

Solicitation No. EQ715-221099/A-005

**Port Weller Search and Rescue Station Project
St. Catharines, Ontario**

CLARIFICATIONS, QUESTIONS AND ANSWERS

CLARIFICATIONS:

1. Refer to the following documents in Specifications Appendix A, to be read in conjunction with Architectural and Structural drawings, for recommendations on floor slab that pertain to particular site conditions of the project:
 - *Search and Rescue Station (SAR) Revitalization St. Catharine, Ontario: Final Geotechnical Investigation Report No.124-B-0017786-0-01-100-GE-R-0001-01* prepared by Englobe dated October 16, 2019, Section 8 Floor Slab.
 - *Search and Rescue Station (SAR) Revitalization St. Catharine, Ontario – New Garage: Supplementary Geotechnical Investigation Report No.124-B-0017786-0-01-100-GE-R-0002-0A* prepared by Englobe dated July 21, 2021, Section 6 Floor Slab.

Q30: The architectural drawings indicate a concrete faced insulation to the perimeter grade beams at the Living Quarters. The drawings for the utility shop has a similar detail. Is there a section detail to determine the type of insulation required at the grade beams?

A30: Refer to details on A600 and A606. Concrete face insulation to be applied to the perimeter grade beams of the heated portion of the Garage/Utility building.

Q31: Similarly the grade beams at the Living Quarters are shown with waterproofing and protection board. Are there details to indicate this is required at the Utility Shop?

A31: Refer to details on A600 and A606. Drainage board and waterproofing to be applied to the perimeter grade beams of the entire Garage/Utility building.

Q32: Can you please check or have the loading for helical pile HP2 reconfirmed. Please see drawing S200 in the attached PDF. Note #19 – HP2 - each pile has a unfactored horizontal load of 30kN. If the horizontal load of 30kN per helical pile is correct, large diameter (8.0 inch +/-) helical piles will be required.

A32: Please refer to drawing S302 Bracing Elevations. It contains Reaction at bracings for gravitational load, earthquake load N-S, and earthquake load E-W. The horizontal force is confirmed as 30kN.

Q33: The door schedule indicates wood doors and the specification is for flush wood doors. Are all of the doors flush wood doors except for two doors in the historic building. There appears to be 2 doors that are required to match the historic installations. Please confirm.

A33: Refer to all documents in conjunction including Drawings A022 (Schedules – Door, Window) and A024 (Door and Window Types). Door schedule indicates aluminium, wood and metal doors. Schedule indicates different types of wood doors and frames:

- sliding bedroom millwork closet door,
- sliding pocket door,
- flush wood door,
- historic reproduction wood stile door.

Doors D200 and D202 are historic reproduction doors.

Schedule also indicates door and frame but as part of demountable partition system.
All references to White Ash to be deleted and replaced with White Oak.

Q34: One of the historic doors is called off to meet 3/4hr rating. I don't believe that this door can be constructed to match existing and be fire rated. Please advise.

A34: Yes, possible. Fire resistance rating requirement must be achieved, with historic reproduction profile.

Q35: In regards to the under slab vapour barrier specification. Detail 3 on A605 shows refers the a vapour barrier under the slab which that section appears to be the area right between the New Living Quarters and the Historic building, are we to assume all slabs on this project receive the vapour barrier?

A35: Yes, all slabs on this project are to receive under slab vapour barrier.

Q36: Where can we find the specified fabrics and side/bottom channels above with coordinating windows?

Reference:

Specifications on Page 2 and 3; Section 12 24 13 (page 379 and page 380) noted below.

Part 2 PRODUCTS

2.1 MATERIALS

.3 Openness factor 5%

.4 Black out fabric

2.2 FABRICATION

.5 Blackout side and bottom channels

A36: Section 12 24 13, '2.1 Materials' and '2.2 Fabrication' provide the performance specification details. Refer to Architectural drawings in conjunction for information of the respective windows at all buildings requiring window roller shades. Site verification required prior to preparation of shop drawings.

Q37: Is there an insulation specification for the domestic water, sanitary or storm drainage. Could the consultant please confirm they do not plan on insulating these services?

A37: For domestic water please refer to Spec section 23 07 19 and the table below taken from the same spec section item 3.6.6:

Application	Temp °C	TIAC code	Pipe sizes (NPS) and insulation thickness (mm)			
			to 1	1-1/4 to 2	2-1/2 to 4	over
Domestic HWS		A-1	25	25	25	38
Domestic CWS with vapour retarder		C-2	25	25	25	25
Cooling Coil cond. drain		C-2	25	25	25	25

Sanitary pipe below the building (underslab piping) does not require insulation. Sanitary piping outside of the building needs to be buried below frost line (1700 mm below grade) as shown in mechanical drawings M-101.