Major Wind Farm Development

PROJECT: Pant-y-Wal Wind Farm, Bridgend
CLIENT: Pennant Walters Limited
VALUE: £9 million
AT-A-GLANCE: Over 14km of access track
In house design capability
21 Nr turbines
115m height to blade tip
400m³ Octagonal Turbine Bases

PROJECT OUTLINE
The proposed Pant-y-Wal wind farm in the County of Bridgend and the Fforch Nest wind farm straddling Bridgend and adjacent Rhondda Cynon Taf were initially two separate wind farms being proposed by two developers. During the planning stage, Pennant Walters, one of the two original developers, acquired full interest in both wind farms.

The combined project, if approved by both authorities, would consist of 21Nr, 2.5MW wind turbines with all associated infrastructure including crane platforms, access roads and cable trenching, to be built on a steeply sided mountain top with challenging, geotechnical issues.

PROJECT DELIVERY
Walters UK Limited was appointed to progress the combined project through the final planning stages and worked closely with the single developer to ensure that the project was progressed as efficiently as possible.

As Principal Contractor, Walters were given full responsibility for the discharge of all Planning Conditions and the design and construction of all civil engineering works including turbine foundations, crane platforms and access roads employing a design team of geotechnical, geo-environmental, structural, landscaping, archaeological and ecological consultants.
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ACCESS TRACK
A key feature of the site was the steeply sloping 4 kilometre access track necessary to access the site via a new site entrance rising over 400 metres vertically across sidelong farmland.

IN HOUSE DESIGN
Walters’ in-house design team were given the task of designing the vertical and horizontal alignment of all access tracks and hard standings including all volumetric modelling necessary to ensure a fully balanced earthworks solution was achieved – essential for a cost efficient solution. In addition to the new access track, a further 10 kilometres of on-site track over difficult, peat marsh terrain was designed and constructed.

BASES