>PW-$PWY-036-8183 | |
| **File No. - N° de dossier**<br>PWY-7-40222 (036) | **CCC No./N° CCC - FMS No./N° VME** |
| **Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-11-06** | **Time Zone**<br>**Fuseau horaire**<br>Pacific Daylight Saving Time PDT |
| **F.O.B. - F.A.B.**<br>**Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐ | |
| **Address Enquiries to: - Adresser toutes questions à:**<br>Martin (PWY), Delia | **Buyer Id - Id de l'acheteur**<br>pwy036 |
| **Telephone No. - N° de téléphone**<br>(778) 707-2139 (  ) | **FAX No. - N° de FAX**<br>(604) 775-6633 |
| **Destination - of Goods, Services, and Construction:**<br>**Destination - des biens, services et construction:**<br>Parks Canada (PCA) - Fort Rodd Hill National Historic Site - Colwood, BC | |

**Instructions: See Herein**

**Instructions: Voir aux présentes**

| | |
|---|---|
| **Delivery Required - Livraison exigée** | **Delivery Offered - Livraison proposée** |
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| **Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)**<br>**Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)**<br><br>**Signature** | **Date** |

Canada

This Amendment 002 is raised to:

1: Extend the solicitation closing date
2: Issue Addendum No. 2

**1: Extension of Solicitation Closing Date**

Extension of Time for Tenderers

Existing Utility Rehabilitation – Parks Canada
Fort Rodd hill National Historic Site, Victoria, BC
Solicitation No: EZ899-181161/A

Notice is hereby given that the time for reception of tenders previously due at 2:00 p.m. P.D.S.T. on 30 October, 2017 is hereby extended to 2:00 p.m. P.S.T. on 06 November 2017.

**2: Issue Addendum No. 2**

Please see Addendum No. 2 attached below.

The addendum will form part of the contract documents.

**All other terms and conditions remain unchanged.**

# Addendum No. 2

2017-10-23

The following changes in the tender documents are effective immediately. This addendum will form part of the contract documents

**1. <u>Reference Technical Specifications, Section 01 35 43 --Environmental Procedures</u>**

Insert "Item 1.7 - The Contractor shall review and comply fully with the requirements of the environmental management plan for Fort Rodd Hill as attached, and incorporate any and all cost impacts in the tender value submitted."

----End of Addendum----

ISL Engineering and Land Services

Inspiring sustainable thinking

**Public Services and Procurement Canada**

Environmental Management Plan

# Fort Rodd Hill National Historic Site

# Existing Utility Rehabilitation

October 2017

# Table of Contents

# ENVIRONMENTAL MANAGEMENT PLAN

for the

# Fort Rodd Hill National Historic Site Existing Utility Rehabilitation

## 1.0 EMP Purpose

ISL Engineering and Land Services Ltd (ISL) has designed and assisted in the preparation of construction tender documents for watermain and pavement rehabilitation at Fort Rodd Hill National Historic Site – Existing Utility Rehabilitation (FRHNHS -EUR).

The Environmental Management Plan (EMP) provides over-arching guidance and direction to bidding contractors. The EMP outlines expectations for the delivery of environmental effects mitigation and construction impact mitigation by the Contractor. The EMP provides both location specific prescriptions for mitigating or avoiding negative effects on ecosystem components as well as well-known best management practices (BMPs) that the contractor must implement to concurrent with their work.

Mitigatory measures to minimize impacts to the vegetation, fisheries, and wildlife resources have been incorporated within the engineering design drawings and ancillary environmental protection and mitigation documentation included within this EMP. The Contractor selected to complete this work will be required to implement both environmental protection measures (i.e. erosion control, sediment control, water quality control) and vegetation, and wildlife habitat impact mitigatory measures prior to, concurrent with, and during the post-construction warranty period.

Environmental protection and mitigation measures are critical to project success. The Contractor will need to work diligently with the site Environmental Monitor (EM), and federal environmental specialists to ensure that protective and mitigatory measures are implemented per the design, the contract, and this EMP.

Prospective contractors are advised to **carefully read and understand this EMP** before they submit responses to the tender, to ensure they have adequately captured environmental protection and impact mitigation requirements for this project, and priced their activities appropriately.

## 2.0 Background

Fort Rodd Hill is a National Historic Site located in the City of Colwood (Figure 1). It was established in the 1890's as a coastal artillery base to defend Victoria and the Esquimalt Naval Base. The fort consists of three gun batteries, underground magazines, command posts, guard houses, barracks, and searchlight emplacements.

The watermains servicing the site are at the end of their service life and ISL has prepared a design to rehabilitate the existing watermain and associated infrastructure utilizing existing infrastructure corridors to minimize environmental disturbance and disturbance of potential locations of archeological or heritage significance.


*Figure 1. Satellite imagery showing location of Fort Rodd Hill National Historic Site, and approximate location of the designated Learning Meadow (Google, 2017).*

# 3.0 Scope of construction activities

The Contract specifications set out details of the civil construction activities for the project. For the purposes of this EMP, the FRHNHS - EUR involves the following project activities and components:

- Removal and replacement of existing water services.
- Decommissioning of some watermains and associated infrastructure.
- Installation of temporary above ground watermain to maintain water services throughout construction.
- Removal and replacement of existing drainage culverts.
- Critical construction impact mitigation to protect and conserve valued ecosystem components, including Species at Risk, within the designated Garry Oak Learning Meadow.

- Important provisions related to construction activities to mitigate potential construction related risks or hazards to VEC's including trees, soils, air quality, archeological resources, spills, etc.

# 4.0 Environmental setting

FRHNHS -EUR is in proximity to the Strait of Juan De Fuca, however it is at a significant enough distance from the ocean that construction is not anticipated to have any impacts on the marine environment. The project does not require work within watercourses that would meet the definition of a stream, and it is not anticipated that there will be interaction with fish habitat as defined by the federal *Fisheries Act.*

There is limited potential for the project to interact with wildlife species since no tree removal is required and the project construction will fall well outside of the nesting bird window (March 15 – August 15).

A portion of the EUR passes through The Learning Meadow. This restored Garry Oak Ecosystem is located east of the north gate to a point 105 m south. It is an area of very high environmental sensitivity since it contains an endangered plant species at risk - Deltoid Balsamroot. The Learning Meadow also contains other rare or sensitive native plant species which need to be protected and conserved per prescriptions in this EMP.

While no tree removal is anticipated to be required to undertake the EUR, at several locations Garry Oak trees and Douglas fir trees are located in close proximity to the watermain trench. It will be important for the Contractor to work with the engineer of record, their arborist, the project Environmental Monitor and hydrovac subcontractor to minimize tree branch, tree root and tree bole damage during excavation in proximity of these few trees.

# 5.0 Environmental monitoring, communication and reporting

- A qualified, experienced, Environmental Monitor (EM) will be provided by ISL for this project.
- The contractor **is not required** to provide their own EM for this project.
- Prior **to any work on the site,** a pre-construction environmental orientation meeting will be held amongst the EM, Project Manager, engineer of record, federal environmental staff and contractor.
- At this environmental, orientation roles, responsibilities, and contact information along with a communication protocols will be confirmed so that there are clear lines of communication amongst the project team **(SCHEDULE 1).**
- At the pre-construction orientation meeting, the EM will complete a Contractor Environmental Orientation Record (CEOR) to ensure a complete understanding of the environmental mitigation requirements and best management practices outlined in this EMP **(SCHEDULE 2).**
- Seven days prior to any work on fencing surrounding the Learning Meadow or work of any kind within the Learning Meadow, the Contractor will contact the Contract Administrator and the Environmental Monitor to arrange **a second Site Specific Environmental Orientation** onsite environmental orientation for the Learning Meadow. The meeting will include the CA, EM, federal specialists, and Contractor so that there is a clear understanding of risks, boundaries, fencing locations and other mitigation measures for work on and within the Learning Meadow.

- Environmental Monitoring will be full time at start-up, full-time for work within the learning meadow and then part time during the balance of the construction period.
- The EM will be notified a minimum of 5 days prior to mobilizing to the site, 7 days prior to commencing work within the Learning Meadow and 3 days notice prior to any hydrovac work around Garry Oak trees.

The EM's responsibilities include:

- Establishing flagging (ribbon) lock-outs on specific trees or groves where excavation work will require the oversite of a Professional Arborist.
- Liaising with federal specialists to ensure that species at risk within the Learning Meadow are protected from disturbance.
- Issuing written field memorandum to the Contractor and notifying the CA in the event of non-conformance with this EMP.
- Recommending stop work provisions in the event of Contractor non-conformance.
- Directing the Contractor on required protective or mitigatory measures to meet requirements of environmental regulatory advice, approvals, known construction environmental best practices (BMP's) and this EMP.
- Requiring that the site supervisor and/or contractors have on site all documentation regarding location of environmentally sensitive areas, environmental mitigation, and this EMP.
- Completing and submitting a copy of a post construction report consistent with the recommended standard format to the Contractor Administrator within 60 days project completion. The report will document that construction has been completed and will document any difficulties encountered during the project.

# 6.0 Contractor's requirements to mitigate risk of harm to Deltoid Balsamroot within the Learning Meadow

- Deltoid Balsamroot, is an endangered plant species, protected from disturbance per provisions in the federal Species at Risk Act (SARA).
- Disturbance to individual Deltoid Balsamroot must be avoided by the Contractor.
- The work required in the Learning Meadow is to be completed first, to ensure the work is done before late winter/early spring.
- Disturbance to Deltoid Balsamroot can be achieved by establishing clear no disturbance areas prior to entry to the Learning Meadow.
- The Contractor must provide 7 days notice to the EM prior to any activity on or within the Learning Meadow.
- The Contractor must complete Site Specific Contractor Environmental Orientation prior to work within or access into the Learning Meadow.

- As a general prohibition, the Contractor's crew must not access, any portion of the Learning Meadow laying north or east of the line shown in Figure 2.

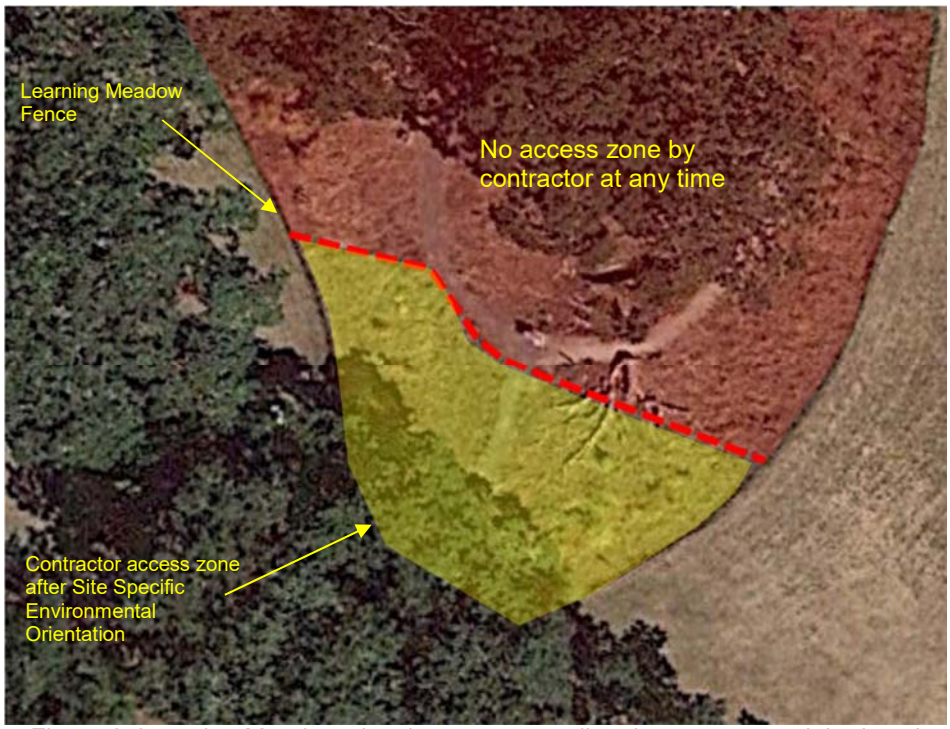


Figure 2. Learning Meadow showing no access disturbance area and the location where the Contractor may access after Site Specific Environmental Orientation.

- A fence has been constructed around the Learning Meadow to prevent unauthorized access and to prevent deer and small mammals from accessing the area.
- The Learning Meadow fence will have to be cut to allow access to the area.
- The Contractor may consider cutting the fence twice perpendicularly when accessing the Learning Meadow when accessing the site to conserve (to the extent possible) the buried lower edge of fence and small mammal barrier.
- The fence must not be cut prior to the Site Specific Environmental Orientation.
- The Learning Meadow fence must be closed (wired shut) after equipment entry or trench cutting through the fence.
- Similarly, the pedestrian access gate must be closed at all times following crew entry and exit from the Learning Meadow.
- The Contractor is to post a sign on the pedestrian gate and on the equipment entry location indicated gate or fence is to be closed at all times.
- The Contractor must not allow gates or fencing to stand open at the end of the work-days or work-shifts.

- The Contractor must reinstate the Learning Meadow fence, including small mammal barrier attached to the fence, to the preconstruction condition.
- The Contractor needs to be aware that the small mammal barrier and fence are buried into the upper soil horizon and will need to be reinstalled in that condition.
- At the direction of the federal Species at Risk Specialist the Contractor will install 'no disturbance' fencing' along the edge of the approved working easement through the Learning Meadow.
- The Contractor will install signage on the temporary fencing indicating that the areas beyond the temporary fence are no entry zones.
- The Contractor shall not move or disturb the temporary protective fencing until directed by the EM in writing.

# 7.0 Contractor's requirements to mitigate risk to other valued ecosystem components within the Learning Meadow

In addition to the Deltoid Balsamroot, the Learning Meadow supports other native plant species propagated by the federal environmental specialists as part of biodiversity conservation. Disturbance to these native plant species must be minimized during construction. The Environmental Monitor, federal specialist, and Contractor must work together to identify area where soil or plants need to be salvaged prior to disturbance.

The topsoil within and adjacent to the watermain trench will support native herbs, shrubs and seeds that may be dormant and not be readily visible during the time of construction. The Contractor needs to minimize effects on these native plants by:

- Utilizing the smallest machinery available to reduce construction footprint, soil track disturbance, and compaction.
- Utilizing "swamp pads" (which can consist of such material as heavy plywood or lumber) to reduce track disturbance of soils around the trench, and to reduce soil compaction.
- Ensuring footwear, clothing, equipment and machinery coming into contact with terrestrial environments must be free of invasive alien species individuals, seeds, propagules and pathogens. This applies to coming onto FRH and moving between areas with invasive species and areas where there are no invasive species such as the Learning Meadow.
- Restoring top soil in the upper trench to its previous structure and function by:
    - Removing the upper layer (30 cm) of topsoil containing native plant bulbs and seeds, and stockpiling that material, for later reuse, separate from mineral soils.
    - Avoiding machine compaction or vibratory compaction in the upper top soil horizon (30 cm).
    - Replacing the salvaged existing topsoil over the disturbed trench area in an uncompacted manner.
- Adjusting trench location to pass through the Learning Meadow in a manner that minimizes disruption to native shrubs.

- Revegetating all disturbed soils with a forb rich seed mixture at a rate of 500 seeds per square meter. Species should include *Camassia leichtlinii* ( 40%), *Allium cernuum* (15%), *Frittillaria affinis* (10%), *Plectritis congesta* (10%) , *Erythronium oregonum* (10%), *Carex deweyana* (10%) *Fragaria virginiana* (5%).

# 8.0 Contractor's requirements to minimize disturbance to Garry Oak and other trees

- The project was designed to utilize existing infrastructure corridors to minimize disturbance to existing tree branches, boles and roots.
- Despite efforts to minimize interaction with trees, there are a few areas where ground disturbance will be well within the rooting zone/driplines of established trees.
- These trees will be flagged by the EM prior to construction, and work in and around the trees is "locked-out" until a Professional Arborist attends the location and removes the flagging "lock-out".
- **The Contractor will be required to retain the Professional Arborist** who will assist in guiding the Contractor to work in the vicinity of trees at risk from trench excavation.
- The Contractor's arborist must be given adequate notice by the Contractor to attend to the site, and the arborist must be onsite for all work within the tree lock-out zone.
- Trench excavation in lock-out zones (or specific trees) will only be undertaken by hydro-vac, provided by the Contractor, and under the direction of the arborist.

# 9.0 Contractor's requirements to avoid disturbance to cultural resources

- A qualified, experienced, archeologist/heritage specialist will be provided by the Owner for this project.
- The Contractor **is not required** to provide their own archeological/heritage specialist for this project.
- The Contractor must review drawings and identify zones where and archeologist/heritage specialist is required to be onsite during ground disturbing activities.
- The Contractor will provide 10 days written notice to the Contract Administrator prior to commencing work within any area designated as having archaeological or heritage values.
- If project activities have the potential to disturb any heritage, archaeological or paleontological features. The Contractor must obtain approval from the Park Cultural Resource Officer prior to initiating work.
- If the Contractor inadvertently uncovers archaeological resources or black greasy soils containing shell fragments, construction at the site will be immediately halted.
- The Contractor will report to the Parks Canada Project Manager immediately of this discovery so that a Registered Professional Archaeologist can assess the site.

- The Contractor must not collect or disturb artifacts within Fort Rodd Hill National Historic Site.

## 10.0 Contractor's requirements to prevent spread of invasive plant species

- Footwear, clothing, equipment and machinery coming into contact with the terrestrial or aquatic environment must be free of invasive alien species individuals, seeds, propagules (i.e., any other material that may cause the spread of the species) and pathogens, accordingly:
    - Equipment must be washed/steam cleaned prior to arrival.
    - The Contractor must ensure that all crew footwear, clothing and equipment are free of invasive alien species (e.g., seeds, propagules) and caked mud when workers deploy to the site.
    - Should the Contractor have crew working at multiple project locations, and these crew members are travelling between the FRHNHS-EUR and offsite projects, the Contractor must ensure that their crew are cleaning footwear before entering FRHNHS – EUR project site.
    - The EM will inspect machinery, equipment, boots and jackets prior to its entry to the Learning Meadow to confirm that the machinery and equipment is free of mud, soil and vegetation that could transport invasive plant species.
    - All soil, gravel, erosion and sediment control products, or other applicable materials must be from a certified weed-free source.
    - Ensure that organic material (e,g., topsoil, borrow and fill material, gravel) taken from the construction site is free of invasive alien species before using in other parts of the protected heritage place.
    - Minimize ground disturbance and vegetation removal, as practical and within project requirements, to reduce the risk of creating seedbed for invasive species.
    - Minimize bare soil exposure to minimize seedbed for invasive plant species (i.e. cover soil stockpiles with tarps, plant native species, cover with natural mulch/ground coverings).
    - Stabilize and re-vegetate disturbed areas as soon as possible with native plants, soil and seed mix approved by designated Parks Canada staff. Do not use standard reclamation seed mixes containing non-native grasses and plants.

## 11.0 Contractor's erosion control and sediment control requirements

Prior to commencement of work, the Contractor must obtain sufficient quantities of silt fence, sandbags, erosion control blanketing, polyethylene sheeting, etc. necessary to stabilize disturbed ground. These materials must be onsite, available for inspection and installation prior to the commencement of any ground disturbance.

- Effective sediment and erosion control measures are to be installed concurrent with work to prevent tracking of muds and soils and to prevent sediment accumulations on walkways or drainages.
- These measures are to be inspected by the EM regularly during the course of construction. Necessary repairs will be made by the Contractor immediately if any damage occurs such that erosion and sediment control is compromised.
- All works will be conducted in a manner that will prevent the release of sediment or sediment-laden waters to ephemeral watercourses, ditches, storm sewers and swales.
- All efforts will be made to minimize disturbance, including machine tracking area and leave undisturbed terrain wherever possible.
- Work will be pursued to completion as quickly as possible once started.
- Effective sediment and erosion control measures are to be maintained until re-vegetation of disturbed areas is achieved.
- All work which involves heavy machinery that is disturbing earth material must be suspended during substantial rainfall. Substantial rainfall will be determined by the EM after a review of weather conditions and existing ground saturation.
- All soil stockpiles are to be covered during construction.
- Any debris removed from the work site are to be stabilized to prevent them from entering the watercourse (i.e. covering spoil piles with secured tarps).
- Disturbed areas of soil that would remain exposed after construction is completed are to be fully restored. This may entail placement of a fully bio-degradable, jute backed, coir-based erosion and sediment blanket (such as Nilex C125BN) or an similar equivalent.
- Straw and hay may not be used for erosion control purposes on this site.
- Non native grass or standard legumaceous reclamation seed mixes must not be used for soil stabilization on this project.

# 12.0 Items pertaining to the Contractor's Use of Grouts and Hazardous wastes

- The Contractor shall undertake all concrete/grouting work with caution, as wet cement/grout is highly toxic to aquatic organisms. The Contractor shall comply with, at a minimum, the following procedures:
    - The Contractor must capture grout and drill wastings to prevent its entry to the aquatic environment.
    - There shall be no contact with freshwater ephemeral watercourses or stormdrainage through spillage, hosing off surfaces, rain, or cleaning of tools.
    - Complete isolation of all cast-in-place concrete and grouting from rainwater ng waters for a minimum of 48 hours. Any water that contacts uncured or partly cured concrete shall be isolated and held, or treated, until the pH is between 6.5 and 8.5 before discharge to storm drain systems.

- Identify and handle all toxic/hazardous materials as required under the Canadian Environmental Protection Act, Transportation of Dangerous Goods Act and Workplace Hazardous Materials Information Service.
- It is not anticipated that the works will uncover contaminated soils. In the event of a hydrocarbon spill the absorbent materials or soils saturated with oil (> 3% by mass) or gasoline are classified as Hazardous Waste. If encountered or generated, contaminated soils must be excavated and hauled off-site to an accepted treatment/disposal area.

# 13.0 Contractor's hydrocarbon wastes and fuel spill mitigation measures

- Oil, grease, lubricants or other construction fluids must be prevented from entering into the terrain, drainage infrastructure or to ephemeral overland flow paths.
- The Contractor must keep an emergency spill kit onsite; it is mandatory, will be inspected and will be required to be onsite each day the Contractor's crew is working on the site. The minimum spill kit will be equivalent to at least a 140 liter sorbent capacity spill kit and include the following:
  - 1 - 50 gal Poly Cart with Lid and 8" Wheels
  - 1 - 10 m long absorbent spill booms
  - 70 - 16" x 20" Sorbent Pads (Oil, Gas & Diesel)
  - 6 - 48" x 3" Sorbent Socks (Oil, Gas & Diesel)
  - 4 -120" x 3" Sorbent Socks (Oil, Gas & Diesel)
  - 4 - 8" x 18"Sorbent Pillows (Oil, Gas & Diesel)
  - 8 Pairs of Nitrile Gloves
  - 1 - Disposable Coverall
  - 20 - Hand Wipes
  - 1 - Epoxy Putty 4oz
  - 1 - Knife
  - 1 - Roll Duct Tape
  - 2 - Disposable Respirators N958 HD
  - Hazmat Disposal Bags


- On-site personnel must be aware of its location and trained in its use. Any contaminants must be recovered at source and disposed according to applicable laws, policies and regulations.
- Contractors will be held responsible to ensure that oil, grease or other deleterious substances do not enter any environmentally sensitive areas.

- There is to be no machine refueling within 15 m of areas of overland flow or catchbasins.
- The Contractor is wholly responsible for costs associated with clean-up of spills originating from their equipment or work practices, and for the clean-up of 'contaminated water, soils and sediments that may be generated by a spill originating from their equipment or activities.
- Call before you dig. BC One Call 1-800-474-6886.
- A reference spill response plan outlining basic spill response strategies and reporting requirements is set out in **SCHEDULE 3.**
- The Contractor must develop a responsive project specific spill response plan to the reference spill response plan in **SCHEDULE 3.**
- All on-site personnel must be briefed on reporting requirements for hazardous materials spills; spills must be reported immediately to designated Parks Canada staff.
- Any spill of a substance toxic to aquatic life of reportable quantities will be immediately reported to the Provincial Emergency Program 24 hour phone line at 1-800-663-3456 and/or BC RAPP line at 1-877-952-7277 and the Parks Canada Project Manager or Duty Officer.

## 14.0 The Contractor's non-hazardous waste handling requirements

- There will be no disposal of solid wastes, including litter into sumps, ditches, trenches, culverts, road edges or private property.
- Waste will be disposed of at a suitable locations in labelled waste receptacles, adjacent to the active work site(s).
- Waste bins must have lids and must be wildlife proof (durable bins with locking lids).
- Waste bins must be emptied when they are full with waste disposed of at a facility approved for the category of waste collected.
- Littering is prohibited and monitoring for this activity will be on-going throughout the project.

## 15.0 The Contractor's requirements for minimizing air pollution

- The contractor will avoid excessive vehicle idling.
- Personal vehicles; light diesel truck must not be left unoccupied and idling for more than one minute.
- Heavy machinery must not be left unoccupied and idling for more than 5 minutes.

## Schedule 1 - Project contact list

| NAME | ORGANIZATION | ROLE | OFFICE # | CELL/PAGER # | EMAIL |
|---|---|---|---|---|---|
| TBD | TBD | TBD | TBD | TBD | TBD |
| TBD | TBD | TBD | TBD | TBD | TBD |
| TBD | TBD | TBD | TBD | TBD | TBD |
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| TBD | TBD | TBD | TBD | TBD | TBD |

# Schedule 2 - Contractor Environmental Orientation Record

## ISL Environmental Management - Contractor Environmental Orientation Record

The Contractor Environmental Orientation Record (CEOR) shall be completed for all works involving an environmental component. The Environmental Monitor is responsible for ensuring that the environmental requirements of the work are reviewed with the Contractor before work is started, and that a record of the discussion is documented on the CEOR. The form must be signed by both the Environmental Monitor and the Contractor. By signing the CEOR, the Contractor indicates he/she has been advised of the environmental requirements of the project. The CEOR shall be filed with the Contract documents as required to confirm pay items, or to otherwise satisfy requirements of the contract.

| | | | |
|---|---|---|---|
| | Date: | | File No. |
| **1** | **Project Information** | | |
| | Project Title | | |
| | Project Description | | |
| | Project Location | | |
| **2** | **Contractor Information (if applicable)** | | |
| | Company Name | | |
| | Company Address | | |
| | Site Contact/Representative Name | | |
| | Tel. # | Fax # | E-mail |
| **3** | **Environmental Management Plan** Review the environmental issues and requirements of the work as specified in the Environmental Management Plan (EMP), Regulatory approvals or Best Management Practices (BMP) | | |
| | Is there an EMP, CMP,BMP or Field Guide for the work? | ❑ Yes | ❑ NA |
| | Have the environmental requirements been reviewed with the Contractor and the Contractor's staff? (Use the checklist below to guide discussion) | ❑ Yes | ❑ NA |

| Environmental Issues | Environmental Management Plan Requirements | Discussed | NA |
|---|---|---|---|
| Fish and Aquatic - habitat alteration, disturbance or loss | | ❑ | ❑ |
| Site isolation & Bypass | | ❑ | ❑ |
| Instream footprint mitigation | | ❑ | ❑ |
| Riparian footprint mitigation (Vegetation disturbance or removal and mitigation) | | ❑ | ❑ |
| Noxious weed control | | ❑ | ❑ |
| Wildlife and Bird - habitat alteration, disturbance or loss | | ❑ | ❑ |
| Soil erosion/compaction Water quality - erosion and siltation | | ❑ | ❑ |
| Disturbance to Heritage Resources/Archaeological Sites | | ❑ | ❑ |
| Noise Concerns | | ❑ | ❑ |
| Hazardous waste (garbage) | | ❑ | ❑ |

| Environmental Issues | Environmental Protection Requirements | Discussed | NA |
|---|---|---|---|
| Air emissions/ dust generation/other | | ❑ | ❑ |
| Generation and disposal of waste (litter, latrine) | | ❑ | ❑ |
| Fuel and flammable storage | | ❑ | ❑ |
| Fuel-Spill of Spill of hazardous substances | | ❑ | ❑ |
| Generation and disposal of hazardous substances | | ❑ | ❑ |
| Property Considerations | | ❑ | ❑ |
| Do the tools and equipment meet the requirements? | | ❑ | ❑ |

| | | |
|---|---|---|
| **Permits and Approvals Information:** Ensure the necessary environmental permits and approvals relating to the work have been obtained prior to starting work. | | |
| Are environmental notification, permits, licenses or approvals required? | ❑ Yes | ❑ NA |
| List applicable regulatory requirements and permit reference numbers. | | |
| | | |
| | | |
| | | |
| Have the permits, licenses and approvals obtained and/or checked? | ❑ Yes | ❑ NA |
| **Emergency Response Plan/Oil and Chemical Spill Response Plan** | | |
| Has the Oil and Chemical Spill Response Plan been discussed? | ❑ Yes | ❑ NA |
| Are there spill kits available on location? | ❑ Yes | ❑ NA |
| Where are the spill kits located? | ❑ Yes | ❑ NA |
| Does the contractor have an Emergency Response Plan? Has it been discussed? | | |
| **Environmental Incident Reporting** | | |
| Environmental Incident Reporting Procedures discussed? | ❑ Yes | ❑ NA |

***The undersigned has been briefed on the environmental requirements of the work as detailed above.***

Signed: _____ Contractor Foreman Date: _____

Counter-signed: _____ Environmental Monitor Date: _____

**Additional Comments:**

_____

_____

_____

# Schedule 3 - Reference Spill Response Procedures

**INCIDENT**

If a spill of fuel, oils, lubricants or other harmful substances occurs at the site, the following procedures will be implemented.

| Spill Response Steps |
|---|
| 1. **ENSURE SAFETY** |
| 2. **STOP THE FLOW** (when possible) |
| 3. **SECURE THE AREA** |
| 4. **CONTAIN THE SPILL** |
| 5. **NOTIFY/REPORT** (PEP 1-800-663-3456) |
| 6. **CLEAN-UP** |
| (Circumstances may dictate another sequence of events) |

**1. ENSURE SAFETY**

- Ensure Personal, Public, and Environmental Safety
- Wear appropriate Personal Protective Equipment (PPE)
- Never rush in, always determine the product spilled before taking action
- Warn people in immediate vicinity
- Ensure **no ignition sources** if spill is of a flammable material

**2. STOP THE FLOW** (when possible)

- Act quickly to reduce the risk of environmental impacts
- Close valves, shut off pumps or plug holes/leaks, set containers upright
- Stop the flow of the spill at its source

**3. SECURE THE AREA**

- Limit access to spill area
- Prevent unauthorized entry onto site

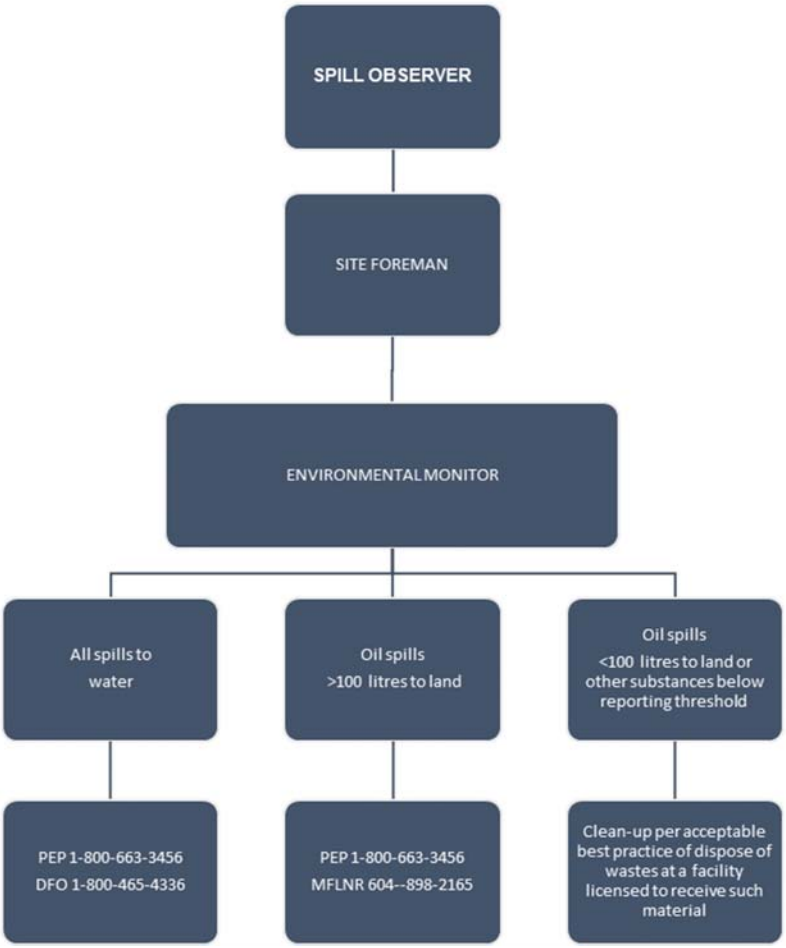
**4. CONTAIN THE SPILL**

- Block off and protect ditches, drains and culverts
- Prevent spilled material from entering drainage structures (ditches, culverts, drains)
- Use spill sorbent material to contain spill
- If necessary, use a dike, berm or any other method to prevent any discharge off site
- Make every effort to minimize contamination
- Contain as close to the source as possible

**5. NOTIFY/REPORT**

- Notify Site Supervisor and EM (or alternate) of incident (provide spill details)
- When necessary, the first external call should be made to (see spill reporting requirements):
  **Provincial Emergency Program (PEP) 1-800-663-3456 (24 hours)**
- Provide necessary spill details to other external agencies (see spill reporting requirements)

## Spill Reporting Notification Chart




| Product | Quantity |
|---|---|
| **Class 2.1** - flammable gas (e.g., propane) | 10 kg or 10 min. |
| **Class 2.2** - non flammable gas (e.g., SF6, $CO_2$) | 10 kg or 10 min. |
| **Class 3** - flammable liquids | 100 liters |
| **Class 8** - corrosive liquid acids and caustics (e.g., battery acid) | 5 kg or liters |
| **Class 9** - environmentally hazardous (e.g., PCB's, used ethylene glycol) | 1 kg or liters |
| Oil & Waste Oil | 100 liters |
| Other Substances (e.g., new antifreeze, power-wash water) | 200 kg or liters |
| Pesticides & Herbicides | 1 kg or liter |

*****ALL SPILLS TO WATER ARE REPORTABLE*****

If in doubt as to whether or not to report a spill, err on the side of caution and report the spill.