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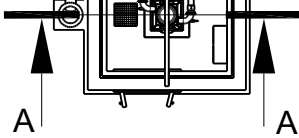
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Plan View
Scale 1:200

Nant Y Betws Powerhouse Section and Nomenclature

A



B

C

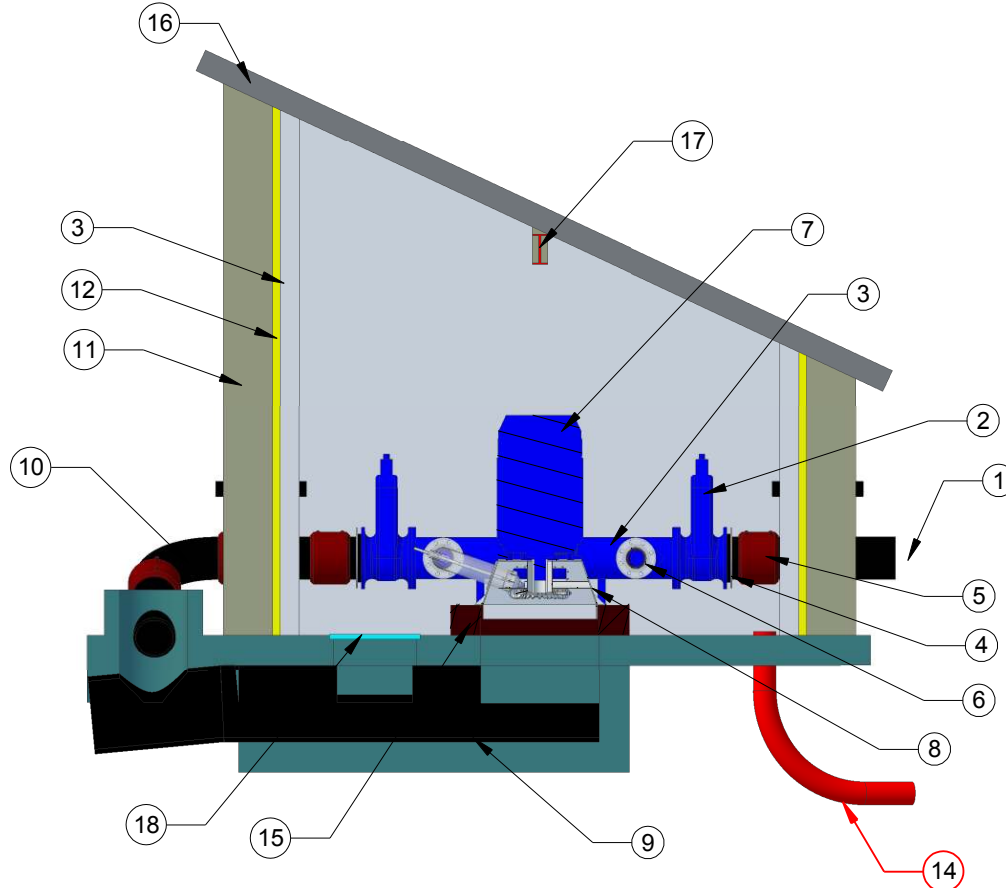
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A

B

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D



Section A-A

1. Penstock. 280mm diameter HDPE. SDR 17, 10 bar rating
2. Manual Gate Valve DN 250
3. Turbine Manifold
4. Spigot Flange adaptor with backing ring
5. Fusion coupling
6. Outlet to branch pipe
7. Generator (34kW split phase, 6 pole induction)
8. Hydro turbine stainless steel casing
9. Tailrace for returning water to watercourse. 450mm Twinwall pipe
10. Bypass pipe for running foam sponges ('pigs') through the penstock for cleaning.
11. External Stone Cladding
12. Insulation - 50mm Polyurethane
13. Internal Blockwork
14. 150mm duct for power cables, min bend radius 450mm
15. Turbine Plinth with internal chamber linked to tailrace
16. Reclaimed Slate Roof. 50mm insulation under the roof is recommended to limit condensation and noise.
17. Beam built into powerhouse to lift generator and other components. Must be capable of lifting 1000kg minimum at centre of span.
18. Drain into Tailrace

Client : **Antur Waunfawr**

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Drawn By : MJP

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Version : 1

Revision Details

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MCS Hydro Transition Installer 123

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