

Terms of Reference (TOR)

2022 Consulting Services

FOR

Venus Mine Site

Yukon



**Prepared by: Yukon Region
Crown - Indigenous Relations and Northern Affairs Canada (CIRNAC)**

Prepared for:

Revision	Date	Comments
0		
1	Oct 28, 2022	Revised for tender re-issue
2		

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1. General Information

1.1 General

This Terms of Reference (TOR) has been developed by Crown - Indigenous Relations and Northern Affairs Canada (CIRNAC) to solicit environmental professional services beginning in the fiscal year 2022/23 and ending March 31, 2024 in support of a Request for Proposal seeking an engineering consultant for the assessment phase for Venus Mine Site and to provide a class 5 cost estimate to remediate the site. The assessment phase of the project will involve at minimum, consideration to some extent the phases provided below.

CIRNAC will retain the services of the Consultant under contract xx. As such, team members outlined in the proposal will be expected to fulfill their respective roles on this project as required. Where the Consultant wishes to add additional staff not previously identified as part of their bid, all staff resumes must be forwarded to the Project Authority and subsequently approved prior to the staff commencing work.

CIRNAC is requesting the Consultant provide a level of effort required to complete the tasks outlined within this TOR and adhere to all standards and guidelines outlined. The Consultant will be the prime Consultant or Constructor and will be responsible to coordinate any Sub-Consultant or Specialty Consultant. The services outlined apply not only to The Consultant, but to any Sub-Consultant and Specialty Consultant disciplines that may be required. The project is being funded through the Federal Contaminated Sites Action Plan (FCSAP) and must be compliant with FCSAP requirements including reporting structures and submission deadlines.

1.2 Federal Contaminated Sites Action Plan (FCSAP)

Federal contaminated sites are a legacy of past land use practices when the environmental consequences were not appreciated. Since 1999, Treasury Board Secretariat (TBS) has approved a Management Framework of policies and best practices including the Federal Contaminated Sites Management Policy (TBS, 2000b). Under this Policy, individual departments are responsible for managing their contaminated sites within existing budgets. CIRNAC is the custodian of the Venus Mine Site and project sponsor/proponent.

FCSAP is administered jointly by TBS and Environment Canada (EC), which houses the Secretariat. Scientific and technical advice is provided by EC, Fisheries and Oceans Canada (DFO), Health Canada (HC) and PSPC.

1.3 Background

The Venus Mine site was primarily a gold and silver mine located approximately 20 km south of Carcross, Yukon between the South Klondike Highway and Windy Arm of Tagish Lake. The site consists of a covered tailings impoundment area and the concrete foundations of the former mill. The mill was constructed in 1970 and operated for approximately one year. The tailings are confined by natural topography on the north and west sides and by a constructed earthen embankment on the south and east sides.



The site is located within the Traditional Territory of the Carcross/Tagish First Nation.

In the 1994 a remedial options plan recommended a cover system and a sealed sheet pile wall be installed. In 1995 remediation occurred to contain the tailings to prevent human/wildlife interaction, install a Waterloo Barrier to saturate the tailings to prevent acid rock drainage and metal leaching. The cover system consisted of a geotextile placed directly on the tailings and compacted silty clay with a gravel cap. Additional work to correct deficiencies in 1998 and 1999 included installing a layer of drain rock over the tailings cover and a stabilizing buttress was constructed at the toe of the Waterloo Barrier.

Monitoring programs that include surface and groundwater quality sampling began in 2003 and have been ongoing monthly since 2018.

Background reports relevant to the project and available for review are as follows:

- a. FINAL REPORT – Investigation and Design of Remediation Measures
- b. FINAL REPORT - Venus Mine Monitoring Program Review
- c. Site Characterization and Risk Assessment in Support of Closure Planning for the Venus Tailings Site, Yukon – Final Report
- d. Example Remediation Options, including Cost Estimates for the Venus Tailings Site, Yukon – Final Report
- e. Venus Mine Tailings Facility Operation, Maintenance and Surveillance Manual
- f. 2018 Data Gap Analysis and Site Investigation Workplan for the Venus Mine
- g. Human Health and Ecological Risk Assessment for the Venus Tailings Site – 2018 Update
- h. Venus Tailings and Former Mill Site Data Compilation for the Venus Site – 2019
- i. Results of 2019 Drilling Program and Dam Stability Update Venus Tailings Storage Facility, Yukon
- j. Interim Site Risk Management Human Health Risk Assessment Venus Tailings Site
- k. Annual Environmental Monitoring Summary Report (April 2021 to March 2022)

1.4 Objectives

The objectives of this TOR are to outline the requirements for The Consultant to provide consulting services. These services include, but are not limited to, the following:

- Background Review
- Data Gap Analysis
- Data Collection
- Site Characterization, Conceptual Site Model and HHERA
- Standards Development
- Remedial Options
- Closure Option Selection



2. Scope

The following services apply to The Consultant and shall form the basis from which costing is derived for this task authorization. The technical requirements are described in the subsections below. The Consultant’s project management approach; that includes start up meetings, progress meetings with client, a communications plan, and health/safety shall be evaluated as part of the tender process. An expectation of the Consultant is to participate in a one hour Project Kick-off Meeting approximately one week following Contract Award. The kick-off meeting is to be held via web/teleconference and will be attended by the contracting authority, CIRNAC and the Consultant team. The Consultant is expected to record and distribute minutes of this meeting.

2.1 Phase I – Background Data and Report Review

Review the previous studies listed in Table 1 to determine the additional information that may be required to adequately complete the scope outlined in the TOR. Planning for the field program, if required, shall focus on collecting information that is considered most critical for evaluating remedial options and addressing high risk uncertainties during development of design documents. The gap analysis may reveal additional assessment work required, therefore this activity shall be completed as early in the schedule as possible, to allow for refinement of resource and time requirements for the remaining project tasks if necessary. The successful Consultant will have access to additional reports located in the CIRNAC library.

Table 1: Background Reports

<i>Report</i>	<i>Author</i>	<i>Date</i>	<i>Report Pages</i>	<i>Appendices/ Tables/Figures Pages</i>
FINAL REPORT Investigation and Design of Remediation Measures	SRK	1998	18	78
FINAL REPORT - Venus Mine Monitoring Program Review	Hemmera	August 2013	32	13
Site Characterization and Risk Assessment in Support of Closure Planning for the Venus Tailings Site, Yukon – Final Report	SRK Consulting (Canada) Inc.	January 2017	57	133
Example Remediation Options, including Cost Estimates for the Venus Tailings Site, Yukon – Final Report	SRK Consulting (Canada) Inc.	January 2017	20	10
Venus Mine Tailings Facility Operation, Maintenance and Surveillance Manual	Tetra Tech Canada Inc.	August 2018	34	13



2018 Data Gap Analysis and Site Investigation Workplan for the Venus Mine	Jacobs Engineering Group Inc.	Sept 2018	12	15
Human Health and Ecological Risk Assessment for the Venus Tailings Site – 2018 Update	Azimuth Consulting Group Partnership	April 2019	87	296
Venus Tailings and Former Mill Site Data Compilation for the Venus Site – 2019	Jacobs Engineering Group Inc.	April 2020	24	664
Results of 2019 Drilling Program and Dam Stability Update Venus Tailings Storage Facility, Yukon	Tetra Tech Canada Inc.	April 2020	9	73
Interim Site Risk Management Human Health Risk Assessment Venus Tailings Site	Azimuth Consulting Group Partnership	May 2020	46	64
Environmental Monitoring Data Summary Report (May 2019 to March 2020) Venus Mine, Carcross, Yukon	Tetra Tech Canada Inc.	July 2020	30	443
Annual Environmental Monitoring Summary Report (April 2021 to March 2022)	Hemmera	May 2022	36	1135

2.2 Phase II – Data Gap Analysis

1. Complete a Data Gap Analysis to determine what additional data is required to complete the remedial options analysis.

The Consultant is to:

- Upon completion of the data gap analysis and development of the field program, submit a Draft Data Gap Analysis Report.
- Participate in a two hour Planning Meeting to discuss findings of the gap analysis, project schedule, overall project objectives, specific requirements of each remaining task, risk management considerations, and other specific program expectations. The meeting is to be held via web/teleconference and will be attended by, CIRNAC and the Consultant team. The purpose of this exercise is to use the most relevant data to develop a collaborative work plan that is fiscally responsible, utilizing efficiencies learned from past project experience to accomplish the tasks set out in this TOR. Record and distribute minutes of this meeting.
- Develop and submit the Final Data Gap Analysis Report, incorporating consolidated review comments received on the Draft document and discussions during the Planning Meeting.



2.3 Phase III – Field Data Collections

1. Develop a Draft Field Work Plan to address identified data gaps (i.e. air/dust monitoring, contaminated soil/sediment sampling, and/or groundwater/surface water sampling, ecological baseline information including ecosystem mapping) in consultation with CIRNAC and Carcross/Tagish First Nation (C/TFN). CIRNAC anticipates that at minimum the remaining scope of Tetra Tech's April 30th, 2020 memo "Results of 2019 Drilling Program and Dam Stability Update, Venus Tailings Storage Facility, Yukon" (TT Report) shall be completed.
2. Participate in a one hour Planning Meeting to discuss findings of the draft field work plan, project schedule, cost estimate, resource requirements, overall project objectives, specific requirements of each remaining task, risk management considerations, and other specific program expectations. The meeting is to be held via web/teleconference and will be attended by, CIRNAC and the Consultant team. The purpose of this exercise is to discuss the potential field plan and goals of each component. Record and distribute minutes of this meeting.
3. Submit a Final Field Work Plan to CIRNAC.
4. Execute the field work plan and provide a Technical memo with the resulting field data, summarizing the site work completed and conclusions/recommendations. Data shall be provided in a working document format such as Excel and laboratory reports included as an appendix.

The field investigation and reporting, as described in TT Report, is to include:

5. Advancing four sonic boreholes, in the locations and to the depths proposed in the TT Report (BH19-02, BH19-03, BH19-04 and BH19-05)
6. Installing 3 Vibrating Wire Piezometers (VWPs) as per the TT Report (two in BH19-04 and one in BH19-05)
7. At all locations, collecting SPT N-values in accordance with ASTM standards
8. Collecting representative soil samples from the dam embankment and foundation soils and complete laboratory testing to evaluate material behavior and potential susceptibility to liquefaction and/or piping and internal erosion (up to 15 samples for particle size distribution and 10 samples for Atterberg Limits).
9. Using the results of the field investigation to:
 - l. Delineate the geometry of the dam embankment.
 - m. Delineate the stratigraphy of the native soils beneath the dam embankment.

The Consultant is to:

- Assume the role of Prime Consultant in accordance with the Authority Having Jurisdiction (AHJ) and be responsible for the health and safety of all site workers and visitors while the Consultant is completing on site activities.
- Develop and submit a Draft Site Specific Health and Safety Plan (SSHASP) to guide and support the field program. The SSHASP is to outline health and safety requirements specific to the hazards identified at the site and the work to be completed. The plan is to identify the Codes/Statutes to be met, rules of behaviour, protective equipment and clothing to be provided, security features to be established, responsible individuals, details on the communication system and emergency response procedures and emergency contacts. The Consultant is responsible for providing bear encounter education and personal protection to all



employees, contractors, and others at the site including the provision of wildlife monitors. The SSHASP is to identify measures and procedures specific to monitoring for and limiting the spread of COVID-19 which comply with guidelines and recommendations provided by the Workers' Safety and Compensation Commission (WSCC) and the Yukon Chief Medical Officer of Health at the time the SSHASP is developed.

- Develop and submit a Final SSHASP, incorporating consolidated review comments received on the Draft document.
- The Consultant is responsible for coordination and costing of all logistical matters related to site access and occupancy. The Consultant proposal is to detail the logistical strategy for transporting equipment and personnel to and from the site, number of people on site, duration of work, accommodations, food supply, wildlife monitors, waste management, communications, etc.
- The Consultant is responsible for providing all equipment necessary to complete the scope of work as outlined in this TOR. This may include but is not limited to sampling equipment, personal protective equipment and personal equipment.
- Provide reports on a schedule as agreed to with CIRNAC during the execution of the field program. Reports are to include a summary of weather, personnel on site, work activities, wildlife sightings, health and safety observations and the planned work activities for the next reporting period.

2.4 Phase IV – Site Characterization, Conceptual Site Model, and Human Health and Environmental Risk Assessment

1. Based upon the background document review and field data collection in Phase III, prepare a draft update to the Site Characterization Report, Conceptual Site Model (CSM), and Human Health and Environmental Risk Assessment (HHERA).
 - a. The Site Characterization Report and CSM shall meet or exceed the guidance in the Canadian Council of Ministers of the Environment (CCME) *Guidance Manual for Environmental Site Characterization in Support of Environmental and Human Health Risk Assessment* (2016).
 - b. For greater clarity, CIRNAC considers an assessment of the tailings retention dams/structures (including the waterloo barrier) against the Canadian Dam Association (CDA) criteria to be necessary components of the Site Characterization Report and CSM. The Site Characterization Report for Venus will update the evaluation of dam stability with respect to applicable guidelines provided by the CDA. This evaluation will include (but not be limited to) refining the slope stability modeling presented in the TT report, an evaluation of potential for piping and internal erosion through the dam and foundation soils, and a refined estimate of the extent of liquefiable soil.
2. Present the findings of the draft updated Site Characterization Report, CSM, and HHERA at a workshop with CIRNAC and C/TFN; the presentation will review the current state of the site, results of the draft HHERA and CSM, respond to questions and collect feedback.
 - a. The Consultant will create presentation materials, potentially including but not limited to slides, handouts, videos, posters, and/or models,
 - b. The Consultant will make a presentation with the above materials and respond to questions. The presentation may be made virtually if this is agreed to be the preferred method in consultation CIRNAC and C/TFN, and



- c. The Consultant will record feedback and make a record of the feedback available to CIRNAC in the form of a written document.
3. Incorporate feedback from the workshop into presentation materials and attend a community open house to present high-level findings. Coordination of outreach activities including community open houses will be performed by C/TFN through a separate agreement directly between CIRNAC and C/TFN..
 - a. The Consultant will create presentation materials, potentially including but not limited to slides, handouts, videos, posters, and/or models,
 - b. The Consultant will make a presentation with the above materials and respond to community questions. The Consultant shall be prepared to make this presentation in the community of Carcross, YT, however the presentation may be made virtually if this is agreed to be the preferred method in consultation with the community, and
 - c. The Consultant will record feedback and make a record of the feedback available to CIRNAC in the form of a written document.
4. Incorporate feedback from the workshop and community open house into the final updated Site Characterization Report, CSM, and HHERA.

The Consultant is to produce an updated Site Characterization Report and CSM including but not limited to the following: executive summary, a review of the site background, the existing site understanding (including topography, soil, , hydrogeology, and contamination), stability and liquefaction analysis, regulatory framework for the site, a summary of field work completed to date, data interpretation, updated conceptual site models (hydrogeological and geochemical), and conclusions.

2.5 Phase V – Site Specific Standards Development

5. Develop draft site specific standards for contaminants of concern and closure objectives to meet the closure goals and end land use objectives for the site. Site specific standards shall be developed consistent with the CCME Guidance Manual for Developing Site-Specific Soil Quality (1996); site specific standards developed under other guidance (such as the BC Ministry of Environment Protocol 2 for Contaminated Sites) may also be considered. Closure goals and end land use objectives will be developed with C/TFN and the community outside the scope of this contract and hence it is NOT part of the Consultant scope. For greater clarity, CIRNAC intends Closure Goals to mean “High level guiding statement articulating the vision for the remediation project,” whereas Closure Objectives means “measurable and achievable statements specific to site components that describe what select closure activities are aiming to achieve.” The Consultant will not be required to attend any workshops or community engagements, produce any presentation materials, or record any feedback with relation to the development of Closure Goals.
6. Present the draft site specific standards and closure objectives at a workshop with CIRNAC and C/TFN; the presentation will review the proposed site specific standards and rationale, respond to questions, and collect feedback.
 - a. The Consultant will create presentation materials, potentially including but not limited to slides, handouts, videos, posters, and/or models,
 - b. The Consultant will make a presentation with the above materials and respond to questions. The presentation may be made virtually if this is agreed to be the preferred method in consultation CIRNAC and C/TFN, and



- c. The Consultant will record feedback and make a record of the feedback available to CIRNAC in the form of a written document.
7. Incorporate feedback from the workshop into materials for and attend a community open house to present a high-level overview of the proposed site specific standards and closure objectives.
 - a. The Consultant will create presentation materials, potentially including but not limited to slides, handouts, videos, posters, and/or models,
 - b. The Consultant will make a presentation with the above materials and respond to community questions. The Consultant shall be prepared to make this presentation in the community of Carcross, YT, however the presentation may be made virtually if this is agreed to be the preferred method in consultation with the community, and
 - c. The Consultant will record feedback and make a record of the feedback available to CIRNAC in the form of a written document.
8. Incorporate feedback from the workshop and community open house into the final site specific standards and closure objectives report. Coordination of outreach activities including community open houses will be performed by C/TFN through a separate agreement directly between CIRNAC and C/TFN.
9. Discussion and agreement between the Consultant, CIRNAC and CTFN may result in the community open house for phase IV and V being combined into a single event.

2.6 Phase VI – Remedial Options Analysis

1. Collaborate with C/TFN and CIRNAC to identify potential remedial options. The site management relationship between C/TFN and CIRNAC is described in a Governance Agreement between CIRNAC and C/TFN.
2. Develop conceptual level remedial options for each contamination source.
3. Produce draft conceptual remedial options analysis with at minimum **3** conceptual level options for each contamination source that may include environmental impact, effectiveness, constructability, risk, liability, time frame, community support, health/safety legal obligations and cost. The Consultant with direction from CIRNAC and C/TFN shall produce definitions and a scoring criteria matrix to accompany the remedial options analysis report.
4. Present a draft Conceptual Level Remedial Options Plan at a workshop with CIRNAC and C/TFN; the presentation will review the potential remedial options and rationale, respond to questions, and collect feedback.
 - a. The Consultant will create presentation materials, potentially including but not limited to slides, handouts, videos, posters, and/or models,
 - b. The Consultant will make a presentation with the above materials and respond to community questions. The Consultant shall be prepared to make this presentation in the community of Carcross, YT, however the presentation may be made virtually if this is agreed to be the preferred method in consultation with the community, and
 - c. The Consultant will record feedback and make a record of the feedback available to CIRNAC in the form of a written document.
5. Incorporate feedback from the workshop and attend a community open house to present a high-level overview of the potential remedial options. Coordination of outreach activities including community open houses will be performed by C/TFN through a separate agreement directly between CIRNAC and C/TFN.



The Consultant shall produce conceptual level remedial options for each contamination source. Each source shall have a minimum of 3 remedial options presented. The plan will create an assumed configuration and composition for site remediation options based on analogues for similar solutions. Design elements are assumed and shall be selected based on conservative but not extremely adverse assumptions. The options shall consider but not be limited to the following design analyses: Establishment of design criteria (geotechnical, seismic, water management), waste volume and water storage, borrow locations, initial water balance model, water quality management, dam safety management, and general cost estimates for comparison purposes.

2.7 Phase VII– Closure Option Selection

1. Incorporate feedback from all previous workshops and community open houses into the final Closure Option Selection report.
2. Ensure the option selected meets the closure goals established by the community.

Final report shall be a document which CIRNAC can utilize to select a closure option for each contamination source, and include a class 5 cost estimate as defined by the AACE cost estimate classification system. A draft class 5 cost estimate shall be submitted for CIRNAC review in advance of the Final estimate.

Cost estimates are to be accompanied by a Cost Estimate Report. Cost Estimate Reports are intended to document the details, assumptions and decisions that were used to create the estimate. The Cost Estimate Report may include, but is not limited to, the following sections:

- .1 Purpose of project and estimate
- .2 Project scope description which aligns with the WBS
- .3 Methodology (bottom up estimate, parametric estimate, etc)
- .4 Estimate classification
- .5 Design basis (type and status of design, list of drawings, quantities summary, etc.)
- .6 Planning basis (approaches to project management, design, procurement, construction)
- .7 Cost basis (method and sources for determining costs for labour, materials, equipment, subcontractors, etc.)
- .8 Allowances (Lump sums for items without enough information to support the class of estimate)
- .9 Exclusions (items not included or included in another cost estimate)
- .10 Risks and Opportunities
- .11 Cost estimate team

Cost estimate to be prepared by certified professional estimator such as a Designated Professional Quantity Surveyors (PQS) or Construction Estimator Certified (CEC), or by an estimator with equivalent credentials or extensive experience providing estimating services in the north. The Consultant may be asked to prepare a broad cost projection, indicative cost estimate and/or a substantive cost estimate. Cost estimates are to adhere to the definitions for each level of cost estimate provided by the Treasury Board.

Cost estimates are to be accompanied by a project schedule. Project schedules are to align with the work breakdown structure included in the specifications and cost estimate and be completed in a GANTT format.



3. Administrative Services

3.1 Project Authority Quality Assurance Reviews

1. The Project Authority may conduct Quality Assurance Reviews on reports, drawings, schedules, and costs estimates prepared by the Consultant, in a manner and at stages noted herein. The Consultant will respond in writing to Project Authority's comments, in a timely manner and will be held accountable for delays if proper and timely responses do not occur.
2. Such reviews are not intended as a check against errors or omissions contained within the documents submitted. The Consultant is responsible for any such errors or omissions, regardless of any review by Project Authority.
3. While the Project Authority acknowledges the Consultant's obligations to meet project requirements, the project delivery process entitles Project Authority to review the work. Project Authority reserves the right to reject undesirable or unsatisfactory work. The Consultant will obtain the Project authority's acceptances during each of the project stages.
4. Acceptances indicate that, based on a general review of material for specific issues, the material is considered to comply with governmental and departmental objectives and practices and that overall project objectives will be satisfied. The acceptance does not relieve the Consultant of professional responsibility for the work and compliance with the terms and conditions of the Contract.
5. The Project Authority acceptances do not preclude the possibility that the work may be determined to be unsatisfactory at later stages of review (e.g. there may be more than one (1) draft version of a report required).
6. Acceptances by the Client and other agencies and levels of government will be obtained to supplement the Project Authority acceptances. The Consultant will assist the Project Authority in securing all such acceptances and adjust all documentation as required by such authorities when securing acceptance.

3.2 Project Consultant Staff, Budget and Cost Controls

The Consultant shall provide a proposal that outlines their suggested deliverables required in order to meet the requirements of this TOR. The proposal shall also include a budget and schedule.

The Consultant shall clearly establish the project team and organizational structure and shall submit the names and responsibilities of each of the members of their staff that will be involved in the project. This team should reflect that proposed in The Consultant's proposal. The Consultant shall provide resumes for all additional employees required to complete the tasks outlined above. All additional personnel shall be approved by the CIRNAC Project Manager prior to commencing work. The Consultant shall designate one individual who will be responsible for overseeing the project and who will liaise with the PSC Project Manager throughout the project. The Consultant will not be permitted to make personnel changes, without prior approval by CIRNAC's Project Manager.



If a project scope change or delay has occurred or is anticipated, The Consultant must notify the CIRNAC Project Manager in writing immediately. The notification shall include a revised budget and justification for any of the changes required to complete the project. No additional or supplemental work shall be undertaken or in substitution of the work specified unless approved in writing by the Project and Contracting Authority.

The approved budget for the project must not be exceeded unless otherwise approved by CIRNAC's Contract Authority and/or Project Manager followed by written confirmation. Effective cost estimating and cost control is of prime importance.

3.3 Project Management & Submission Documentation Standards

The Consultant will provide reports, and associated documentation including all annexes, tables and photographs as per deliverable format outlined below unless otherwise noted in this TOR. The Consultant will be responsible for the cost of processing the project reports using the Consultant's own or contracted typing/word processing facilities. The Consultant will be responsible for all proof-reading.

The CADD drawing format required for drawings is the AutoCAD native format with the DWG file extension, Release 2007 or later. All drawings are to be produced in the metric system of measurement. Issued for Construction drawings and As-Built/Record drawings are to be provided in AutoCAD drawing format with the final version of the deliverable.

The Consultant shall maintain contact with the CIRNAC Project Authority throughout the contract. Draft and Final reports shall be submitted to the Project Authority. Submissions include one (1) electronic copy (Adobe Acrobat pdf) of the Draft Reports and one (1) electronic copy (Adobe Acrobat pdf) of the Final Reports. All report figures and final site survey(s) are to be in AutoCAD format.

The Consultant will provide Draft Documents for review by the CIRNAC Project Authority. Project Authority will strive to provide comments within 2 weeks of draft document submission. Provide written response to Project Authority's comments for each review. Justification for any draft report comments that cannot or will not be addressed by the Consultant in the final reports must be provided to CIRNAC in writing prior to submission of the final reports.

3.4 Project Authority

The CIRNAC Project Leads for this project are:

Darren Thomas
Environment, Yukon Region
Crown-Indigenous Relations and Northern Affairs Canada
Room 415C
300 Main Street
Whitehorse, Yukon Y1A 2B5
ph: (867) 667-3866
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Ron Gee
Environment, Yukon Region
Crown-Indigenous Relations and Northern Affairs Canada
Room 415C
300 Main Street
Whitehorse, Yukon Y1A 2B5
ph: (867) 667-3342
cell. (867) 332-1862
email: ron.gee@rcaanc-cirnac.gc.ca

3.5 Scheduling

The following schedule is provide for information purposes only. The Consultant is expected to provide their own schedule as part of the submission.

Activity	Date
Contract Award	January 6, 2023
Kick Off Meeting	January 13, 2023
Data Gap Analysis	February 10, 2023
SSHASP	February 15, 2023
Field Work Plan	May 1, 2023
Technical Memo with Field Data	July 31, 2023
HHERA and CSM Draft	August 15, 2023
HHERA and CSM Workshop	September 30, 2023
HHERA and CSM Community Open House	October 15, 2023
HHERA and CSM Final	October 30, 2023
Site Specific Standards Draft	December 30, 2023
Site Specific Standards Workshop	January 15, 2024
Site Specific Standards Community Open House	January 30, 2024
Site Specific Standards Final	January 15, 2024
Remedial Options Analysis Draft	February 1, 2024
Remedial Options Analysis Workshop	February 15, 2024
Remedial Options Community Open House	February 28, 2024
Final Closure Option Selection Report	March 15, 2024
Class 5 Cost Estimate Draft	March 15, 2024
Class 5 Cost Estimate Final	March 31, 2024

All work related to this proposal is to be completed by March 31, 2024.

3.6 Lines of Communication and Coordination

- The CIRNAC Project Manager administers the project and controls The Consultant's work during all phases of project delivery.
- The Consultant will:



- Correspond only with the CIRNAC Project Manager and not communicate directly with Third Parties, unless authorized in writing by the Project Manager or if the CIRNAC Project Manager is copied on the communication. If so authorized, The Consultant will provide to the CIRNAC Project Manager, a copy of any such correspondence and/or summary of discussions with Third Parties.
- Ensure that all communications carry CIRNAC Project Manager's Project Title, Project Number, File Number and name of person to whom correspondence is addressed.
- All communications shall be limited to verification of contract conformance and regulatory compliance with no interpretation of project or site risks being provided to other Third Parties
- Advise CIRNAC's Project Manager and/or Contracting Authority of any changes that may affect schedule or budget, or are inconsistent with instructions or written approvals previously given or decisions previously agreed to.
- Detail the extent and reasons for the changes and obtain confirmation in writing as soon as feasible.
- Coordinate and assume responsibility for the work of any and all Sub-Consultants and Specialists Consultants retained by the Consultant.
- Ensure clear, accurate and ongoing timely and responsive communication of concept, budget, and scheduling issues.

3.7 Quality Assurance Reviews

- The CIRNAC Project Manager will conduct Quality Assurance Reviews on reports and costs estimates prepared by The Consultant, in a manner and at stages noted herein. The Consultant will respond in writing to all comments, in a timely manner and will be held accountable for delays if proper and timely responses do not occur.
- Such reviews are not intended as a check against errors or omissions contained within the documents submitted. The Consultant is responsible for any such errors or omissions, regardless of any review by the CIRNAC Project Manager.
- While the CIRNAC Project Manager acknowledges The Consultant's obligations to meet project requirements, the project delivery process entitles the CIRNAC Project Manager to review the work. The CIRNAC Project Manager reserves the right to reject undesirable or unsatisfactory work. The Consultant will obtain the CIRNAC Project Manager acceptances during each of the project stages.
- Acceptances indicate that, based on a general review of material for specific issues, the material is considered to comply with governmental and departmental objectives and practices and those overall project objectives should be satisfied. The acceptance does not relieve The Consultant of professional responsibility for the work and compliance with the terms and conditions of the Contract.
- The CIRNAC Project Manager acceptances do not prohibit rejection of work, which is determined to be unsatisfactory at later stages of review.
- Acceptances by other agencies and levels of government will be obtained to supplement the CIRNAC Project Manager acceptances. The Consultant will assist the CIRNAC Project Manager in securing all such acceptances and adjust all documentation as required by such authorities when securing acceptance.

3.8 Special Requirements

The Consultant will use a Canadian Association for Laboratory Accreditation Inc. (CALA) accredited laboratory.



The information, data, material, etc. gathered as part of this study shall be treated as confidential and shall only be discussed with the Project Authority unless otherwise directed by the Project Authority.

No acceptance or approval by the Project Authority, expressed or implied, will be deemed to relieve the Consultant of their professional or technical responsibility for the calculations, drawings, analytical results, or other material prepared or assembled by the Consultant, or for things required under this Agreement.

The Consultant will refer queries on the project from the public, news media, etc. to the Project Authority.

3.8.1 COVID-19

It is the responsibility of the Consultant to determine how the work outlined in this TOR can be delivered in accordance with the restrictions of the Territorial regulator concerning public health emergencies declared within the jurisdiction or any specific restrictions within municipal or provincial jurisdictions.

Under the circumstances that the Consultant or CIRNAC deem that the work is not safe to human health or the work is not permitted by other authorities, the work may be postponed to a later agreed upon date or cancelled. If the work cannot be completed before the scheduled call up end date, the contract will be amended to only include work that was able to be completed. Fees paid to the Consultant will be in accordance with the relevant provisions of the Terms of Payment under the Standing Offer agreement. Please refer to the Standing Offer agreement, Terms and Conditions 0220DA GC 7 Suspension & GC 8 Termination.

COVID-19 risks and mitigations (pertaining to employees, contractors and/or the public) must be included within the Health & Safety Plan. It is the responsibility of the Consultant to be aware of the restrictions of the Territorial regulator concerning public health emergencies declared within the jurisdiction or any specific restrictions within municipal or provincial jurisdictions.

The Consultant shall be responsible for ensuring the health and safety of all personnel at the site. Accordingly, a health and safety plan shall be developed prior to commencing any work at the subject properties and implemented during the field activities. The Consultant shall provide a description of the plan in the project proposal. The Health and Safety Plan shall include precautions and mitigations related to the hazard of contracting and spreading COVID-19 disease. It is the responsibility of the Consultant to be aware of and adhere to all Federal, Provincial/Territorial and Municipal health requirements and restrictions pertaining to COVID-19. The Consultant shall update their Health and Safety plans as conditions change.

3.9 Codes and Standards

- All criteria will be in accordance with the current edition of Canadian Codes and Standards, and, any other relevant Codes as applicable, such as criteria intended for use on all FCSAP projects, this includes risk assessment guidance documents produced by



- FCSAP expert support departments. If local or municipal codes and bylaws are more stringent, they will take precedence.
- Regulations, by-laws, and decisions of "Authorities having jurisdiction" will be observed. In cases of overlap, the most stringent will apply.
 - The Consultant will identify and communicate with all jurisdictions applicable to the project.

Proposals are to be forwarded via electronic mail only to:

3.10 Invoicing

The Consultant shall submit with all invoices on a monthly basis with a summary spreadsheet in Microsoft Excel. This spreadsheet is to include the following:

1. Budget cost for both Fees and Disbursements
2. Fees and Disbursement costs for each invoice
3. Summary of Fees and Disbursements spent to date
4. Remaining left to be billed

The budget numbers for fees will be determined using the Consultant's proposed level of effort applied to the Consultant's unit rates as indicated in Standing Offer Agreement EW699-170520/002/NCS. Budget numbers for disbursements will be those provided by the Consultant in their LOE. Markups on disbursements are to be in accordance with the firm fixed fee percentages included in Standing Offer Agreement EW699-170520/002/NCS. Refer to Standing Offer Agreement EW699-170520/001/NCS for details regarding the supporting documentation required with all invoices.