MC.CMC

Addendum / Addenda

No./N°

4

Project Description / Description de pro Solicitation No. 17-22090: Updat the Canadian Highway Bridge De	ing Climatic D		tional Building Code of Canada and
Solicitation No./ N° de solicitation 17-22090	Project No./N° de projet		W.O. No./N° d'ordre de travail
Departmental Representative / Représentant Ministériel Steve Cassidy	Date Nov 27, 2017		l
 Issue 1 indicates a need to update Code Table Elements for snow, precipitation, humidity and temperature. We note that wind pressures are excluded from this list of Elements. However, mapped contours of updated wind pressures are required under Issue 3. Who will be producing the updated design wind pressures? When will these data be made available for contouring? In what format will they be provided? Will wind pressure data include both peak gust and average values? 		Answers to #1 a) b) c) d)	Environment and Climate Change Canada. April 2018 Microsoft Access or Excel No – The Code currently addresses only Hourly average wind data.
 Issue 1 of the RFP indicates a requirement to provide: "software available for use and retention by NRC and ECCC, to enable future updates to the design data." Do NRC and / or ECCC have specific requirements for this software? If so, what requirements does NRC / ECCC have in terms of: 		Answers to #2	
i. Operating system / platform and programming language(s):		i. ii.	Something within Microsoft Visual Studio This is OK, provided the use of such

- ii. Options to leverage 3rd party licensed applications / software (e.g., spreadsheets, databases, statistical packages):
- iii. User interface (GUIs, language, etc.):

- apps/software is made clear, any fees associated are described, and the licensing agreement will not prevent NRC and ECCC from using it for the intended purpose (to produce data for the Building and Bridge Codes)
- iii. No special requirements. The software is for internal use only, so it needs to be useable by NRC and ECCC.
- 3. Issue 3 indicates requirements to provide:

 "...mapping and map interpolation tools
 designed to perform well with elements of
 NBC Table C-2 and CSA 6. The software,
 including a prototype interface for an
 interactive map interpolation tool that could
 be offered to users via a website, must be
 available for future use by NRC and ECCC, full
 documentation to be provided".
 - a. Do NRC and / or ECCC have specific requirements for the mapping and map interpolation tools and associated software? If so, what requirements does NRC / ECCC have in terms of:
 - i. Operating system / platform and programming language(s):
 ii. Options to leverage 3rd party licensed applications / software (e.g., GIS packages)
 - iii. User interface (GUIs, language, etc.)
 - b. For the prototype web map interface:
 - i. Is there an expectation to: a) make pre-contoured NBC
 Table Elements accessible via a web mapping interface; or,
 b) enable users to generate contours of NBC Table
 Elements via a web-based map interface
 - ii. Is it intended for internal (NRC and ECCC) or external (public) use?
 - iii. Must the prototype conform to Canada's website standards, language standards, layout standards, security standards, etc.

Answers to #3 (a)

- i. Something within Microsoft Visual Studio
- ii. See 2)ii.
- iii. No special requirements. The software is for internal use only, so it needs to be useable by NRC and ECCC

Answers to #3 (b)

- i. The tool will be based on a set of data (that will be updated by government), and the users will interact with the tool to interpolate the values that are of use to them. The tool will need to generate contours based on the latest set of data, and then have them accessible to users via a web mapping interface.
- ii. The prototype is only for internal use with the ultimate goal being to make it available for external (public) use (but not at this stage).
- iii. No this is a prototype. However, it must be able to be adapted to these standards in the future. If the prototype does not conform, a roadmap describing the work required to achieve these standards will need to be provided.

sources will be the MSC station data archives, to be augmented with reliable third party data sources where possible, and station data records ending as close to the present as possible."

Given the sparsity of observation stations in some regions of the country and the need to develop spatially interpolated isopleth maps (Issue 3), would NRC consider multi-year records of high spatially and temporally resolved mesoscale model outputs a suitable dataset for augmenting the MSC station data archives or must the data being used to augment the MSC records be from weather observation stations only?

4. Issue 1 of the RFP states: "The primary data

Answer to #4

Yes - there might be some role for mesoscale modelling and reanalysis, but this should supplement the station data, which would be the primary source..

5. Section 3.1 of the RFP specifies that the duration of the contact is January 1, 2018 until October 31, 2020, whereas 'Schedule' under Appendix B states that the work is to be completed by December 2020. Which end date is correct?

Answer to #5

The correct date is December 2020.

Upon request, the text above can be provided in French.



Conseil national de recherches Canada

