

**TOWNSHIP OF SOUTH GLENGARRY**  
**GLEN WALTER ELEVATED WATER STORAGE TANK**

**CONTRACT NO. 122083**

**ADDENDUM NO. 3**

The Contractor's attention is drawn to the following amendments to the Contract Documents.

The following questions/requests were received prior to close of Tender. Responses are in red.

1. We request clarification on your Response to Question #28 of Addendum #2.  
Our design engineer's interpretation of the response is that he is free to use load combinations in compliance with the newest edition of the Ontario Building Code only. Please confirm if you are in agreement with this interpretation?

Further note, the OBC 2020 code that comes into effect January 2025 includes seismic data resulting in earthquake loads up to 50% higher when compared to current provisions.

***Removing Item 2.2.7 (starting on page 13) of Section 11700 would correct this issue.***

***Clauses 2.2.7 and 2.2.8 of Specification Section 11700 have been revised. Please replace pages 13 and 14 of that Section with the attached revised pages.***

2. Upon receipt of response to Item 1 above, it will be necessary to complete significant design calculations for the elevated tank foundation and then the supporting ground improvement by others.

***In order to properly assess best design option for this we respectfully request the tender close date be extended from Friday December 13<sup>th</sup> to Wednesday December 18<sup>th</sup>.***

***An extension of the Tender period is granted to Wednesday December 18, 2024 at 2:00 pm local time.***

1. The Tenderer shall sign this Addendum in the space provided below, shall affix his seal hereto and submit this Addendum in the same envelope as his Tender. Except as and to the extent that they are amended by the foregoing, all terms and conditions of the Tender Documents remain in full force and effect.

Signature of Tenderer

SEAL OF TENDERER

Ainley and Associates Limited

Township of South Glengarry

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- .3 Live Load (including surcharge load) as indicated on Contract Drawings.
- .4 Live load on top of tank roof to be 1.0kPa.
- .5 Water Load (weight of all water when tank is filled to 150mm above Overflow) .
- .6 Snow load in accordance with the Ontario Building Code specified on the contract drawings.
- .7 Wind loading in accordance with the Ontario Building Code based on 1/50 frequency from any direction against the tank when full or empty. These loads shall be applied to the design in accordance with the appropriate section of the Ontario Building Code for Glen Walter.
- .8 Seismic Design must be completed using:
  - .1 Seismic factors for Cornwall, derived from the Ontario Building Code Supplementary Standard SB-1
  - .2 Refer to Geotechnical Report for Site Classification
  - .3 Importance Factor to be Post Disaster
  - .4 Seismic Force Resisting System with Rd of 2.0 or greater.
  - .5 Dynamic Analysis Procedure
- .9 Tolerable Settlement of Buildings: The eccentricity of vertical and live loads that may occur due to out-of-plumb construction shall be assumed to be at least as 1 in 250 and to differential settlement of the structure on the founding soils .
- .6 The effects of movements and loads from surface and wall ice thrusts shall be considered in conjunction with the rapid drawdown of stored water.

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- .7 The weight of the foundation and empty tank structure plus weight of the soil directly above the foundation shall be sufficient to resist the maximum net uplift occurring with the tank empty and the wind load, or earthquake load, as specified previously, acting in a direction causing the greatest net uplift on the foundation.
- .8 The tanks supporting structure shall be designed in strict accordance with the Ontario Building Code and relevant sections of the OHSA (as amended) for safety related equipment and ease of access for maintenance. The tank supporting structure shall be designed for the following load combinations:
1. Serviceability Limit States (SLS) - Load Combinations
    - Case 1:  $D + (WL) + 0.5L + 0.25S$
    - Case 2:  $D + (WL) + W$
  2. Ultimate Limit States (ULS) - Load Combinations
    - Case 1:  $1.4D + 1.4(WL)$
    - Case 2:  $1.25(D + (WL) + G) + 1.5L + 0.4W$
    - Case 3:  $1.25(D + (WL) + G) + 1.5S + 0.4W$
    - Case 4a:  $1.25(D + (WL) + G) + 0.5S + 1.4W$
    - Case 4b:  $0.9D - 1.4W$
    - Case 5a:  $1.0(D + (WL) + G) + 1.0E + 0.25S$
    - Case 5b:  $1.0(D + (WL)) - 1.0E$

where: D = Dead Load  
 E = Earthquake Load and Effects  
 L = Live Load  
 S = Snow Load  
 T = Temperature Effects  
 W = Wind Load

2.3 Composite Elevated Water Storage Tanks.1 General:

- .1 The elevated water storage tank shall be of composite-type design complete with all the accessories and piping required for its proper operation and maintenance. Detailed Shop Drawings of all the required