

Addendum / Addenda

No./N°

2

Project Description / Description de projet Solicitation No. 17-22090: Updating Climatic Data for the National Building Code of Canada and the Canadian Highway Bridge Design Code CSA S6		
Solicitation No./ N° de sollicitation 17-22090	Project No./N° de projet	W.O. No./N° d'ordre de travail
Departmental Representative / Représentant Ministériel Steve Cassidy	Date Nov 9, 2017	
1. The RFP references, but does not provide copies of Table C-2 of the National Building Code of Canada or Annex A3.1 Canadian Highway Bridge Design Code. Could the National Research Council provide copies of these documents to potential bidders so that they can assess the requirements to provide updated climate design data?		1. Here is a sample of data – see attached. Note the NBC currently lists data for 660 locations across Canada.

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



Sample data from NBC Appendix C (2015)

Division B

Appendix C

**Table C-2
Climatic Design Data for Selected Locations in Canada**

Province and Location	Elev., m	Design Temperature				De- gree- Days Below 18°C	15 Min. Rain, mm	One Day Rain, 1/50, mm	Ann. Rain, mm	Moist. Index	Ann. Tot. Ppn., mm	Driv- ing Rain Wind Pres- sures, Pa, 1/5	Snow Load, kPa, 1/50		Hourly Wind Pressures, kPa	
		January		July 2.5%									S _s	S _i	1/10	1/50
		2.5% °C	1% °C	Dry °C	Wet °C											
British Columbia																
100 Mile House	1040	-30	-32	29	17	5030	10	48	300	0.44	425	60	2.6	0.3	0.27	0.35
Abbotsford	70	-8	-10	29	20	2860	12	112	1525	1.59	1600	160	2.0	0.3	0.34	0.44
Agassiz	15	-9	-11	31	21	2750	8	128	1650	1.71	1700	160	2.4	0.7	0.36	0.47
Alberni	12	-5	-8	31	19	3100	10	144	1900	2.00	2000	220	2.6	0.4	0.25	0.32
Ashcroft	305	-24	-27	34	20	3700	10	37	250	0.25	300	80	1.7	0.1	0.29	0.38
Bamfield	20	-2	-4	23	17	3080	13	170	2870	2.96	2890	280	1.0	0.4	0.39	0.50
Beaton River	840	-37	-39	26	18	6300	15	64	330	0.53	450	80	3.3	0.1	0.23	0.30
Bella Bella	25	-5	-7	23	18	3180	13	145	2715	2.82	2800	350	2.6	0.8	0.39	0.50
Bella Coola	40	-14	-18	27	19	3560	10	140	1500	1.85	1700	350	4.5	0.8	0.30	0.39
Burns Lake	755	-31	-34	26	17	5450	12	54	300	0.56	450	100	3.4	0.2	0.30	0.39
Cache Creek	455	-24	-27	34	20	3700	10	37	250	0.25	300	80	1.7	0.2	0.30	0.39
Campbell River	20	-5	-7	26	18	3000	10	116	1500	1.59	1600	260	2.8	0.4	0.40	0.52
Carmi	845	-24	-26	31	19	4750	10	64	325	0.38	550	60	3.6	0.2	0.29	0.38
Castlegar	430	-18	-20	32	20	3580	10	54	560	0.64	700	60	4.2	0.1	0.27	0.34
Chetwynd	605	-35	-38	27	18	5500	15	70	400	0.58	625	60	2.4	0.2	0.31	0.40
Chilliwack	10	-9	-11	30	20	2780	8	139	1625	1.68	1700	160	2.2	0.3	0.36	0.47
Comox	15	-7	-9	27	18	3100	10	106	1175	1.28	1200	260	2.4	0.4	0.40	0.52
Courtenay	10	-7	-9	28	18	3100	10	106	1400	1.49	1450	260	2.4	0.4	0.40	0.52
Cranbrook	910	-26	-28	32	18	4400	12	59	275	0.30	400	100	3.0	0.2	0.25	0.33
Crescent Valley	585	-18	-20	31	20	3650	10	54	675	0.75	850	80	4.2	0.1	0.25	0.33
Crofton	5	-4	-6	28	19	2880	8	86	925	1.06	950	160	1.8	0.2	0.31	0.40
Dawson Creek	665	-38	-40	27	18	5900	18	75	325	0.49	475	100	2.5	0.2	0.31	0.40
Dease Lake	800	-37	-40	24	15	6730	10	45	265	0.55	425	380	2.8	0.1	0.23	0.30
Dog Creek	450	-28	-30	29	17	4800	10	48	275	0.41	375	100	1.8	0.2	0.27	0.35
Duncan	10	-6	-8	28	19	2980	8	103	1000	1.13	1050	180	1.8	0.4	0.30	0.39
Elko	1065	-28	-31	30	19	4600	13	64	440	0.48	650	100	3.6	0.2	0.31	0.40
Fernie	1010	-27	-30	30	19	4750	13	118	860	0.88	1175	100	4.5	0.2	0.31	0.40
Fort Nelson	465	-39	-42	28	18	6710	15	70	325	0.56	450	80	2.4	0.1	0.23	0.30
Fort St. John	685	-35	-37	26	18	5750	15	72	320	0.50	475	100	2.8	0.1	0.30	0.39
Glacier	1145	-27	-30	27	17	5800	10	70	625	0.83	1500	80	9.4	0.2	0.25	0.32
Gold River	120	-8	-11	31	18	3230	13	200	2730	2.80	2850	250	2.8	0.6	0.25	0.32
Golden	790	-27	-30	30	17	4750	10	55	325	0.57	500	100	3.7	0.2	0.27	0.35
Grand Forks	565	-19	-22	34	20	3820	10	48	390	0.47	475	80	2.8	0.1	0.31	0.40

Sample data From Annex A3.1 of Canadian Highway Bridge Design Code - CSA S6 (2014)

Annex A3.1 (normative) **Climatic and environmental data**

Notes:

- (1) *This Annex is a mandatory part of this Code.*
- (2) *See Annex CA3.1 of CSA S6.1 for the sources and derivation of the data presented in this Annex.*

Table A3.1.1
Reference wind pressure
(See Clause 3.10.1.2.)

Location	Hourly mean wind pressure, Pa, for return periods of			
	10 yr	25 yr	50 yr	100 yr
British Columbia				
Abbotsford	415	530	620	710
Agassiz	570	675	755	840
Albemi	470	560	630	700
Ashcroft	280	340	385	430
Beaton River	220	265	300	340
Burns Lake	305	355	390	430
Cache Creek	285	340	380	430
Campbell River	455	560	640	720
Carmi	245	315	375	440
Castlegar	225	285	335	390
Chetwynd	320	370	405	440
Chilliwack	475	605	715	830
Cloverdale	360	420	470	520
Comox	445	555	645	740
Courtenay	445	555	645	740
Cranbrook	225	280	325	370
Crescent Valley	225	280	325	370
Crofton	485	565	625	690
Dawson Creek	310	365	400	440
Dog Creek	310	365	400	440
Duncan	485	565	625	690
Elko	270	355	425	500
Fernie	325	410	480	550
Fort Nelson	210	255	285	310
Fort St. John	305	350	385	420
Glacier	240	285	315	350
Golden	270	310	345	380
Grand Forks	265	345	415	480
Greenwood	285	375	445	520
Haney	360	420	470	520
Hope	405	525	625	730
Kamloops	305	360	405	450
Kaslo	225	275	320	360
Kelowna	340	410	470	530
Kimberley	225	280	325	370
Kitimat Plant	380	440	485	520
Kitimat Townsite	380	440	485	520
Langley	360	420	470	550
Lillooet	315	380	430	490

(Continued)

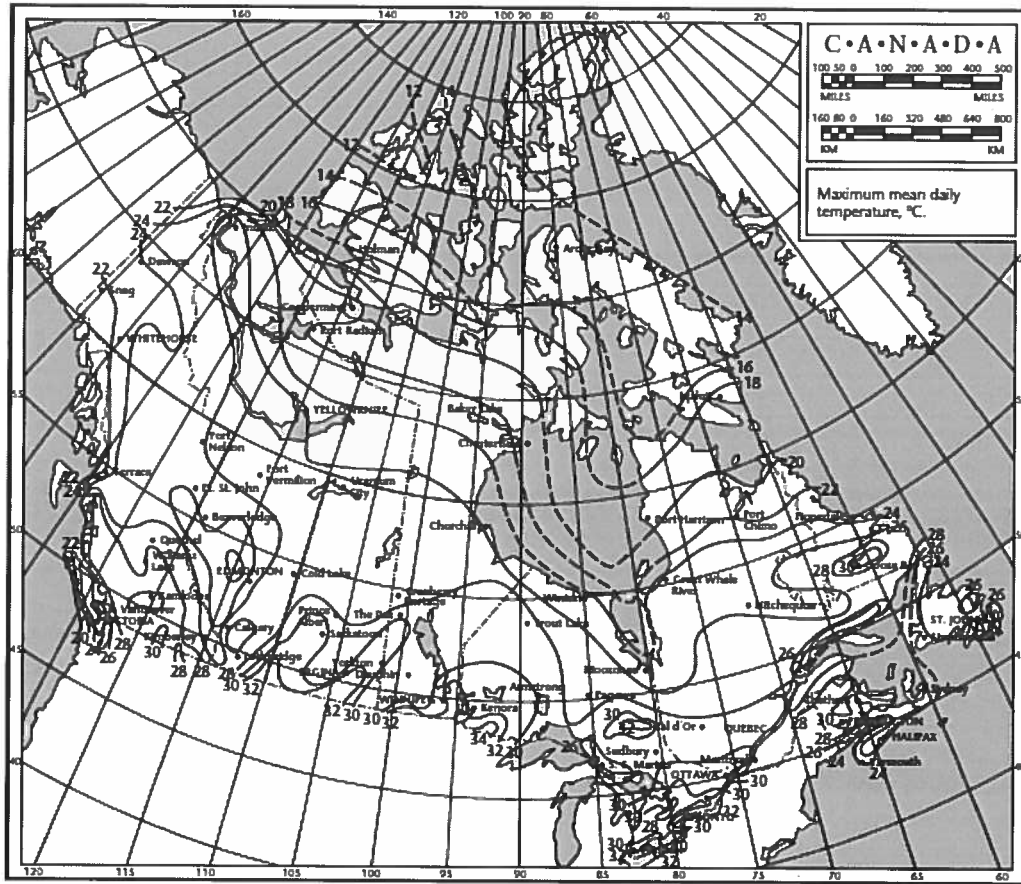


Figure A3.1.1
Maximum mean daily temperature
 (See Clause 3.9.4.1.)

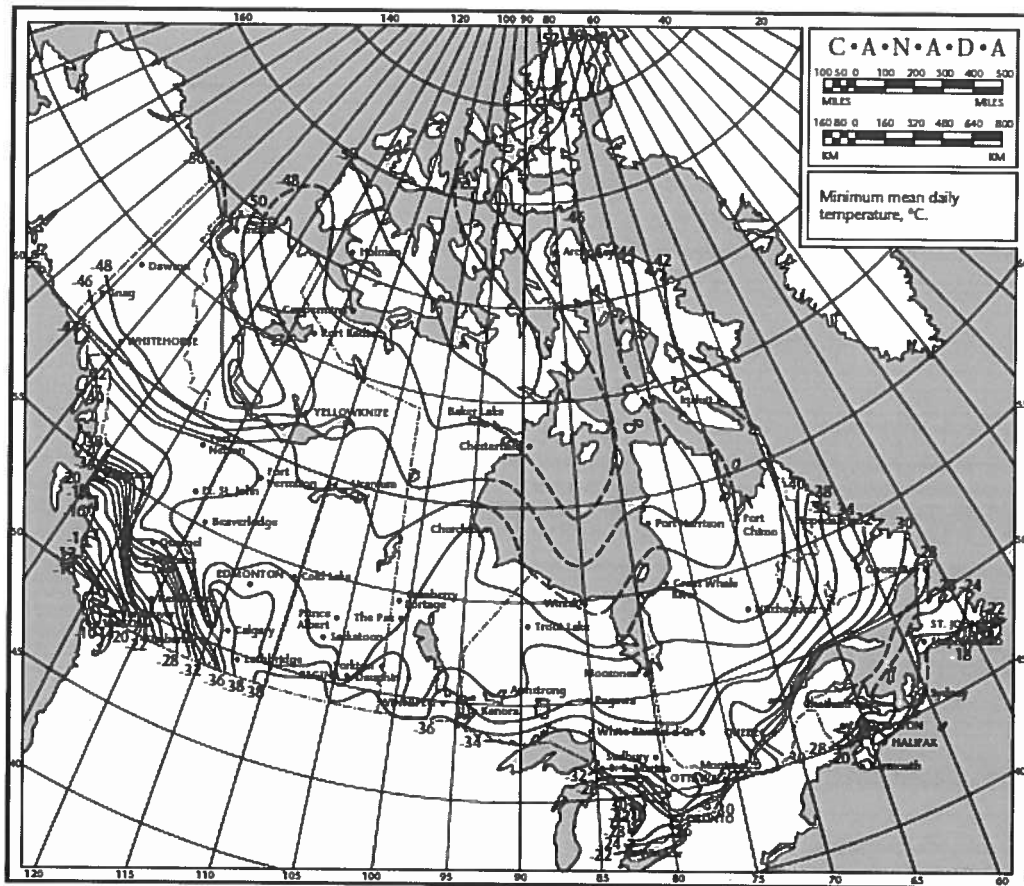


Figure A3.1.2
Minimum mean daily temperature
 (See Clauses 3.9.4.1 and 10.23.3.4.)

Ice accretion — the buildup of an ice layer on the exposed surfaces of a body due to freezing rain or in-cloud icing.

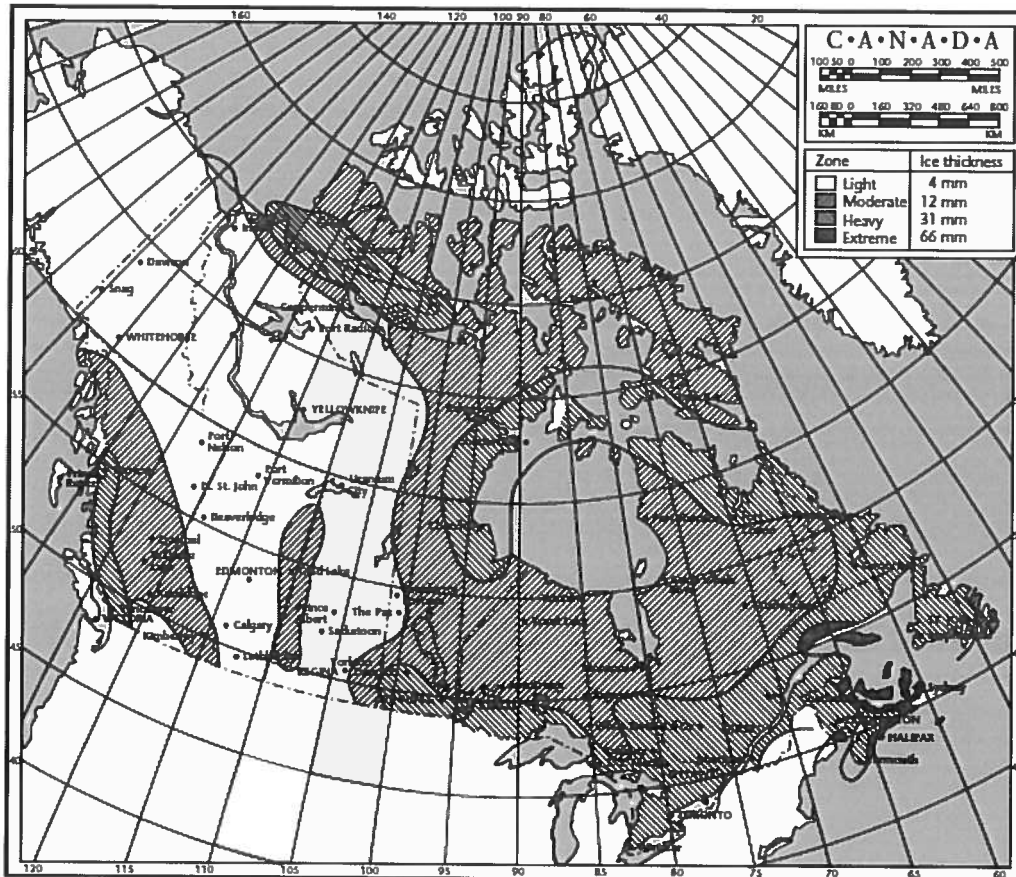


Figure A3.1.4
Ice accretion
(See Clause 3.12.6.2.)

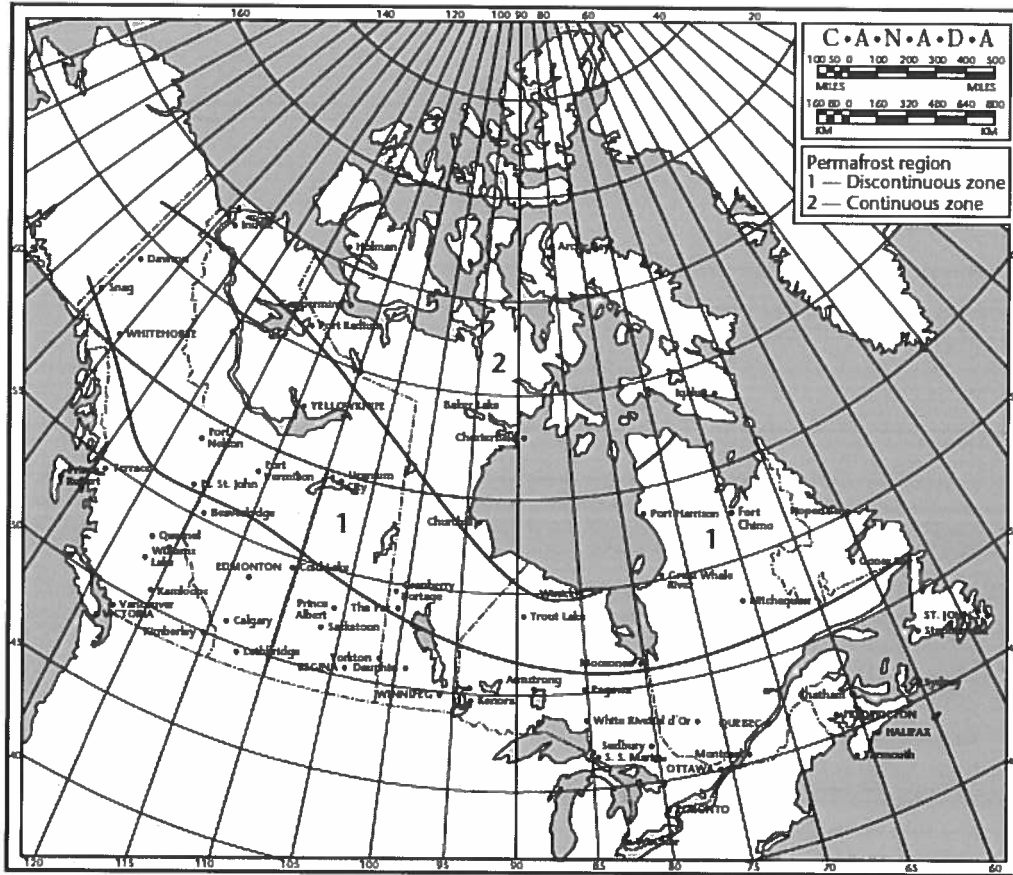


Figure A3.1.5
Permafrost region
 (See Clause 6.1.)