

**Amendment No. 012**

**Technical Question and Answer**

#	Question	Response
1	Division 26 spec electrical detail sheet E-124-E-127: Has (4) four extra panel schedules that are not on the floor plans nor the circuits. Are these for the future goat barn and not to be included as part of this project? Panels PP-GC, PP-GD, PP-GF and PP-GG. Please confirm.	Panel PP-GC, PP-GD, PP-GF and PP-GG are panels for the future goat barn and are not included as part of this project.
2	Division 26 spec electrical detail sheet E-123: Panel schedule PP-CG is shown on floor plan DWG E-C-2.3 but is not shown on single line diagram DWG E-C-2.6. Please confirm where panel PP-CG is fed from.	Panel PP-CG is shown as fed on the single line diagram DWG E-C-2.6 from Panel DP 'CB', circuit 56,58,60.
3	Division 26 electrical specification 26 29 10 Motor Starters: Please confirm all loose starters shown on electrical drawings are supplied and installed by electrical contractor division 26.	All loose starters shown on the electrical drawings are to be supplied and installed by the electrical contractor division 26.
4	DWG E-C-2.11: Please confirm the ventilation fan and milk parlour basket fan starter panels is provided by dairy equipment supplier.	The ventilation fan and milk parlour basket fan starter panels are to be provided by the dairy equipment supplier. Note that All indicated wiring, cabling and conduit is by the electrical and systems contractors.

5	<p>DWG E-C-2.2: Manure Pump Room C15 indicates 'EX' explosionproof for all the magnetic starters, motors, devices and receptacles inside the room. Please confirm the classification type for this room.</p>	<p>The Manure Pump Room C15 is classified as a Class 1, Div 1 at/in the manure tank, and 1524mm away is Class 1, Div 2 space per Code and unclassified beyond the room. Note that exhaust fan EF-5 (wall exhauster) serving the room is also to be explosion rated (Class 1 Div 2) as well. Clarification is provided in Addendum 08 to Set 2.</p>
6	<p>DWG E-C-2.4: Manure Pump Room C15 indicates 'MP' moistureproof for the fire alarm devices in this room. But DWG E-C-2.2 indicates explosion proof items in there. Please confirm that these fire alarm devices are to be 'EX' explosionproof.</p>	<p>Yes, fire alarm devices in the Manure Pump Room C15 are to also be explosion proof. Clarification is provided in Addendum 08 to Set 2.</p>
7	<p>Division 26 spec electrical detail sheet E-130: Please confirm this detail sheet is not applicable and not to be provided on this project.</p>	<p>Correct, Division 26 spec electrical detail sheet E-130 pertains to the Goat Barn and is not applicable and not to be provided on this project.</p>
8	<p>Amendment 10/Addendum No.6: References Cerberus Pyrontronix Siemens Fire Alarm System. It is still unclear if the new cow barn FACP has to be connected to this existing Siemens fire alarm control panel whether wireless or wired. Please confirm that the new fire alarm control panel in cow barn is completely standalone and does not need to be connected to the existing Siemens fire alarm control panel in any way.</p>	<p>The fire alarm system for the Cow Barn is an independent fire alarm system for the building but is to be tied into the overall Institution's Cerberus Pyrotronix Siemens Fire Alarm System wirelessly reporting back to the MCCP (Main Communication and Control Post) in the Institution. Refer to Addendum 7.</p>

Solicitation No. - N° de l'invitation  
EQ734-221264/A

Amd. No. - N° de la modif.  
011

Buyer ID - Id de l'acheteur  
PWL048

Client Ref. No. - N° de réf. du client  
R.100644.001

File No. - N° du dossier  
PWL-1-44036

CCC No./N° CCC - FMS No./N° VME

9	<p>The R1 &amp; R2 roof descriptions do not match what is noted in the steel roofing specification, see below and advise asap. If we are to go with strapping on the trusses as per R1 &amp; R2 roof descriptions <b>OR</b> if it will be 1/2:" plywood with membrane as per spec's? There is quite a cost difference between the two items.</p>	<p>Use strapping per Roof assembly as described in architectural drawings. There is no plywood roof sheathing or underlayment required. Specifications to be updated to omit these references in addendum 08.</p>			
	<table border="1"> <tr> <td data-bbox="170 591 506 1068"> <p><b>Notes on Drawings:</b></p> <p><b>R1</b> ROOF ASSEMBLY- NON-RATED 0.34mm HI-RIB STEEL c/w SCREW FASTENERS 38 x 89MM WOOD STRAPPING AT 610mm c/c PRE-ENGINEERED WOOD TRUSSES SPACED AT 1220mm c/c RSI: 7.04 BLOWN-IN INSULATION 0.1524 mm POLY VAPOUR BARRIER 38 X 89mm WOOD STRAPPING AT 610MM c/c 13mm INTERIOR PVC PANEL CEILING (/16mm GYPSUM BOARD/ ACT- SEE RCP)</p> <p><b>R2</b> 1 HR FIRE-RATED ROOF ASSEMBLY- OFFICE AREA 0.34mm HI-RIB STEEL c/w SCREW FASTENERS 38 x 89MM WOOD STRAPPING AT 610mm c/c PRE-ENGINEERED WOOD TRUSSES SPACED AT 1220mm c/c RSI: 7.04 BLOWN-IN INSULATION 0.1524 mm POLY VAPOUR BARRIER 38 X 89mm WOOD STRAPPING AT 610MM c/c 2 LAYERS OF TYPE X GYPSUM BOARD 13mm INTERIOR PVC PANEL CEILING (/16mm GYPSUM BOARD/ ACT- SEE RCP)</p> </td> <td data-bbox="506 591 816 1068"> <p><b>Notes in Spec:</b> PART 2 PRODUCTS 2.1 SHEET METAL MATERIALS .1 Zinc coated steel sheet: to ASTM A653/A653M, commercial quality, with Z275 coating, regular spangle surface, prefinish as specified in 2.2, 0.43 mm minimum base metal thickness. 2.2 PREFINISHED STEEL SHEET .1 Prefinished steel with factory applied polyvinylidene fluoride. .1 Class F1S. .2 Colour selected by Departmental Representative from manufacturer's standard range. .3 Specular gloss: 30 units +/-5 to ASTM D523. .4 Coating thickness: not less than 22 micrometres. .5 Resistance to accelerated weathering for chalk rating of 8, colour fade 5 units or less and erosion rate less than 20% to ASTM D822/DB22M as follows: .1 Outdoor exposure period 2500 hours. .2 Humidity resistance exposure period 5000 hours. 2.3 ACCESSORIES .1 Plastic cement: to CAN/CGSB-37.5.</p> </td> <td data-bbox="816 591 1213 1068"> <p><b>Notes in Spec (cont):</b> PSPC Ontario SHEET METAL ROOFING Section 07 61 00 Region Project Page 3 Number R.100644.001 Document Set 2 2021-08-31 .2 <b>Plywood roof sheathing:</b> In accordance with Section 06 10 00. .3 <b>Underlayment:</b> To ASTM D1970/D1970M, 1 mm thick composite underlayment comprised of SBS rubberized asphalt compound with high temperature softening point integrally laminated to high density cross-laminated polyethylene film. Self-adhering with siliconized kraft paper bottom surface and non-slip coating on exposed surface. .4 Sealant: Asbestos-free sealant, compatible with systems materials, recommended by system manufacturer. .5 Rubber-asphalt sealing compound: to CAN/CGSB-37.29. .6 Cleats: of same material, and temper as sheet metal, minimum 50 mm wide. Thickness same as sheet metal being secured. .7 Fasteners: stainless steel screws, exposed with coloured heads to match metal roofing. .8 Washers: of same material as sheet metal, 1 mm thick with rubber packings. .9 Touch-up paint: as recommended by sheet metal roofing manufacturer.</p> </td> </tr> </table>	<p><b>Notes on Drawings:</b></p> <p><b>R1</b> ROOF ASSEMBLY- NON-RATED 0.34mm HI-RIB STEEL c/w SCREW FASTENERS 38 x 89MM WOOD STRAPPING AT 610mm c/c PRE-ENGINEERED WOOD TRUSSES SPACED AT 1220mm c/c RSI: 7.04 BLOWN-IN INSULATION 0.1524 mm POLY VAPOUR BARRIER 38 X 89mm WOOD STRAPPING AT 610MM c/c 13mm INTERIOR PVC PANEL CEILING (/16mm GYPSUM BOARD/ ACT- SEE RCP)</p> <p><b>R2</b> 1 HR FIRE-RATED ROOF ASSEMBLY- OFFICE AREA 0.34mm HI-RIB STEEL c/w SCREW FASTENERS 38 x 89MM WOOD STRAPPING AT 610mm c/c PRE-ENGINEERED WOOD TRUSSES SPACED AT 1220mm c/c RSI: 7.04 BLOWN-IN INSULATION 0.1524 mm POLY VAPOUR BARRIER 38 X 89mm WOOD STRAPPING AT 610MM c/c 2 LAYERS OF TYPE X GYPSUM BOARD 13mm INTERIOR PVC PANEL CEILING (/16mm GYPSUM BOARD/ ACT- SEE RCP)</p>	<p><b>Notes in Spec:</b> PART 2 PRODUCTS 2.1 SHEET METAL MATERIALS .1 Zinc coated steel sheet: to ASTM A653/A653M, commercial quality, with Z275 coating, regular spangle surface, prefinish as specified in 2.2, 0.43 mm minimum base metal thickness. 2.2 PREFINISHED STEEL SHEET .1 Prefinished steel with factory applied polyvinylidene fluoride. .1 Class F1S. .2 Colour selected by Departmental Representative from manufacturer's standard range. .3 Specular gloss: 30 units +/-5 to ASTM D523. .4 Coating thickness: not less than 22 micrometres. .5 Resistance to accelerated weathering for chalk rating of 8, colour fade 5 units or less and erosion rate less than 20% to ASTM D822/DB22M as follows: .1 Outdoor exposure period 2500 hours. .2 Humidity resistance exposure period 5000 hours. 2.3 ACCESSORIES .1 Plastic cement: to CAN/CGSB-37.5.</p>	<p><b>Notes in Spec (cont):</b> PSPC Ontario SHEET METAL ROOFING Section 07 61 00 Region Project Page 3 Number R.100644.001 Document Set 2 2021-08-31 .2 <b>Plywood roof sheathing:</b> In accordance with Section 06 10 00. .3 <b>Underlayment:</b> To ASTM D1970/D1970M, 1 mm thick composite underlayment comprised of SBS rubberized asphalt compound with high temperature softening point integrally laminated to high density cross-laminated polyethylene film. 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10	<p>Is there an opportunity to set up an on-site “concrete plant” for the Joyceville New Barn project. The set-up is fairly simple and would require a small footprint of space for a tilt up silo, aggregate piles, and admix station. This set up would allow for “on time delivery” during a very busy construction environment. (see attachment, Print Layout)</p>	<p>Yes, a concrete batch plant operation is permissible with environmental effect mitigation measures per specification.</p>
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