

Solicitation No. - N° de l'invitation ET025-183260/A	Amd. No. - N° de la modif. 002	Buyer ID - Id de l'acheteur pwz117
Client Ref. No. - N° de réf. du client INAC	File No. - N° du dossier PWZ-7-40287 (117)	CCC No./N° CCC - FMS No./N° VME

CLARIFICATIONS: Questions and Answers

1. We note several references to 'manufacturer's site visits' for the purposes of field verification, quality assurance and the like. While we agree with the principle, we wish to point the extraordinary impact this may have to the project from a cost perspective. We count at least 21 references to 'manufacturer's site visits' throughout the document. While dependent on the location of manufacturer's offices or designated representatives relative to the Place of Work, we estimate at least \$15,000.00 per occurrence of this requirement in the specification. For reference purposes, we have compiled the following list of occurrences of this requirement in the specifications:

05 12 23 – 3.11 (Field Testing of Structural Steel Welds) – Independent lab Radiography and other field testing of structural steel welds. **Answer: This requirement is maintained.**

06 18 00 – 3.3 (Field Testing of Glue-Laminated Construction) - Independent lab Bolt torque testing , plumbness and straightness of structure. **Answer: This requirement is maintained.**

~~22 31 16 – 3.3.2 (Commercial Domestic Water Treatment) – Have manufacturer present during start-up~~
Answer: Not required, this will be further defined in Addendum.

~~23 05 13 – 3.3.2 (Common Requirement for HVAC Equipment – Manufacturer's field services~~ **Answer: Not required, this will be further defined in Addendum.**

~~23 05 17 – 3.5 (Pipe Welding) – Provide an inspection specialist~~ **Answer: Not required, this will be further defined in Addendum.**

~~21 05 01 – 3.7 (Hanger and Supports for HVAC Piping and Equipment) – Manufacturer's field services~~
Answer: Not required, this will be further defined in Addendum.

~~23 05 48 – 3.3 (Vibration and Seismic Controls for HVAC – Manufacturer's field services~~ **Answer: Not required, this will be further defined in Addendum.**

~~23 05 94 – 3.3 Pressure Testing of Ducted Air System) – Appears to apply only to high pressure systems. Does not appear to be applicable to this project~~ **Answer: Not required, this will be further defined in Addendum.**

~~23 11 13 – 3.9 (Facility Fuel Oil Piping) – Have manufacturer present during startup~~ **Answer: Not required, this will be further defined in Addendum.**

~~23 25 00 – 3.7.2.13 (HVAC Water Treatment) – Have manufacturer present during startup~~ **Answer: Not required, this will be further defined in Addendum.**

~~23 32 48 – 3.4 (Acoustical Air Plenums) – Arrange to have manufacturer's representative to review the work~~ **Answer: Not required, this will be further defined in Addendum.**

~~23 52 00 – 3.6 (Heating Boiler) – Manufacturer's representative to certify....~~ **Answer: Not required, this will be further defined in Addendum.**

~~23 73 11.01 – 3.4 (Kitchen Hoods and Exhaust Systems) – Have manufacturer present during start-up~~
Answer: Not required, this will be further defined in Addendum.

~~23 82 39 – 3.3 (Unit Heaters) – Have manufacturer present during start-up~~ **Answer: Not required, this will be further defined in Addendum.**

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23 82 43 – 3.3 (Hydronic Radiant Panels – Have manufacturer present during start-up **Answer: This requirement is maintained.**

~~23 84 13 – 3.3 (Humidifiers) – Have manufacturer certify the installation~~ **Answer: Not required, this will be further defined in Addendum.**

26 09 43 – 3.3 (Network Lighting Controls) – Inspection by manufacturer's representative **Answer: This requirement is maintained.**

28 10 00 – 3.3 (Access Control) – Ensure manufacturer's representative on site

28 23 00 – 3.3 (Video Surveillance) – Site verification by manufacturer

28 31 00 – 3.3 (Intrusion Detection) – Site verification by manufacturer

Answer: The following three security systems are interconnected. A single representative typically does the verification onsite for all three.

28 46 00 – 3.2 (Fire Detection and Alarm) – Manufacturer's field report **Answer: It is a code requirement to do ULC537 tests by the manufacturer's representative.**

We believe that in the absence of the manufacturer's representative, these services are otherwise well covered by the contractor, sub-contractor, design consultant, departmental representative and the authorities having jurisdiction. Please confirm that the additional service of the manufacturer is necessary or still desired. Considering the minimal scale of this building, we would also propose that Commissioning be included in the tender as an optional price in the bid to be exercised in the contract if deemed necessary post award. Please confirm. **Answer: Commissioning to remain in contract, it is not an optional price.**

2. Please provide a specification for the structural wood decking in F2 and R1/R2. **Answer: This will be further defined in Addendum.**

3. A fence exists on the site. Is the demolition of this fence to be included in the scope of this project?

Answer: Yes, it is to be included in the scope of the project and will be further defined in Addendum.

4. Please provide specifications for the new fence referenced in the drawings

Answer: This will be further defined in Addendum.

5. Please provide a specification for the concrete topper intended for floor detail F1 and F2 along with details of required reinforcement.

Answer: This will be further defined in Addendum. No reinforcement is required in the concrete topping.

6. Cement panel specified in wall type W2a is noted to be installed continuously without seams. Largest area of installation is approximately 6' x 12'. We cannot find a supplier of cement panel in this size. Please provide further product detail or revise installation requirements.

Answer: This will be further defined in Addendum.

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7. There are several notes related to furniture and equipment by others. Please confirm that this is to be installed by others as well.

Answer: All items identified by others will be installed by others.

8. Consider a cash allowance for Utility and Service connections such as Telephone and Power. This is typical practice for projects in this region.

Answer: This will be further defined in Addendum

9. 32 16 15 indicates wood curbs are to be paid for by linear meter. Please provide unit pricing table.

Answer: They are included in the lump sum rather than by linear meter. It will be further defined in Addendum.

10. 31 23 16.26 indicates to carry 250 cubic meters of rock removal in bid. Please provide unit pricing table for rock removal over and above this quantity

Answer: Please price accordingly. Any revisions will be made via change order.

11. Linoleum Sheet Resilient flooring has certain limitations with respect to in-floor heat. Temperature at the adhesive line should never exceed 27 degrees Celsius and can result in the opening of seams, discolouration and failure of the adhesive. Please confirm the use of this material for the floor.

Answer: This will be further defined in Addendum.

According to the quote document Division 23 01 31 point 2.4 HVAC contractor is to provide a robotic cleaner for duct, we have the specifications but no model for the product. I understand that those spec must have been taken from a specific robot model, would it be possible to have the model because when it come to robotic, every company have its own type of robot with very specific specification making it hard to find the exact one.

Answer: No robotic cleaner is required for this project. This will be further clarified in Addendum.

This is to inform you of the recent advertisement of the Joamie Court subdivision which is to be substantially complete by November 1, 2018.

AV-D in the attached documents coordinates with the Access Vault for Water, Sewer and Fire Protection Services.

There may be an opportunity to coordinate this element of the work with the City of Iqaluit for cost reduction.

We would propose that this element of the work be set aside or covered with a cash allowance with instruction to coordinate with the City of Iqaluit.

Answer: We are aware of the Joamie Court project and have been coordinating with the Government of Nunavut and their consultant team. There will NOT be a cash allowance for this work.

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'Is the tube lengths for the in floor radiant heat shown in the charts on drawings M302 and M303 are correct.

They feel the lengths should have another zero (0) added as they think the lengths are short.'

Answer: This will be further defined in Addendum.

Please advise which windows have type I, 2 and 3 coverings.

Answer: The type of window shades are identified in architecture drawings A-201-REFLECTED CEILING PLAN – GROUND (notes 08, 09 and 10) and A-202-REFLECTED CEILING PLAN – LEVEL 2 (note 06).

Drawings M200, M201, M202, M300, M301, M302, M303

- Could you please provide manufacturer and model for each of plumbing and heating items in tables (Also see section 22 42 13 and 22 42 16) and also for water meter (01/M204), back flow preventer, pressure regulators, thermostatic mixing valve and water make-up assembly (specification 22 05-15)? It will be difficult for us to provide you a proper quote without acceptable products.

Answer: A manufacturer and model cannot be provided. The specifications are performance base only.

Drawing M204

- Could you please provide manufacturer and model for W-1 and DW-1?

Answer: A manufacturer and model cannot be provided. The specifications are performance base only.

Drawing M202

- Where do we have to provide items PR-1 and PR-2? We don't see anyone on drawings. PR-1 also doing reference to pressure regulator in riser detail on drawing M200.

Answer: For PR-1 and PR-2 references on M-202, refer to the Plumbing Equipment List located on the same drawing page. The distinction between PR-1 references in M-202 and M-200 will be further clarified in Addendum.

Drawing M304

- Could you please provide manufacturer and model for the 3 Ø air separator and the filter in bypass of HP1 pumps?

Answer: A manufacturer and model cannot be provided. The specifications are performance base only.

Specification section 22 31 16

- Could you please provide manufacturer and model for water treatment system?

Answer: A manufacturer and model cannot be provided. The specifications are performance base only.

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Specification section 23 21 13.02 2.1.2

- Can we use the specifications of this section (steel) instead of section 23 21 13.01 (copper) for the heating pipework even though it seems to apply to underground piping between the FMB and the MRB (which we don't seem to have on this project)?

Answer: This will be further clarified in Addendum.

Section 06 400 2.18.1.2.6

Heavy-duty extensions and drawer slides, Extra-heavy-duty, for large module and pullout stairs, full extension pretension, mechanism in close position with lock lever, steel ball bearing, side capacity: 150 to 550 lbs, length as per woodwork module requirement, white (30) finish.

This product is not available in white finish.

Answer: This will be further clarified in Addendum.

1. Please provide specs for the gabion and fence.

Answer: Specifications will be further defined in Addendum.

2. Please provide a plan view of the new access vault shown on C-106.

Answer: This will be further defined in Addendum.

3. Why is the insulation needed around the pipes inside the access vault? Insulation inside the access vaults is not specified in the Iqaluit Municipal Guidelines.

Answer: It is considered that the risk of pipes freezing is too important to not have insulation inside the access vaults.

<p>M300</p> <ul style="list-style-type: none">• Do we absolutely have to install two emergency valves in line on the oil supply pipework of the oil pumps? <p>Answer: Yes one exterior, one interior.</p> <p>Plan M301</p> <ul style="list-style-type: none">• The two heating pipework and details (05 / M305) supplying the roof vents are not at the required locations on the M203 plan. Please clarify. <p>Answer: This will be further defined in Addendum</p> <p>Map M304</p> <ul style="list-style-type: none">• Can you tell us in plan M300 (in the mechanical room) where do we need to install the pressurized glycol make-up unit (PGV-1 or PGU-1 according to plan M301)? <p>Answer: This has been clarified in Addendum 1</p> <ul style="list-style-type: none">• The diameters of the pipework feeding the Crawlspace are 32Ø on this drawing while they are 20Ø on M300 drawing. Which diameters are to consider? <p>Answer: This will be further defined in Addendum</p> <ul style="list-style-type: none">• The diameter of the domestic cold water piping supplying and exiting the domestic hot water tank is 38Ø whereas in the M204 drawing it is 25Ø. Which diameter is to consider? <p>Answer: This will be further defined in Addendum</p> <ul style="list-style-type: none">• Can you tell us where the sets containing the BSP-1 to 4 pumps and accessories are on the M300 plan view? <p>Answer: See detail plan M300 detail 03.</p> <ul style="list-style-type: none">• Do each of these sets include all the elements placed in each box on a skid? <p>Answer: Anchoring on the wall as shown on detail 03 of M300. This will be further defined in Addendum</p>	<p>Plan M300</p> <ul style="list-style-type: none">• Devons-nous absolument installer 2 valves d'urgence en ligne sur l'alimentation en huile des pompes d'huile ? <p>Répondre : Oui. Une à l'intérieur et une à l'extérieur.</p> <p>Plan M301</p> <ul style="list-style-type: none">• Les 2 réseaux de chauffage et détails (05/M305) alimentant les événements au toit ne sont pas du tout aux endroits requis sur le plan M203. Veuillez clarifier le tout. Répondre : Ils restent facilement identifiables mais cette information sera tout de même clarifiée en addenda. <p>Plan M304</p> <ul style="list-style-type: none">• Pouvez-vous nous indiquer au plan M300 (dans la salle mécanique) où se trouve le système de pressurisation de glycol (PGV-1 ou PGU-1 selon le plan M301) ? <p>Répondre : Clarification apportée avec l'addenda 1.</p> <ul style="list-style-type: none">• Les diamètres des réseaux alimentant le Crawlspace sont 32Ø sur ce plan alors qu'ils sont 20Ø au plan M300. Quels diamètres sont à considérer ? <p>Répondre : Clarification à venir en addenda.</p> <ul style="list-style-type: none">• Le diamètre de la tuyauterie d'eau froide domestique alimentant et sortant du chauffe-eau est 38Ø alors qu'au plan M204, il est 25Ø. Quel diamètre est à considérer ? <p>Répondre : Clarification à venir en addenda.</p> <ul style="list-style-type: none">• Pouvez-vous nous indiquer où se trouve les ensembles contenant les pompes et accessoires BSP-1 à 4 sur la vue en plan du plan M300 ? <p>Répondre : Clarification à venir en addenda.</p> <ul style="list-style-type: none">• Est-ce que chacun de ces ensembles comprennent tous les éléments placés dans chaque encadré sur un skid ? <p>Répondre : Non fixation au mur tel que représenté aux élévations 03 et 04 de M300. Clarification à venir en addenda.</p>
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Can you also draw the heating pipework for the radiant floors from the HP2-1 and HP2-2 pumps manifold to the above mentioned panels and up to the PRAD-1 to PRAD-5 on M302 and M303 drawings. The pipework can be very different (and therefore not the same cost) depending on whether there is a pipework supplying the manifolds of the 2 floors in a single pipework or in two separate pipework per floor; similarly if the panels containing the BSP-1 to 4 pumps are in the mechanical room or directly with the manifolds. Usually, pipework for the radiant floor system are included into the same heating pipework than the other heating devices. Please clarify.

Answer: Information is provided on plan M304.

- Do we absolutely have to supply and install an in-line 75Ø air separator at the boiler outlet in addition to the hydraulic separator (HYS-1) which, among other things, has the same function of purging the air from the pipework with its air vent at the top? This air separator is therefore useless.

Answer: The air vent is redundant. Not the air separator. This will be further defined in Addendum

- Do we absolutely have to provide a second set of heat pumps (HP1-2 and HP2-2) in series with other ones (HP1-1 and HP1-2)? There is only one heating network. The hydraulic separator is not an exchanger that separates two networks. These pumps therefore become useless.

Answer: The aim of the hydraulic separator is not separation. It's a low loss header. This will be further defined in Addendum. The pumps serve different roles. Primary circuit is for control.

Plan M305

- Do we need oil pan under each filter of each boiler?

Answer: Yes. This will be further defined in Addendum

• Pouvez-vous aussi nous dessiner le réseau de chauffage pour les planchers radiants partant de la nourrice des pompes HP2-1 et HP2-2 jusqu'aux panneaux ci-haut mentionnés et jusqu'aux manifolds PRAD-1 à 5 des plans M302 et M303. Les réseaux peuvent être très différents (et donc pas le même coût) dépendamment s'il y a un réseau alimentant les manifolds des 2 étages en un seul réseau ou en deux réseaux séparés par étage ; de même si les panneaux contenant les pompes BSP-1 à 4 sont dans la salle mécanique ou directement avec les manifolds ; de même si l'on doit incorporer le réseau des planchers radiants à même le réseau de chauffage existant (ce qui est habituellement le cas dans les projets de planchers radiants). Veuillez clarifier le tout.

Répondre : L'information est très claire au plan M304.

- Devons-nous absolument fournir et installer un séparateur d'air en ligne 75Ø à la sortie des chaudières en plus du séparateur hydraulique (HYS-1) qui a, entre autres, la même fonction de purger l'air du réseau avec son purgeur d'air sur le dessus ? Ce séparateur d'air est donc inutile.

Répondre : Le purgeur est redondant. Pas le séparateur. Clarification à venir en addenda.

- Devons-nous absolument fournir un 2e ensemble de pompes de chauffage (HP1-2 et HP2-2) en série aux autres pompes (HP1-1 et HP1-2) ? Il n'y a qu'un seul réseau de chauffage. Le séparateur hydraulique n'est pas un échangeur qui sépare deux réseaux. Ces pompes deviennent donc inutiles

Répondre : La pertinence ou non de pompes en séries dépend de la pression développée des dites pompes. Les pompes HP1-1/2 sont réglables à faible vitesse et faible pression développée afin de servir un but de circulation et contrôle. Le nom du séparateur porte à confusion. Il sert de header dans notre application. Clarification à venir en addenda.

Plan M305

- Devons-nous prévoir des pannes à l'huile en dessous de chaque filtre de chaque chaudière? **Répondre : Oui. Clarification à venir en addenda.**