



Standards Council of Canada 55 Metcalfe Street, Suite 600 Ottawa ON K1P 6L5 Canada

Subject: Request for Proposal (RFP) # 2024-04

This document represents an invitation to Bidders to submit their proposals to the Standards Council of Canada (SCC) for SCC is seeking a Supplier to develop a Technical Specification (TS) for the priority area: **Water and wastewater distribution systems in northern regions.** 

In accordance with the Statement of Work attached hereto as Appendix "B", SCC will issue a contract to the successful Bidder, establishing the pricing and terms / conditions under which the development of the above-mentioned initiative will be undertaken.

Proposals must be received by SCC no later than **16:00 hours**, **(4 p.m.) EST on Tuesday**, **February 27**<sup>th</sup>, **2024**. It is the Bidder's responsibility to deliver their proposal prior to **the time/date of bid closing**. Proposals received after 16:00 hours will not be accepted.

**PROPOSALS ARE TO BE SUBMITTED ELECTRONICALLY TO** <u>contracts@scc.ca</u> by the time/date of bid closing (including the financial proposal).

# 1. ATTACHMENT 1 – Technical Proposal

NOTE: No financial information is to be included in ATTACHMENT 1

# 2. ATTACHMENT 2 – Financial Proposal

Proposals that do not contain the requested documentation or deviate from the required financial format may be considered incomplete and disqualified.

SCC is not obliged to accept the lowest bid and/or any proposal.

Questions with respect to the meaning or intent of this process, or requests for correction to any apparent ambiguity, inconsistency or error in the document must be submitted in writing to <a href="mailto:contracts@scc.ca">contracts@scc.ca</a> and must be received by 12:00 hours (noon) EST on **Wednesday**, **February 14<sup>th</sup>**, **2024**. All answers will be communicated to all potential bidders via the CanadaBuys website.

# Request for Proposal # 2024-04

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APPENDIX A - REQUEST FOR PROPOSAL – ACCER	TANCE FORM

Proposal Submitted by		
(Name of Company)		
(Complete Address)		
GST/HST Number	BIN Number	
Telephone Number:		
Fax Number:		
Contact Person:		
Contact Email Address:		

- 1. The Undersigned (hereinafter referred to as "the Bidder") hereby proposes to the Standards Council of Canada (SCC) to furnish all necessary expertise, supervision, materials, equipment and other incidentals necessary to complete to the entire satisfaction of SCC or their authorized representative, the work described in the Statement of Work attached hereto as Appendix "B".
- **2.** The Bidder hereby proposes to perform and complete the work in accordance with the terms and conditions (at the place and in the manner) specified in:
  - (i) Appendix A attached and entitled "Request for Proposal Acceptance Form;
  - (ii) Appendix B attached and entitled "Statement of Work";
  - (iii) Appendix C attached and entitled "Technical Evaluation Criteria";
  - (iv) Appendix D attached and entitled "Financial Proposal"; and

# 3. Period of Services

- (i) The contract award date is the date that the contract is signed by the Bidder and SCC.
- (ii) The service start date is the date that the Bidder and SCC agree to commence the work.
- (iii) The Bidder hereby proposes to perform the work commencing on the service start date and have work completed as established in Appendix B.

# 4. Financial Proposal

The Bidder hereby proposes to perform and complete the work as per the financials outlined in Appendix D - Financial Proposal of SCC RFP #2024-04, which represents the total financial proposal.

# 5. Optional Modifications

In the event that SCC requests the successful Bidder to proceed with any optional modifications or additional changes to the process, payment for this additional work will be based on the per diem rates quoted (see Appendix D of SCC RFP #2024-04).

Authorization to proceed with additional work will be provided by way of a contract amendment as per the established proposal.

# 6. Optional Years

SCC may decide, at its discretion, to exercise an option by means of formal contract amendment, to extend the term.

# 7. Federal Goods and Services Tax (GST) and Harmonized Sales Tax (HST)

The prices and rates quoted as part of the Bidder's proposal are NOT to include any provision for taxes.

# 8. Payment Schedule

As a result of acceptance of the Bidder's proposal, SCC reserves the right to negotiate an acceptable payment schedule prior to the awarding of a contract and/or any amendments.

# 9. Appropriate Law

Any contract awarded by SCC as a result of SCC RFP #2024-04 shall be governed by and construed in accordance with the laws in force in the Province of Ontario. Canada.

# 10. Tender Validity

The Bidder agree(s) that their proposal will remain firm for a period of 90 calendar days after the **time/date of bid closing**.

# **Signatures**

The Bidder herewith submits this bid in accordance with the requirements specified in the Request for Proposal documents.

SIGNED	hisday of 2024.
Per	
	NAME OF COMPANY
Per	
	(Signing Officer and Position)

APPENDIX B – STATEMENT OF WORK

	APPENDIX B - STATEMENT OF WORK		
Project	SCC is seeking a Supplier to develop a Technical Specification (TS) for the priority area:		
	Water and wastewater distribution systems in northern regions		
Background	All regions of Canada are experiencing environmental, social, and economic impacts that can be attributed to climate change. Adapting standards, and related technical guidance, to ensure infrastructure is climate resilient is critical for Canada and its citizens. Standards can specify performance and material requirements that can be used as the integration point for climate-related risks into infrastructure planning and development processes.		
	Through funding announced in Budget 2021, SCC renewed its Standards to Support Resilience in Infrastructure Program (SSRIP) for a five-year period (2021-2026). Phase II of SSRIP builds upon and extends the activities of phase I (2016-2021), enabling SCC to continue working with Canada's national standardization network to develop and implement standardization solutions that boost infrastructure resilience and create stronger communities for Canadians. As in Phase I, this will result in resources and standardized guidance related to climate change and climate resilience to support both standards users and developers in Canada.		
	In 2011, SCC launched the Northern Infrastructure Standardization Initiative (NISI). Key to the success of NISI was the establishment of the Northern Advisory Committee (NAC). The NAC provides strategic advice, input, and guidance for the initiative to ensure that deliverables were relevant in a northern context and in the best interest of Northerners.		
	Canada's North is warming at a higher pace than the rest of the country. Northern communities are expected to face more threatening and acute impacts from the changing climate. Permafrost thawing and heavier precipitations are expected to increase the stress on water distribution systems. Distribution pipe failures in the water and wastewater systems are significantly more frequent in northern regions (compared to the rest of Canada). This is attributed in part to the subgrade movements due to permafrost regime change and lack of northern-specific maintenance measures. The risk of overload of the distribution systems is also increased with the expectation of more intense precipitations with climate change.		
	Where pipe distribution system is absent, water is often truck-delivered to the homes and stored in tanks. Those tanks are often located in the crawl space of homes as many homes do not have basements because of the bedrock and permafrost conditions. Some communities have utilidors, a network of pipes insulated and heated above ground. But most communities rely on trucked water and sewage pumpouts. That means many Northern homes are designed so the truck driver can easily access water and septic tanks, and to keep tanks from freezing, they must be located inside the building, usually in a crawl space.		

Access to clean and safe water is increasingly challenging due to the difficult access to a water source and water treatment storage for isolated northern communities. The recent contamination of Iqaluit's water supply in 2021 is an example of evidence of the precarity of northern Canada's water infrastructures.<sup>1</sup>

Design and maintenance of water and wastewater systems in Northern Canada require particular considerations due to the specificities of the northern climate. The most common challenges observed with water and wastewater systems in the north are related to:

- design and treatment technology;
- a lack of operation and maintenance<sup>2</sup>;
- lack of adequate performance monitoring;
- operational equipment dysfunctions; and
- water source availability.<sup>3</sup>

Through the Canada-wide Strategy for the Management of Municipal Wastewater Effluent, the governments of the Northwest Territories, Nunavut, Quebec, Newfoundland and Labrador and the federal government are working collaboratively to:

- assess the performance of existing wastewater facilities and factors affecting these;
- develop northern performance standards;
- develop initial risk level criteria and timelines for implementation of northern performance standards with due consideration of the economic implications in the short, medium, and long-term;
- adapt the environmental risk assessment approach as appropriate for the Far North; and
- adapt monitoring and reporting requirements. 4

The development of northern-specific standards for water and wastewater management will align with the above initiative. The northern performance standards are needed as the National Performance Standards, which are the minimum requirements for effluent quality from all municipal, community and government wastewater facilities that discharge into lakes, rivers, and oceans, do not apply to sanitary or combined sewer overflows or to facilities located in geographic areas where extreme climatic conditions impede treatment, such as Canada's Far North.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> https://www.thearcticinstitute.org/igaluits-water-crisis-highlights-deeper-issues-arctic-infrastructure/

<sup>&</sup>lt;sup>2</sup> Ecojustice (2019) Waterproof 3: Canada's Drinking Water Report Card, https://ecojustice.ca/wp-content/uploads/2014/11/Waterproof\_Essentials\_web\_corrected\_Dec\_8.pdf. Accessed on January 30, 2022

<sup>&</sup>lt;sup>3</sup> National Assessment of Water and Wastewater Systems in First Nations Communities, Summary Report, February 2003, Indian and Northern Affairs Canada, page ii.

<sup>&</sup>lt;sup>4</sup> Canada-wide Strategy for the Management of Municipal Wastewater Effluent, Canadian Council of Ministers of the Environment, 2009, page 9

<sup>&</sup>lt;sup>5</sup> https://ccme.ca/en/municipal-wastewater-effluent

While there is work underway with the development of northern performance standards, the NAC has identified that technical guidance is needed to help the northern communities understand the different considerations that should be considered for the design, construction, operation, and maintenance of their water and wastewater distributions systems.

As such, SCC is issuing one contract to fund the development of a Technical Specification for *Water and wastewater distribution systems in northern regions*.

# Scope

This Technical Specification (hereafter referred to as TS) should support the user in the planning, design, construction, rehabilitation/replacement, and operation and maintenance of northern water mains and water systems with special considerations for isolated communities. This will be particularly important for those that are new to northern water systems.

The TS should be complementary to existing water and wastewater codes, regulatory requirements, by-laws and best management and guidelines.

An appropriate scan of current literature, guidance, and existing documentation, undertaken as part of the development process, could include, but is not limited to:

- Existing documentation that details or reviews best practices, past failures and lessons learned for the maintenance and management of water and wastewater distribution systems in northern regions.
- First Nations drinking water and wastewater legislation, https://www.sacisc.gc.ca/eng/1330528512623/1533729830801
- CSA W203 Planning, Design, Operation and Maintenance of Wastewater Treatment in Northern Communities using Lagoon and Wetland Systems
- National Assessment of Water and Wastewater Systems in First Nations Communities, Summary Report, February 2003, Indian and Northern Affairs Canada Cold Regions Utilities Monograph, Third Edition, American Society of Civil Engineers
- Canada-wide Strategy for the Management of Municipal Wastewater Effluent, Canadian Council of Ministers of the Environment, 2009
- Technical Council on Cold Regions Engineering of ASCE and the Cold Regions Engineering Division of the Canadian Society for Civil Engineering, Cold Regions Utilities Monograph, Edited by Daniel W. Smith, Third Edition. 1996
- Alaska Department of Environmental Conservation, https://dec.alaska.gov/media/11476/chapter-5-intro-to-water-distribution.pdf
- Ecojustice (2019) Waterproof 3: Canada's Drinking Water Report Card, https://ecojustice.ca/wpcontent/uploads/2014/11/Waterproof\_Essentials\_web\_corrected\_Dec\_8.pdf. Accessed on January 30, 2022
- Nunavut Tunngavik Incorporated (2020) Nunavut's Infrastructure Gap, https://www.tunngavik.com/files/2020/10/2020.10.20-

- Nunavuts\_Infrastructure\_Gap\_Report\_vf.pdf. Accessed on January 30, 2022
- Statistics Canada. Operation and Maintenance Costs of Drinking Water Plants. Biennial Drinking Water Plants Survey, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810010301. Accessed on January 30, 2022
- Jane G (2019) City of Iqaluit says climate change is contributing to its water pipe woes. Nunatsiaq News, March 18, https://nunatsiaq.com/stories/article/city-of-iqaluit-says-climate-change-iscontributing-to-its-water-pipe-woes/. Accessed on January 30, 2022
- Government of Canada (2019) Canada's Arctic and Northern Policy Framework. Canada's Arctic and Northern Policy Framework, https://www.rcaanc-cirnac.gc.ca/eng/1560523306861/1560523330587#s0. Accessed on January 30, 2022
- Good Engineering Practice for Northern Water and Sewer Systems,
  Department of Public Works and Services, Government of Northwest
  Territories available at
  <a href="https://www.maca.gov.nt.ca/sites/maca/files/resources/goodengpractice.pdf">https://www.maca.gov.nt.ca/sites/maca/files/resources/goodengpractice.pdf</a>
- CSA S900.1 Climate change adaptation for wastewater treatment plants
- CSA S900.2 Structural design of wastewater treatment plants
- ISO 24516-3 Guidelines for the management of assets of water supply and wastewater systems — Part 3: Wastewater collection networks

The guidance should consider the geography, water access, local and traditional knowledge, logistical challenges and limitations, climate, environmental conditions, community size, and complexity of land area vegetation and level of permafrost, as well as the cultural considerations of northern Canada.

The following are more detailed explanations of elements that should be included in the TS:

#### 1. General Considerations

The final document should:

- Align with relevant existing guidance and requirements for community infrastructure in northern communities, such as previously established community standards guidance
- Include visual flow charts, checklists, and graphics to help the/ reader understand the process requirements identified
- Be reviewed for plain language, and written for a community audience
- Undergo graphic design and layout
- Be available in both English and French

# 2. Climate Change and Northern-Specific Considerations

The TS should include best practices for incorporating climate change adaptation strategies. The guidance should include considerations for fluctuating climatic conditions across the north and the changing permafrost conditions.

As such, it should:

- Identify the climate trends in northern Canada with the potential to impact water and wastewater distribution systems.
- Detail how predicted climate trends will impact the water and wastewater systems in northern communities. The impacts of the changing climate should be presented for the design, operation and maintenance of those systems.
- Provide guidance for collecting the future climate parameters that will inform climate-resilient strategies in the design and management of water and wastewater infrastructure assets in the North. Sources like climatedata.ca can be leveraged for future climatic design data.
- Identify weather parameters that need frequent and local monitoring because of their high impact potential on the performance of northern water infrastructures.

# 3. Impact of Water Source

For the north and remote communities, the primary factor underlying the water and wastewater options for a home or community is the water source itself. Community water supplies come from lakes and rivers and provide either year-round or a seasonal water supply. The TS should cover the impact of the water source on the development of the water distribution system. The TS should detail the main design challenges associated with river and lake water sourcing such as:

- Ice formation on the water source. To use lakes and rivers year-round as a water source, the surface ice, up to two metres thick must be taken into consideration.
- Pipe freezing at the interface with the water source. The ice formation can damage the piping in lakes if it is placed in water, which is too shallow.
- Ice load on the water intake structure. Particularly in rivers, water systems are vulnerable to damage, particularly during spring break of river ice
- Impact of low temperature on the water storage infrastructure (tanks)

# 4. Selection and Design of water distribution systems

The TS should cover the different types of water distribution systems and provide recommendations on the selection of a type of system. The local ground system, the water source, the number of users and their spatial distribution are examples of factors that govern the choice of the appropriate type of water distribution system. As minimum, the TS should address the three main types of systems and options as outlined in the *Cold Regions Utilities Monograph*. Within the options, there are

design criteria that should be addressed to ensure that the water remains as clean and safe as possible:.

# 1. Truck-Haul Systems

For this option, the TS should outline how the quality of the water should be controlled in all parts of the distribution system beginning with the loading point, to how it is transferred to and from the truck, and ending with how it is then transported and stored in the truck tank.

# 2. Piped Systems

Guidance should be provided for piped systems from rivers or lakes. In the smaller and more remote communities a piped systems may not be feasible but should be evaluated as a piped system is usually easier to manage and control the cleanliness and quality of the water. This section on piped systems should provide guidance on the advantages and disadvantages of the different types of above and below-ground systems and when one option is better suited than the other. The guidelines on how to keep the clean water and wastewater lines separate should be described.

3. Other Methods and Infrastructure for Water Distribution Any potential alternative to the three main type of system above can be presented based on input of the technical committee. Advantages, disadvantages and design considerations should be presented for any proposed alternative type of distributions system.

# 5. Operation and maintenance

Proper operation and maintenance are critical for the durability of water distribution systems in northern conditions. As a minimum the TS should cover the following:

- How to develop a master plan and provide an overview of the different criteria that should be tracked and monitored to help ensure the water remains as clean and safe as possible.
- A check list of main preventive maintenance tasks based on lessons learned on past failures of water systems in northern communities
- Where applicable, especially with more complex systems, there should also be consideration for what training and skills are required for those operators providing the monitoring and maintenance. Appropriate trained and skilled operators should be able to monitor and track and to prevent any operational equipment dysfunctions before they occur.

# 6. Wastewater infrastructure

This section should outline the different type of wastewater storage, treatment and disposal that can be considered for northern communities. Guidance and recommendations should be formulated for the location of wastewater treatment

infrastructure to minimize the risk of contamination of the drinking water source and distribution system.

Like water access, wastewater collection in the northern communities is largely dependent upon the size and access to the necessary infrastructure. Wastewater collection systems present similar types of vulnerability as clean water distribution systems. These types of system present the highest health risks to the users, compared to other types of collection systems used in the North.

# 7. Wastewater collection systems

This section should present the different types of wastewater collection systems outlining the advantages and disadvantages of each system. There are four main types of systems with different infrastructure impacts to house plumbing, as well as to the community infrastructure. The TS should cover the pros and cons of each type of system and guidance on the selection of the appropriate type of collection system. Where appropriate linkage should be provided with the existing CSA W203 standards on planning, design, operation and maintenance of wastewater treatment in northern communities using lagoon and wetland systems.

# 1. Tanker Truck and Building Holding Tank Systems

As the northern communities rely heavily on septic tanks for storage, it is important for this section to help the user understand the pros and cons of the different types of septic tanks and to also know the importance of proper maintenance to prevent seepage and leakage into the environment.

# 2. Piped Collection Systems

This section should outline the piped system design considerations including collection, access, service, and maintenance. More specifically, the following types of systems should be covered:

# a. Pressure Sewage Systems

This section should outline the advantages and disadvantages of the three common types of pressure sewage systems: a) pressure sewage systems, b) STEP systems, and c) individual lift pump systems.

# b. Vacuum Sewer Collection Systems

This section should outline the advantages and disadvantages of the two main types of vacuum sewer collection systems:
a) conventional gravity fixtures with exterior vacuum valve sump, and b) vacuum toilets and vacuum sumps with greywater valves.

# 3. Other Wastewater System Design Considerations

This section should outline the design considerations required for the different wastewater systems designs that may not be addressed with the different types above such as cold-region lift station adaptations for municipal lift stations, force mains, and building plumbing.

# 8. Capacity-building

The TS should address the capacity-building requirements to create local expertise for the maintenance of water and wastewater systems. Typical resource requirements (human and material) for ongoing operations and preventive maintenance should be presented.

# Mandatory Requirements

# The SUPPLIER:

- Shall comply to SCC Requirements and Guidance for National Technical Specifications (TS); and
- Acknowledges and accepts this statement of work (SOW) and all of the requirements pertaining to deliverables detailed within.

# Reporting Requirements

The Supplier will also be required to prepare written reports summarizing the progress against specific SCC-required phases in the development of the TS.

 At stage 7 a concise report shall be generated explaining how the Technical experts considered gender responsiveness when drafting the requirements of the TS.

# Tasks / Technical Specifications

This appendix contains detailed requirements about the work that is to be delivered by the SUPPLIER throughout the required Stages 1 through 8.

End-project deliverable(s) shall constitute the publication of a TS, simultaneously published in English and French.

### The SUPPLIER shall:

- Form a project team with the technical competency to handle the project management, committee management, and other activities as specified in the Deliverables section. The SUPPLIER will also identify at least one substitute (as backup support) with equal or higher technical competence to ensure project completion.
- Submit all Contract-related deliverables directly to SCC using the electronic workspace, according to the authorized work plan and schedule or Submit all Contract-related deliverables directly to SCC, by email, according to the authorized work plan and schedule;
- Ensure SCC is informed as per the reporting schedule outlined in the Contract;
- Manage the TS development process and provide support (coordination and communication) to project technical committees in accordance with the applicable SCC Requirements and Guidance for Technical Specifications;
- Inform and obtain SCC's final approval on all joint press release communications:

- Provide sufficient notice to SCC to review and approve any public, nonmandated announcements regarding work undertaken in relation to this project; specifically, the SUPPLIER to provide the following minimum notice to SCC:
  - Public Review Strategy (if applicable) minimum five (5) business days
  - SUPPLIER or Joint SUPPLIER-SCC Publication Content minimum fifteen (15) business days; note that that the timeline is for SCC to approve the SUPPLIER content – with respect to Joint Publications, the publication issuance shall be at SCC's final determination
  - For clarity, public announcements do not include the mandatory announcement required under Stage 3;
- Provide acknowledgement of the contribution of SCC and associated funders, to contribution of the development of the TS (including in publication and related announcements);
- Inform and seek authorization from SCC of scope, work plan, budget and/or schedule changes;
- Enable accessibility to the TS in both official languages.
- TS distribution reporting: For the identified lifecycle following publication of the TS, the Supplier is required to supply SCC annual reporting including number of visits (to view the TS) and number of times the TS is accessed (by download or online use) summarized by language of publication.

Projects funded under the Northern Infrastructure Standardization Initiative should provide the following acknowledgement: [SUPPLIER] acknowledges that the development of this Technical Specification was made possible, in part, by the financial support of the Standards Council of Canada, as part of the Northern Infrastructure Standardization Initiative (NISI), and with the input of the Standards Council of Canada's Northern Advisory Committee. NISI promotes the development and update of standards to adapt northern infrastructure to climate change.

# **Deliverables**

See deliverables table on the following page.

Stages	Requirement	Deliverable
Stage 1:	Circumstances for use of a TS:	Confirmation that at least one
Preliminary (Guidance clause 3.1)	an existing National Standard of Canada or international standard is not available	circumstance is met.
	b) a fast solution is required	
	c) the subject matter is still under technical development	
	d) another reason precluding immediate publication of a standard	
Stage 2: Initiation	New Work Item Proposal	
(Guidance clauses 3.2, 3.2.1)	a) The SUPPLIER shall document the need for the TS.	a) Confirmation that the need has been documented.
	b) Generate project work plan with clear deliverables and matching timelines for completion, and budget.	b) Obtain SCC approval of project work plan and budget.
	c) The work plan shall include consideration of the obligation to make an "active offer" regarding the use of both official language ensuring compliance with the Official Languages Act.	c) Confirmation that the language capacity is in place to ensure that an active offer regarding the use of either of Canada's official languages is made and that participants can use their official language of choice.
	d) Conduct a coordination meeting with SCC and project sponsor (if any)	d) Confirmation coordination meeting was held.
	e) Revise and confirm appropriate project scope (based on sponsor or stakeholder needs, standard landscape research, intended TS application needs, such as certification)	e) Obtain SCC approval of the project scope.
Stage 3: Notice	The SUPPLIER shall inform the	Confirmation that the notice
(Guidance clause 3.2.2)	public and key stakeholders in both official languages simultaneously, through its communication channels that it is initiating the development of a TS.	has been provided to the public in both official languages simultaneously.

Stages	Requirement	Deliverable
Stage 4: Committee (Guidance clauses 3.3, 3.3.1)	Technical Experts  a) In addition to SCC-identified stakeholders, the SUPPLIER shall identify technical experts in the subject matter of the TS to participate in the drafting process.	a) Confirmation that the group members are subject matter experts.
	b) The SUPPLIER shall offer an inclusive, transparent development process and afford the opportunity to participate to any interested stakeholder.	b) Confirmation that reasonable efforts were undertaken to secure technical experts appropriate to the scope of the TS.
	c) The SUPPLIER shall provide appropriate member orientation to technical committee members, in the language of choice identified by the member.	c) Confirmation that orientation was provided.
	d) The SUPPLIER shall utilize a Terms of Reference (ToR), outlining mandate and operations, and provide the ToR to committee members.	d) Confirmation that ToR were accepted by technical committee members.
	e) The SUPPLIER shall ensure an "active offer" regarding the use of both official languages is made.	e) Confirmation that an active offer was made regarding the use of both official languages and that members are able to participate in the official language of their choice.
Stage 5: Drafting (Guidance clause 3.3.2)	The identified technical experts shall draft the TS in accordance with the outlined process.  Depending on the language preferences of participants voiced when the active offer was made, this may need to be done in both official languages.  Working with the technical experts, the SUPPLIER will determine if a peer review or public review will be conducted in Stage 6.	Confirmation that the TS was developed by the technical experts and that the language requirements were met.

Stages	Requirement	Deliverable
Stage 6: Approval	Technical Approval	
(Guidance clause 3.4)	a) Approval shall be based on consensus by the technical experts or by a vote with a minimum of 2/3 of affirmative votes.  The developer shall sign off on the final document to confirm the appropriate process has been followed and the required consultations and peer review have occurred. If one or more members of the group containing the technical subject matter experts and/or interested parties disagree with publishing the final document, the developer shall generate a report justifying the decision to publish.	a) Confirmation of approval and the method utilized.  If one or more members of the group containing the technical subject matter experts and/or interested parties disagree with publishing the final document, confirmation the developer has generated the required report justifying the decision to publish.
	<ul> <li>b) Undertake a peer review or public review, as determined in Stage 5. At minimum, a peer review is required. If a public review, it must be conducted in both official languages simultaneously and must be open for a minimum of 3 weeks. Public Review Strategy shall include: <ul> <li>Identification of targeted audience.</li> <li>Outreach efforts.</li> <li>Additional proactive measures intended to reach out to a wider audience.</li> </ul> </li> <li>The SUPPLIER should support the review through proactive identification of targeted</li> </ul>	b) Public review strategy for SCC approval.  Confirmation that peer or public review has been conducted. If public review was needed, confirmation must include the language and duration requirements.

Stages	Requirement	Deliverable
	stakeholders with notification, any other proactive engagement, such as public forums, etc.	c) Confirmation of sign-off
	<ul><li>c) Sign off by the SUPPLIER confirming appropriate process has been followed.</li></ul>	was conducted.
	<ul> <li>d) If needed, a report justifying the decision to publish shall be drafted.</li> </ul>	d) If needed, confirmation that report was generated.
Stage 7: Publication	a) The SUPPLIER shall publish the TS simultaneously in both of Canada's afficial languages.	a) Confirmation that the TS     has been published in
(Guidance clause 3.5)	Canada's official languages.	English and French simultaneously.
	b) Develop and obtain SCC approval for any joint communications, if applicable	b) Obtain SCC approval for any joint communications
	c) The TS is to be available online at no-cost for the identified lifecycle in downloadable PDF format. The cost displayed for the TS shall be displayed as "\$0.00" or "at no cost" for Canadian IP addresses.	c) Confirmation that the TS is available online at no cost.
	d) A concise report explaining how the Technical Experts considered gender responsiveness when drafting the requirements of the TS, and the outcome.	d) Copy of Gender report provided to SCC
Stage 8: Maintenance	The SUPPLIER shall identify a suitable lifecycle.	Confirmation that a lifecycle has been identified.
(Guidance clauses 3.6, 3.6.1)		

# APPENDIX C – TECHNICAL EVALUATION CRITERIA

# APPENDIX C - TECHNICAL EVALUATION CRITERIA

## **Technical Evaluation Process**

The technical evaluation for the development of this National Technical Specification (TS) will consist of four (4) parts:

- A determination of the compliance of each bid with the mandatory requirements stated in <u>Part A</u>, below. This phase will consist of determining compliance of submitted Proposals against mandatory requirements. Proposals meeting all the mandatory requirements will be considered for the second phase. Proposals that do not substantially comply with all mandatory requirements and / or are substantially incomplete, will be disqualified and not evaluated further.
- 2. Each proposal that meets the stated mandatory requirements will be evaluated against the point-rated technical selection criteria (Part B). This phase will consist of evaluating the (i) technical and (ii) cost merits of proposals, which meet the stated mandatory requirements, against the point-rated technical selection criteria. Bidders must achieve a minimum score of 66% (50 points of a possible 75 points) for the point-rated technical criteria as stated in Part B, below. Only proposals meeting these requirements will be considered.
- 3. In the financial evaluation, tendered prices of the qualified bids will be computed as stated in Appendix D: Financial Proposal Template.
- 4. The highest-ranked Respondent will be determined using the highest combined rating of technical merit (75 points) and cost (25 points).

An Evaluation Committee, consisting of at least three (3) SCC or SCC-appointed representatives, will be formed to assess all bids received in response to SCC RFP# 2024-04. The committee will be dissolved after the successful completion of their duties in selecting the Bidder with whom SCC will contract for the delivery of the National Technical Specification that focuses on management of water and wastewater system management in northern communities.

# Part A: Evaluation of Mandatory Requirements

Proposals will be assessed by the SCC Evaluation Committee to determine whether they meet mandatory requirements pertaining to:

- The Proposal Format
- The Bidder, and
- The Project Team

# The Proposal Format

The proposal should not exceed 15 pages using 11 point font and excluding appendices.

## The Bidder

Each Bidder submitting a response to RFP #2024-04 must demonstrate to the satisfaction of the Evaluation Committee that:

• The Bidder has the competency to develop technical guidance solutions, similar to those outlined in the <u>Flexible Standards-Based Strategies and Solutions</u>, and the ability to comply to SCC's National Technical Specification guidelines, by submitting 2 copies of previously published technical guidance documents of a similar nature, that reflect the Project team's experience in developing technical guidance documents.

# The Project Team

Each Bidder must agree to the following mandatory requirements for the Project Leadership Team:

- At least three (3) years of experience in overseeing consultation-based technical guidance document development and
- At least two (2) years of experience managing committees of volunteer experts in the development of consensus-based technical guidance documents.

As part of the proposal, the Bidder must attach the curriculum vitae of each Team Member (resource) with, as a minimum, the following information:

- a) Name of the proposed Team Member and the role for which they are proposed;
- b) A list of qualifications directly related to the requirements;
- c) Chronological work experience;
- d) A detailed list of relevant academic and professional attainments.

The Project Team must consist of at least one (1) Project Leader, and at least one (1) Team Member. Only those proposals that are judged by the Evaluation Committee to have met all stipulated mandatory criteria will receive further consideration.

### Part B: Point-Rated Requirements

Each proposal must demonstrate to the satisfaction of the Evaluation Committee that all stipulated mandatory requirements can be substantiated through the evaluation of the point-rated requirements in the following four (4) categories, for which the respondent must include a response:

	Category	
I.	Bidder's experience in developing technical guidance documents	20
II.	Distribution and outreach strategy	20
III.	Project plan and schedule	30
IV.	Quality of the proposal	5
	Total Possible Points	75

The point-rated requirements correspond to specific criteria, which have been identified as forming the basis for the accumulation of points in each of the four (4) categories. Each proposal **must include a response to each category**.

# 50 of the possible 75 points must be achieved (66%) in order for the financial elements of the bid to be evaluated.

The Evaluation Committee will assess the experience and competence of the Bidding Organizations, ("the Bidder") with respect to RFP# 2024-04, in the development of technical guidance documents.

# I. Bidder's experience in developing technical guidance documents

The Bidder must provide examples that demonstrate the extent to which they meet each criterion. The <u>same example</u> may be used <u>to meet various criteria</u> but must be revised accordingly to highlight the context within which it applies. The basis for scoring each criterion is provided in the table below.

"Recent", unless otherwise stated means within the last five (5) years.

Criterion	Basis for Scoring	Possible Points
I.A. The Bidder is asked to provide two (2) recent examples that demonstrate that the Project Team has successfully managed volunteer expert committees responsible for the development of technical guidance or best practice documents.	For each example, points will be awarded as follows:  - up to three (3) points if the example adequately demonstrates successful management;  - up to five (5) points if the example convincingly demonstrates successful management.  Note: If the Bidder provides more than two (2) examples, only the first two (2) examples will be scored in the order they appear.	10
I.B. The Bidder is asked to provide two (2) current or recent examples that demonstrate experience and competence of the Project team in the development of technical documents related to water/wastewater management and/or northern community infrastructure.	For each example, points will be awarded as follows:  - up to two (2) points if the experience is implied or indirect;  - up to four (4) points if the experience is explicit and directly related to water/wastewater systems or northern infrastructure.  - up to five (5) points if the experience is explicit and directly related to water/wastewater systems and northern infrastructure.	10

# II. Distribution and outreach strategy

The Successful Bidder will plan and implement an outreach strategy to be approved by SCC in advance that will ensure appropriate engagement in the development of the Technical Specification and subsequently, increase awareness of the publication. Evaluation of each Bidder's proposed outreach strategy will be based on the Bidder's preliminary understanding of and connections with the target audience for the Technical Specification.

In particular, the Evaluation Committee will assess the depth of the Bidder's understanding of and connections with the target audience, proposed method(s) of communication, and any proposed complementary materials to facilitate greater awareness, understanding and application of the Technical Specification. The Bidder must provide examples that demonstrate the extent to which they meet each criterion. The basis for scoring with respect to each criterion is also provided in the table below.

Criterion	Basis for Scoring	Possible Points
II.A. The Bidder is asked to demonstrate an understanding of and connections with the target audience.	<ul> <li>Points will be awarded as follows:</li> <li>up to three (3) points for a breakdown of the target audience into relevant organizational categories;</li> <li>up to five (5) points for a breakdown of the target audience into relevant organizational categories, listing up to two (2) active contacts in some of the organizational categories with whom the Bidder has an active relationship (including the contact's name, title, and organization);</li> <li>up to eight (8) points for a detailed breakdown of the target audience into relevant organizational categories, listing up to two (2) active contacts in each organizational category with whom the Bidder has an active relationship (including the contact's name, title, and</li> </ul>	8
II.B. The Bidder is asked to provide <b>two (2) examples</b> of	organization.  For <b>each example</b> , points will be awarded as follows:	6
experience promoting technical guidance solutions and the capacity to provide easily understood guidance to stakeholders.	<ul> <li>up to one (1) point for demonstrating experience promoting standards solutions or other technical guidance solutions;</li> </ul>	
	<ul> <li>up to two (2) points for demonstrating experience promoting standards or other</li> </ul>	

Criterion	Basis for Scoring	Possible Points
	technical guidance solutions and developing complementary guidance materials;  - up to three (3) points for demonstrating experience promoting standards solutions and developing complementary guidance materials for stakeholders that are also target audiences for contributing and/or implementing the developed solution.	
II.C. The Bidder is asked to identify short-term activities for promotion and outreach to facilitate awareness, distribution and understanding of the Technical Specification by the target audience.	Points will be awarded as follows:  up to three (3) point for an outreach plan with some detail or insight;  up to six (6) points for a detailed outreach plan that demonstrates an understanding of the needs and characteristics of the target audience.	6

# III. Project plan and schedule

The Bidder is required to provide a proposed (preliminary) schedule for the development of the Technical Specification so that the Evaluation Committee may assess whether the Bidder has a realistic and well-ordered plan for the coordination of development work within the 16-months window, from start to finish. The basis for scoring the proposed schedule is provided in the table below.

Criterion	Basis for Scoring	Possible
		Points
III.A. The Bidder is asked to demonstrate that the Project	Points will be awarded as follows:	10
team will use a development process that will result in products that are of high	<ul> <li>up to five (5) points for a basic plan that identifies key details, deliverables, and key assumptions;</li> </ul>	
technical quality, as well as relevant, well-accepted, and implementable. This requires the Bidder to	<ul> <li>up to eight (8) points for an adequate plan that identifies the main details, deliverables, and key assumptions;</li> </ul>	
describe key steps relating to their proposed work plan.	<ul> <li>up to ten (10) points for a thorough plan, that includes details, deliverables, and key assumptions, and explains how they would contribute to the development of a strong Technical Specification.</li> </ul>	

Criterion	Basis for Scoring	Possible Points
III.B. The bidder is asked to provide a project schedule demonstrate that the Bidder has a clear and feasible plan for developing the Technical Specification within a 16-month timeframe and conducting distribution and outreach activities by mapping out the critical path including provisional dates.	<ul> <li>Points will be awarded as follows:</li> <li>up to five (5) points if the schedule addresses some main elements of the critical path, with some explanation of how the timelines were determined;</li> <li>up to nine (9) points if the schedule addresses nearly all main elements of the critical path, with some explanation of how the timelines were determined;</li> <li>up to twelve (12) points if the schedule addresses all main elements of the critical path, with thorough explanation of how the timelines were determined, including key underlying assumptions.</li> <li>Note: If a chart or image is included in the response, the resolution must be high enough such that all labels are clearly readable. A narrative should accompany the schedule, with explanation of how the timelines were determined, including key underlying assumptions.</li> </ul>	12
III.C. The Bidder is asked to provide <b>two (2) recent examples</b> that demonstrate the Project team have active relationships with organizations central to northern communities or/and northern infrastructure.	<ul> <li>For each example, points will be awarded as follows:</li> <li>up to three (3) points if the example convincingly demonstrates meaningful communication with the organizations;</li> <li>up to four (4) points if the example convincingly demonstrates a relationship that involves active collaboration with the organizations.</li> </ul>	8

# IV. Quality of the proposal

The Evaluation Committee will assess the quality of the proposal to determine whether the information organized within the proposal is presented in a clear and comprehensive fashion.

Criterion	Basis for Scoring	Possible
		Points
IV.A. The Bidder is asked to assure that material within	Points will be awarded as follows:	5
the proposal is formatted, organized, and written in	<ul> <li>up to three (3) points if the proposal is generally well-organized but is somewhat difficult to read</li> </ul>	
such a way as to make clear to the reviewer where	and contains some typos;	
responses to mandatory and point-rated requirements are located. The writing should	<ul> <li>up to five (5) points if the proposal is highly organized, concise, clearly written, and contains very few to no typos.</li> </ul>	
also be concise, easy-to- read, and edited for typos.		

# **Potential Capacity Building Activities**

The SUPPLIER is encouraged to carefully consider, and subsequently provide, several options for the development of capacity-building activities in the proposal. These options could include, but are not limited to:

- Developing an online training seminar (e.g., webinar) focused on the TS(s) that
  provides an overview of the TS(s), including context for development and
  requirements
- Presenting on the TS(s) at a conference
- A short written promotional overview of the TS(s) (e.g., a brochure)
- A self-paced training module to develop knowledge, understanding, and application
  of the TS(s).
- Opportunities to create understanding and co-ordination among stakeholders to help shape and influence the advancement of the TS to a National Standard of Canada (NSC)

Any capacity-building activities funded by SCC as part of this project must be made available in both English and French and provided at no fee to participants or recipients. Exceptions would only be made for instances where translation is not applicable (e.g., a presentation in a unilingual conference). Promotion of capacity-building activity(ies) should be coordinated with SCC prior to launch.

While capacity-building activities will take place following publication of the Technical Specification, planning for these activities should be considered throughout the course of the TS's development.

Please note that the cost of the proposed capacity-building activities will be assessed separately from the cost of developing the Technical Specification and will be excluded from the evaluation of the financial bid (see Appendix D). SCC will decide which activities, if any, to pursue and will agree upon the costs with the chosen supplier, prior to contract signature.

APPENDIX D - FINANCIAL PROPOSAL

# APPENDIX D FINANCIAL TERMS AND CONDITIONS PAYMENT SCHEDULE

PROJECT PHASE STAGE	PAYMENT REQUIRED (\$)	FY1	FY2
Project Initiation	NA	-	-
Technical Committee Engagement	\$	\$	\$
Drafting Process	\$	\$	\$
Technical Approval	\$	\$	\$
Publication	\$	\$	\$
Proposed Capacity Building Activity #1 (title of activity)	\$	\$	\$
Proposed Capacity Building Activity #2 (title of activity) add lines as necessary	\$	\$	\$
Official Language Act (See note 5)			10, 000 \$
Total:	\$	\$	\$
Total (excluding capacity building efforts)	\$	\$	\$
Total (including capacity building efforts)	\$	\$	\$

#### Notes

- 1. All prices quoted are in Canadian funds (excluding HST)
- End of Project Phase is based on the completion of the referenced stage; completion is deemed to be achieved once all the deliverables for the stage have been submitted by the Supplier and approved by SCC.
- 3. Project Completion occurs once the Supplier has completed all deliverables within the Scope of Work (see Appendix B) AND all invoices have been submitted.
- 4. Eligible proposals will be assessed financially solely based on the total cost excluding capacity building efforts. Capacity building activities will be agreed upon during contract negotiations and will be in addition to the cost associated with developing the Technical Specification.
- 5. As this project is funded by the Standards to Support Resilience of Infrastructure Program (SSRIP), the Official Language Act applies. As required, there may be additional French language interpretation and/or translation tasks upon acceptance by stakeholder(s) or participant(s) of an active offer with respect to the Official Languages Act. These costs will be reimbursed based on actuals, and must be substantiated by the Supplier (e.g., through records of translator efforts/time). Should this additional task affect the project timelines, the Supplier will follow the Scope Change Management Process of the contract. A maximum cumulated allowance of 10,000 \$ for substantiated expenses under this Act will be provided by SCC.

The financial proposal will be evaluated as follows:

$$p = y * \mu/z$$

Where

p = points for the financial proposal being evaluated

y = maximum number of points for the financial proposal

 $\mu$  = price of the proposal with the lowest price

z = price of the proposal being evaluated

**APPENDIX E - GENDER REPONSIVENESS REPORTING** 

### **GENDER REPONSIVENESS REPORTING**

The SUPPLIER is required to provide SCC with a concise report on how gender responsiveness was considered during the development process using the following template. SCC may use this information to report internally and externally on efforts made to support gender responsiveness for deliverables funded by the Standards to Support Resilience in Infrastructure Program (including by the Northern Infrastructure Standardization Initiative).

SUPPLIERS must consider the UNECE Guidelines on Developing Gender-Responsive Standards and are encouraged to share the document with Technical Committee and Working Group members.

Criteria	Example response
Contract number	Indicate the contract number provided by SCC here
Title of TS	Indicate the name of the TS, in English and French, that will be used when published. If the name has not been finalized, provide the most current name available in both English and French.
Supplier Organization	Indicate the name of your organization
Project Lead	Indicate the name(s) of the Project Manager(s) involved in the development of the TS
The gender ratio of the Technical Committee developing the TS	Indicate the gender ratio using the following formula: # of female committee members/total committee members*100 = % of female members on the committee The gender specific data to support this indicator should be collected on a voluntary basis (i.e., committee members should be invited to identify their gender, but not obligated to do so)
Efforts made to reach out to encourage women to join the Technical Committee as well as any barriers faced in doing so	Include any efforts made to encourage women to join the Technical Committee. The response should note:  • Whether the gender ratio was considered when developing or adding members to the committee  • What efforts were made to balance the ratio. Examples of efforts could include:  - Connecting with organizations and informal networks within industries and professions to explicitly invite women to join the committee with the goal of improving the gender balance  - Advertising the call widely, and proactively reaching out to invite women  - Oversampling women in recruitment efforts  - Any challenges the Project Manager(s) faced in balancing the gender ratio, and efforts made to overcome these  - The result of these efforts (e.g., the number of female members added to the

	committee and how that impacted the gender ratio)
The gender ratio of the Working Group, if applicable, developing the TS	Example of a response: The Technical Committee for this TS had previously been developed with a gender ratio of 13% (female committee members as a percentage of total members). Given the imbalance, we asked Technical Committee members to provide us recommendations for female colleagues who could join the committee, which led to two possible members. These two individuals were contacted to join the committee. We also reached out to female professionals in our own networks to join the committee, and professional women's networking groups relevant to the industry. When seeking volunteers, we explicitly encouraged women to apply. The result was the addition of three female members to the committee, which raised the gender ratio to 40%.  Indicate the gender ratio by using the following formula:  # of female Working Group members/total Working Group members*100 = % of female members on the Working Group The gender specific data to support this indicator should be collected on a voluntary basis (i.e., committee members should be invited to identify their gender, but not obligated to do so).
Efforts made to encourage women to join the Working Group, if applicable, as well as any barriers faced in doing so.	See example provided for Technical Committee members.
Overview of how the TS considers gender responsiveness	<ul> <li>This section should include the following elements:</li> <li>An overview of efforts made to consider gender responsiveness in the TS. For example: <ul> <li>How committee members considered gender the potential gender implications of the TS during the development process, and how they did so.</li> <li>Whether committee members sought the relevant expertise, tools or resources required to develop a gender responsive TS, and if not, what were the obstacles to doing so (e.g., if they were provided links to freely available GBA+ training).</li> <li>Whether the committee considered if the process in the TS is flexible and adaptable enough to accommodate relevant physiological (e.g., size, strength, stature, biology) and/or social differences between genders (e.g., prevalence of one gender or another in a certain sector or occupation)</li> <li>A list of sections that identify how the TS is gender responsive (e.g., language or considerations). This should include the following:</li> </ul> </li> </ul>

- The section number(s) and title(s) that includes gender responsive considerations.
- A quick overview of the language included that supports gender responsiveness.
- If gender responsiveness was not included, please provide the rationale for why that decision was made (for example, after examining sex-disaggregated data it was determined that there were no significant differences between men and women)

Example response: During the first Working Group meeting, members were encouraged to consider gender responsiveness during the development of the TS. The Project Manager explained the importance of the TS being gender responsive, and the potential impacts felt by women when gender was not considered. The Project Manager then facilitated a Q and A on the subject and provided tools (including links to GBA+ analysis training, and the UNECE guidelines) in the orientation package, and members were encouraged to consult these. When the first draft of the TS was prepared and being reviewed by Working Group members, the Project Manager asked members to comment in each section how gender differences could impact the use of the TS. In two instances. Working Group members identified the need for gender responsive considerations. These were addressed by adding in the following language (insert language from the TS) in Section # (insert the section numbers). In all other cases, the Working Group agreed that gender differences would not impact the use of the TS as it was written. During the Technical Committee review, members were requested to review the TS with gender responsiveness in mind. To support this discussion, committee members were provided a copy of the UNECE's Declaration for Gender Responsiveness for Standards Development as well as a list of questions to consider as they went through the TS. Questions included:

- What barriers might women face in using this TS? How has this been addressed?
- Will different groups (such as women) be differentially impacted by the application of this TS? If so, what has been done to address this.

Technical Committee members did not have any suggestions on how to improve the TS to support gender responsiveness but did provide suggestions on how to promote the TS to female professionals. These will be followed during the publication stage.