Mynydd Maen Action Group

Report on RPS Document "Cil Lolydd Solar Farm Phase 1 Peat Probing"

(RPS document dated 13th March 2025)

Prepared by CDH 10/04/2025

Summary

On 3rd April, members of the Mynydd Maen Action Group visited the co-ordinates of the RPS Peat Probing Report to check on their accuracy, mainly because there were several missing points due to 'frozen' ground conditions. The coordinates were provided to our group on request by email from Cenin on 1st April.

We found a significant and deeply concerning lack of accuracy in the results published in the RPS Peat Probing Report, to the extent that it cannot be relied upon and the results must be rejected.

We recommend the entire cable route is visited in person and properly surveyed, to ensure a route is selected that follows existing tracks and paths.

We would be happy to accompany anyone who wishes to visit, to explain and demonstrate our findings and the inaccuracies in this report.

The inadequacy of this report brings into question the professionalism of the applicants and gives us great concern for their integrity and ability to conduct an installation of this scale on our landscape.

Background

Further Information documents recently published on the PEDW casework portal regarding DNS CAS-02446-R8X8W2 – Cil-Lonhydd Solar Farm. One of these was a document entitled "2025-03-17 – FI – Phase 1 Peat Probing Report".

This Peat probing exercise along the proposed cable route for Cil-lonydd Solar Farm had been requested by PEDW in their document "Request for Further Information", to establish whether the cable route would pass through areas with peat soil.

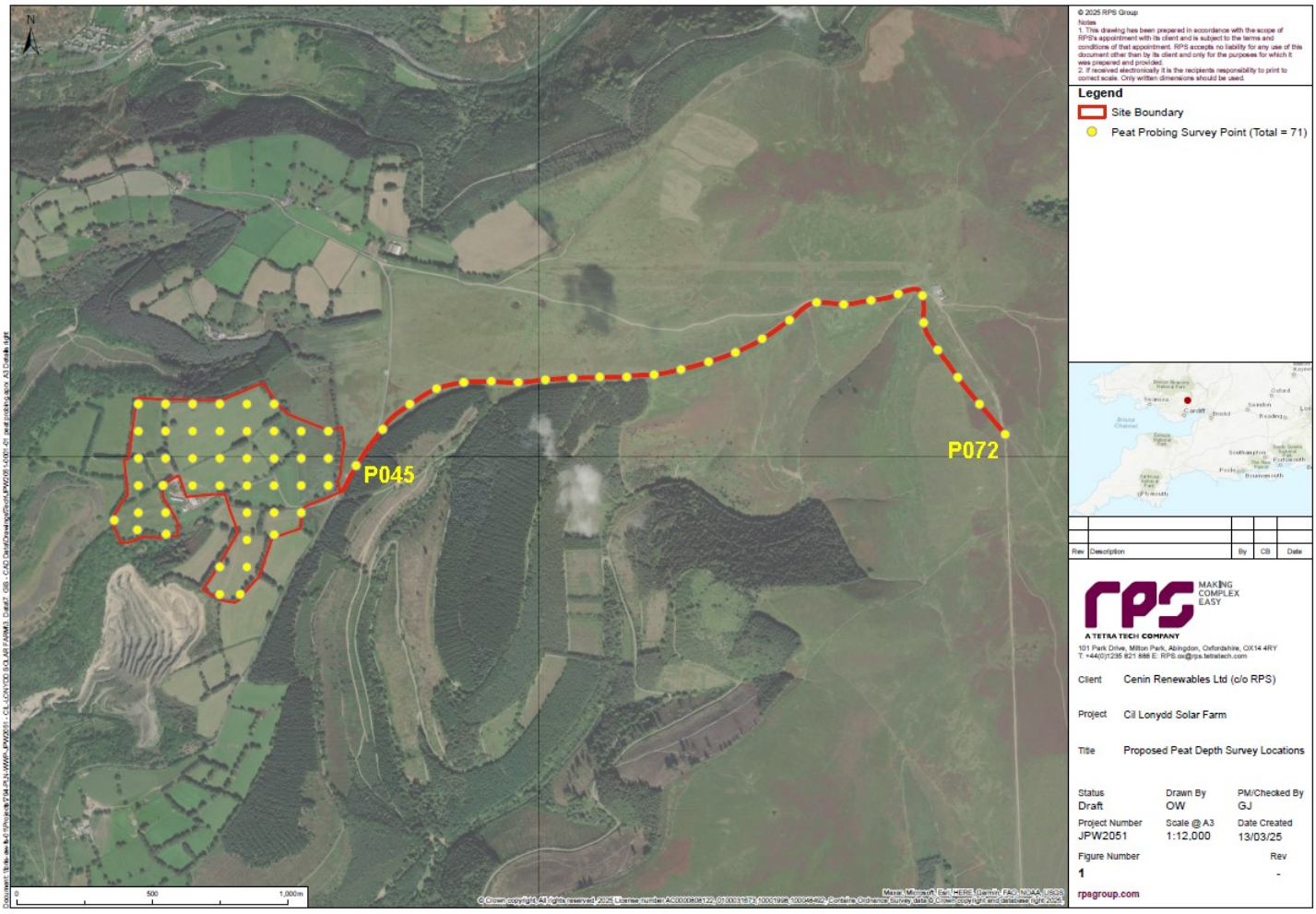
On the 3rd of April members of the Mynydd Maen Action Group visited Mynydd Maen to verify the findings of the report. We were particularly concerned that 5 of the 28 points on the study route were missing as the area was reported "frozen" on the day of the visit by consultants RPS.

Procedure

To check the findings of the applicant, we used the British Geological Survey's webapp to convert the eastings and northings provided by Cenin into Latitude and Longitude. We then converted these to What3Words locations, to enable us to navigate accurately to each point.

On visiting the site, we found a serious number of discrepancies which cause us to question whether the site had been visited at all by the consultancy RPS, or, at least if it had, that the coordinates on the cable route had been very roughly estimated. We also found the photographs published in the report did not match the actual co-ordinate positions.

Below is Figure 1, from the RPS probing report, to which we have added the position numbers (P045-P072) of the coordinates that we were interested in, that is, those on the common. Point 066 appears to be missing from RPS' peat report.



We used the What3Words App for Android to locate the positions. We estimate all our readings were taken within a maximum of 1m from the exact location. Here's the what3words list 'Cable route Cil-lonydd solar' https://what3words.com/list/1825741709 but it only works on a phone App, not the web page.

We checked peat depths using a homemade probe made from bamboo and we checked peat quality with a professional Varomorus.com auger.

Observations

From the start the positions of the sampling points seemed a bit random, sometimes on undisturbed land, sometimes on a vague rough track, which was often divided up by multiple motor cycle ruts.

We assumed at this stage, that the cable was supposed to follow the actual path of the track or cut into the roughest and most disturbed part of the route, so as to reduce damage to the minimum. It quickly became apparent that this was not the case.

Here is an extract from our results spreadsheet

		RPS Group Survey			MMAG Survey		
pos-ition	Flag	Peat Thickness (m bgl)	Probe Base Compositio n	General Remarks	Peat thickness mm (Centre reading is on actual position)	Probe composition	Remarks
P045	1	0.00	<Null>	Road / concrete	mud	mud	Roadside verge, not road 200 deep mud
P046	2	0.20	Granular	<Null>	150-250-200	peat	
P047	2	0.15	Granular	<Null>	150-150-150	peat	
P048	2	0.10	Granular	<Null>	100-0-0	peat	
P049		Unknown	<Null>	Frozen	100-0-0	Peat	
P050		Unknown	<Null>	Frozen	50-0-200	Peat	3m to right 200 peat
P051		Unknown	<Null>	Frozen	150-150-150	Peat	
P052		Unknown	<Null>	Frozen ground due to tree cover	150-150-150	Peat	
P053		Unknown	<Null>	Frozen ground due to tree cover	150-200-150	peat	
P054		0.10	Cohesive	Grass and reeds, with stones over peat	150-50-0	peat	150 peat 3m to left
P055		0.20	<Null>	<Null>	0-0-50	peat	
P056	3	0.10	Cohesive	Grass, reeds over peat	not recorded		See photo, not on track
P057	3	0.00	Granular	<Null>	not recorded		see photos, not on track
P058	2	0.00	Granular	<Null>	200	peat	Wimberry bushes
P059	2	0.00	Granular	<Null>	200	peat	Wimberry bushes
P060	2	0.00	Granular	<Null>	150	peat	Still not on actual track
P061		0.00	Granular	Compressed track	0		alongside wide rutted tracks
P062	2	0.00	Granular	<Null>	150	earth no peat	alongside track
P063		0.00	<Null>	Gravel track	0		Gravel Track
P064		0.00	Granular	Gravel track	0		Im from edge of gravel track
P065		0.00	<Null>	Gravel track	100	peat	8m from gravel track
P067	4	0.00	<Null>	Gravel track	200-300	soil	NOTE there is no P066!
P068	4	0.00	<Null>	Gravel track	200	peat	rushes
P069	4	0.00	<Null>	Gravel track	150-200	peat	Path through rushes
P070	4	0.00	<Null>	Gravel track	150-200	peat	lots of rushes, winberries
P071	4	0.00	<Null>	Gravel Track	400	peat	In proposed grid conection compound
P072		0.00	<Null>	Gravel track	0	stone track	on gravel road junction well past grid connection

Flags (second column in spreadsheet above)

1 Not a good start! Accurate position was on the east side of the road, not in road, and the road was tarmac, not concrete.

2 Totally different results for RPS survey and our survey, in most cases we measured on the point and a few metres left and then right, looking west

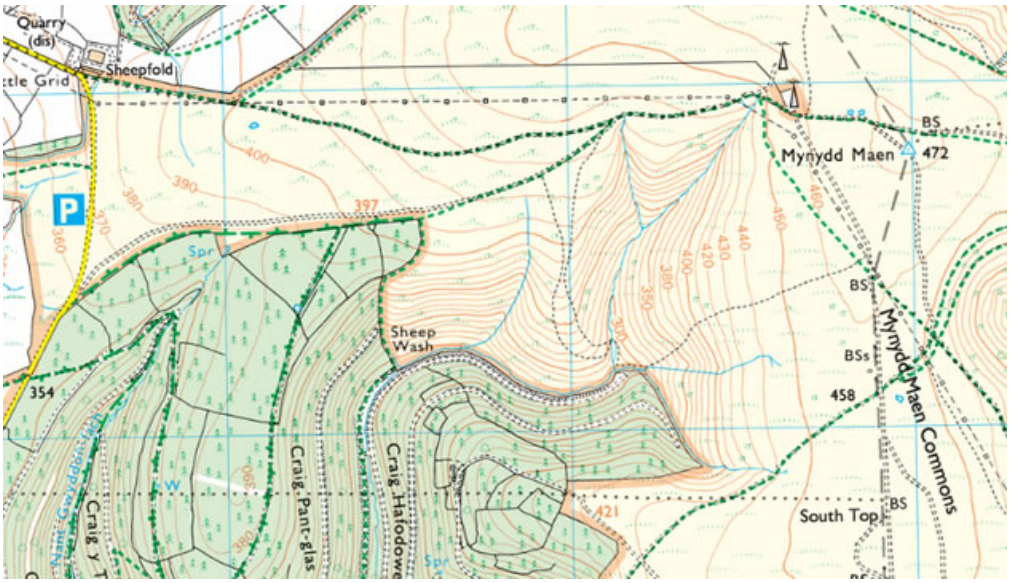
3 Choice of survey position strange, lots of damaged land to north of positions, why not use that to dig the cable trench?

4 Such differing results that we were obviously in totally different places!

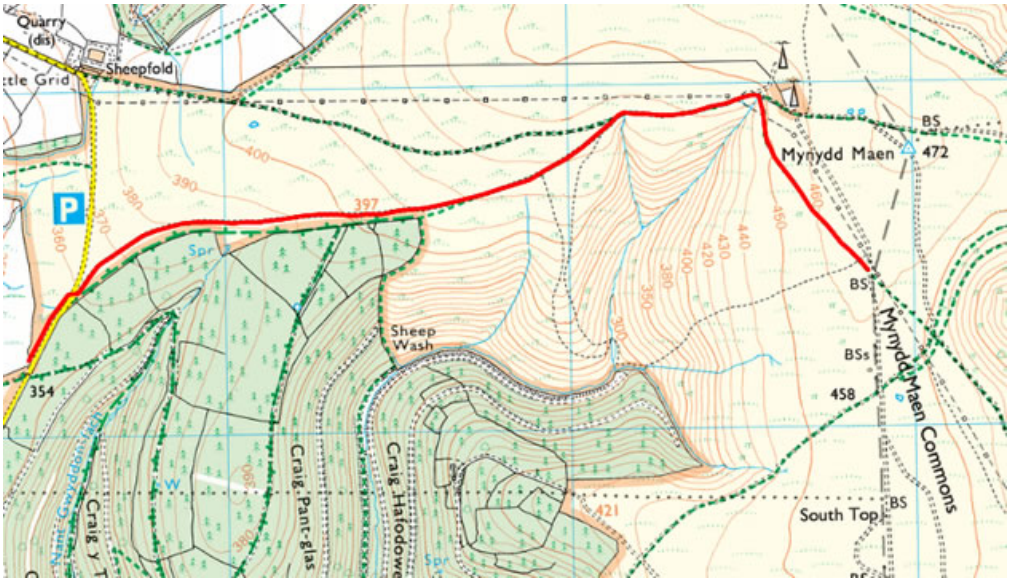
Note that our results differed from those recorded by RPS on all but a few locations.

As we proceeded with our survey we got the distinct impression that whoever carried out the survey for RPS had been given the coordinates but did not have a way of accurately locating them, so they estimated the positions, as well as they could, off the map/image above.

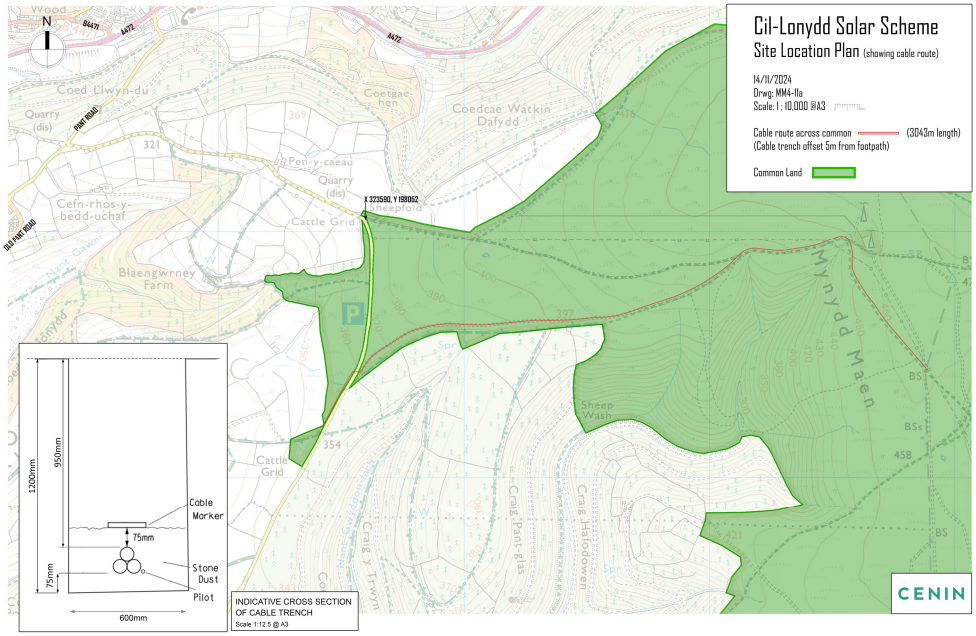
Furthermore from P067 to P072 it appears that they followed the obvious route, along the gravel road, rather than the route that is set out by the given coordinates and as indicated by their map (Figure 1 above). The route indicated on the map and by the coordinates follows a PRoW marked in the OS map which is neither used nor visible on the ground.



OS Map
On this map the PRoWs, in green, which sometimes follow the tracks, are more prominent than the tracks without the green dashed footpath lines.



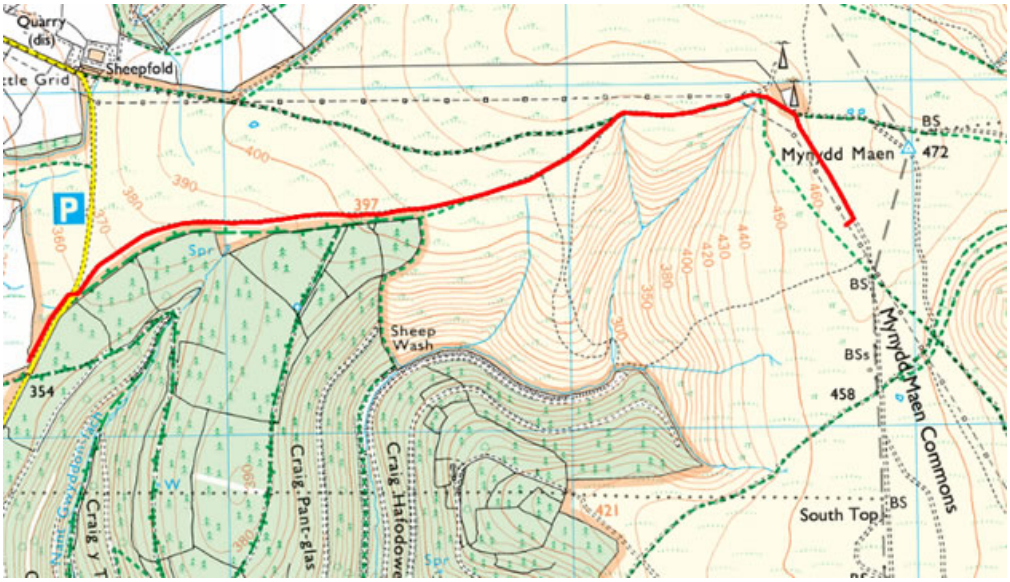
Our belief is that the person planning this cable run did not survey the site, they just traced the obvious green line on the OS map, as we have done on the left.



This is exactly how it ended up! If the applicant had actually visited site they would have realised that, after the gas station, they were following a non existent path.

Furthermore, the cable route extends well beyond the RES substation, when examined on the ground.

An in-person site visit would have resulted in a far more practicable cable route such as we suggest below. This route follows the gravel track south from the gas station and the mast.



We suspect this last section must be the route that the peat surveyor followed, seemingly without the benefit of any GPS location.

An accurate visit would have evidenced mistakes made previously in the cable route design, which leads us to question whether the visit actually took place. And if it did, we are deeply concerned by the extremely poor levels of accuracy.

In our view, a far less damaging cable route could have been planned by actually surveying the proposed route and choosing to design the cable trench to follow the existing tracks and ruts, generally avoiding peat, and actually following the gravel roads where they exist.

Comparison of Photos

ROS Peat Survey picture at P057

Our pictures at P057

RPS Peat Survey picture at P060

Our Pictures at P060

RPS Peat Survey picture at P067

Our pictures at P067

RPS report show no pictures from P068 to P071 but RPS say there is no peat and gravel track at these positions.

Below are our pictures at these positions.

P068

P069

P070

P071

We also note the following in the Peat Report.

- The route on the map does not detail the cable route crossing the tarmac road close to the solar farm site.
- The pictures do not show properly in the Peat report available on the PEDW casework portal. However it does show on the copy sent direct from Cenin. This needs to be corrected and republished on the PEDW casework portal.
- Fig 2, “the Peat Contour Results” is totally meaningless as far as the cable run from P045 to P072 is concerned. We question the suggestion that one single peat depth measurement each 100m along the route can be interpolated as being the same for a 100m radius around that point!

Discussion

We question whether the person conducting the Peat Probe Survey had access to GPS, as the results provided in the report are so seriously inaccurate.

Furthermore, the original cable route appears to have been plotted entirely by desk study, as an in-person visit to the site would have immediately highlighted several major flaws in the proposed route, when viewed in terms of the actual terrain of the site.

Conclusions

- The cable route was badly designed in the first place, by using a desk study without conducting a site visit. This proposed route bears no regard for the terrain of the site, which is clearly visible on a OS map to an experienced user of maps
- The chosen Peat Probe survey coordinates followed the cable route which had been poorly selected using the process described in the point above
- The RPS Peat Probe survey was actually conducted by someone did not manage to locate the cable route coordinates accurately. Therefore, the results of the Peat Probe survey are seriously flawed and inaccurate and cannot be relied upon
- The RPS Peat Probe survey is not fit for purpose and does not indicate that Cenin are taking seriously the Inspector’s request for further information.

Recommendations

We believe that a properly conducted site visit would identify an improved and less damaging cable route, such as the one we have proposed. However, if Cenin persist in following the cable route described in their application, we suggest the following points, in order to minimise damage to the mountain....

- The current Peat Probe report should be rejected and conducted correctly
- The site should be visited and the proposed cable route surveyed properly, to decide a less damaging route, along existing tracks and paths
- The cable trench should be positioned along the existing paths, tracks and ruts so that no further damage is caused.
- Where the cables follow the road consideration should be given to actually putting them under that road, avoiding further damage to the verges. This would be dependent upon avoiding existing gas mains running across the mountain.

Report by CDH 10/04/2025
