David Wilkinson

Helios EN010140

Reg 20050592

Date 18/03/2025

Expanding from my published submission, 28 February 2025. Updated 18/03/2025 with Questions.

The Battery Energy Storage System (BESS) plus the 132Kv Sub Station

Let's be serious. **This Behemoth is certainly no toy.** The two massive Transformers will be **6.480 meters tall.**

The Battery/Inverter containers measuring (once placed on mounts):

Length 12.2meters - Height 3.5 meters -Width 2.4 meters of which there will be 76 SEVENTY SIX ?

WESTERLY WINDS

Question for Google:

Does wind carry sound further?

Answer

Yes, wind can carry sound further when it is blowing in the same direction as the sound wave, essentially acting like a "tailwind" that helps propel the sound waves over a greater distance; however, if the wind is blowing against the sound wave, it can actually cause the sound to disperse more quickly, making it harder to hear at a distance.

The BESS will be approximately 575 meters from Chestercourt Cottages, 625 meters from the Black Dog Public House, *which is surrounded by a substantial amount of*

Housing - so much so, that in 2006 Yorkshire Water deemed there to be enough buildings to put in a public sewer for all.

Camblesforth Village is approx. **1425meters**/1.425Km **DIRECTLY IN THE FIREING LINE WIND WISE** should any problems occur.

NOISE

Guaranteed noise 24/07/365 days per year (***please remember some countries forces, use noise as a form of torture)***

Please see in the attachments: **FIG 7.19 1 & 2** plus **MAP 8 (supplied)**

FIRE RISK

Lithium-Ion batteries. Whilst it is easy for some to say, that the probability of fire is low, it is a **fact** that these fires do occur! As fire fighters have discovered in recent years, lithium-ion battery fires are prone to reigniting. That's because the lithium salts in the battery are self-oxidizing, which means that they can't be "starved out" like a traditional fire. These Batteries can give off Hydrogen Fluoride. **How hydrogen fluoride works** • Hydrogen fluoride goes easily and quickly through the skin and into the tissues in the body. There it damages the cells and causes them, to not work properly. • The seriousness of poisoning caused by hydrogen fluoride depends on the amount, route, and length of time of exposure, as well as the age, and pre-existing medical condition of the person exposed. • Breathing hydrogen fluoride can damage lung tissue and cause swelling and fluid accumulation in the lungs (pulmonary edema). • Skin contact with hydrogen fluoride may cause severe burns that develop after several hours and form skin ulcers. Also, leakage of chemicals/acid into the ground aquifer. Toxic wind-blown fumes. My house is approximately **575** meters, together with others in close proximity from the Battery Energy Storage System and approximately **1425** meters from Brigg Lane Camblesforth. The prevailing westerly winds put us directly in line with the **BESS. Which will be, a <u>TICKING TIME BOMB affecting mental health.</u>**

Questions

With Reference to Environmental statement Figure 11.4

(The map I have supplied number 7), has a symbol Z? which I have added. Whatever it/they are. (counted 28) They have the capability of emitting 45-50 dB of noise. The Z? in question is ALMOST AT THE BOTTOM OF MY GARDEN.

Due to the poorly detailed map, I could not get a Fix position to measure approx., how close it is.

1.a What are these?

Answer

1a_____

Also With Reference to Environmental statement Figure 11.4

1.b

On the poorly detailed Map Fig 11.4 – Noise Contour Map Daytime, (my ID Map 7). I would like some independent assurance, that *as if by some miracle,* we are in the **< 30 dB zone.**

Answer

1b_____

3.4.17 The Field Stations, (see attachments)

2. Are these the Inverter Stations? (<u>If so GUARRANTEED NOISE</u>) up to 100?

Answer
2_____

3. <u>Where are the, to scale location drawings for these?</u>

Answer
3_____

3.4.22 Battery containers **(separate from Field Stations and Inverter Stations)**

12.2m in length x 2.4m Width x 3.5 in height.

4. It does not say how many?

Answer 4_____

5. looking at **BESS and Substation** Preliminary Drainage Strategy Drawing. Fig 4.3

No E216/88 (supplied)

Are the 76 large containers - the Battery containers?

Answer 5

_____

6. What are the 38 smaller brown containers?

Answer 6

_____

What we have now.

High quality agricultural FOOD producing land (**some with underground aquifers**). Panoramic ***everchanging*** open fields with ***views as far as the eye can see***. Lovely lanes and footpaths, which people use **to mentally** refresh themselves as well as providing **physical refreshment**. To some people this may seem like little things, but in the wider picture, keeping both mental and physical health, can prevent ***other unforeseen knock-on situations*** e.g. More load on the **already struggling NATIONAL HEALTH SERVICE.** After all the Victorians created public parks to offer healthy recreation for all, and in particular the working classes. The Victorians saw recreation as offering ***mental and physical wellbeing,*** and social benefits literally a 're–creation'. They realized that parks could serve as '***The Lungs' for the cities.***

Such a diverse variety of wildlife including Deer, Badgers with next to no physical barriers to corral them, or anything else for that matter.

The variety of bird life is amazing, a list of which I have mentioned in previous submissions.

What is being proposed

Helios are proposing to take **476 hectares of High-Quality food producing land out of service**, and **IMPOSE** upon us, **fields full off mind-numbing rows of, THREE METER HIGH, monotoned glass solar panels.** They say after 15 Years you won't be able to see them, due to the very high screening fences, they are putting up to surround them. ***They will also screen the views that I have just described earlier*.**

Chestercourt road for example.

Please see the following

Environmental Statement Appendix 7.7 - Visualisations (Part1 of 2).pdf (Please look online, to see Photos of the landscape)

Looking at the photographs, on the following VIEWPOINTS. **3A, 3B, 3C, and 3D.**

Look at **EXISTING**, **YEAR 1**, and **YEAR 15**.

ON YEAR 15, you might as well **be walking in a maze.**

In this increasingly unstable world, of which things are changing on a daily basis. ***Who in their right minds would SQUANDER this precious land, that enables us to independently produce food for ourselves, and not be at the mercy of somebody else, and at what cost?***

I believe that most of the Solar panels are made and supplied by China. Once we become reliant on China. What do we do if they decide not to supply us with spares etc.

We can see Farmers being inundated with these Solar companies offering up to £1200/acre – index linked – for the next 40 years.

My opinion is. T**o risk our independence**, by potentially having this being **IMPOSED** upon us, is not only ***morally wrong, unethical, and an irresponsible thing to do***.

BUT IS TOTALLY AGAINST OUR WISHES!

Question. What is democracy? Oxford dictionary explanation:

A political system, that allows the citizens, to participate in political decision-making, or to elect representatives to government bodies.

CUMULATIVE IMPACT

We have Drax Power Station.

There are two additional Solar Farms, which have been passed and are starting to be constructed around Camblesforth.

Camela Lane close to the northern village boundary of Camblesforth, on **113 hectares.**

Wade House Lane to the south east of Camblesforth.

Together with the Helios site**, Camblesforth will be totally surrounded and placed inside an Industrial Complex**.

Boom Power is hoping to build a Solar Farm near Howden which is just to the east of Drax. This will negate **1,200 Hectares** of food producing Land. We also have **Rusholme wind farm**, which is a 12-turbine wind farm located near Drax.

Drax Power is going to start recovering, a lifetime deposit of Pulverised Fuel Ash (PFA). Some by rail, but the rest by Road.

Drax Power is to receive power from up North to come from Bridlington with all the upheaval that that will entail.

Drax Power is looking to put in a carbon capture pipeline to the North Sea. All of these, will put extra vehicular strain on the a A1041, which is already struggling at the present time, and the A645, irrespective of the new homes that are being, and going to be built in the area.

The combination of all these schemes, that we will miserably have to endure, will take years to build.

Is this concentrated area, not doing more than enough, for the energy needs of our Country? Please do not suffocate us, with this industrial complex, and leave us some - of the quality of life that we have at the moment.

Together with this Project. The Village of Camblesforth will be totally SURROUNDED.

Please remember these fields provide more than just food, but also provide the lungs of our lovely village, and give us sustenance and wellbeing in many other ways.

My Philosophy is. Leave it at least as good as you got it – if not better.

Please leave something of worth, not only for our children, but our children's children.

Incidentally, we get the occasional Hot Air Balloon, landing in these very same fields.

To sum up

PRIORITY.

Site Meeting to evaluate the safety, and wrongly siting, of the BESS & Substation

Taking the **WESTERLY prevailing winds**. I think that more scrutiny/facts need to be carefully looked at with regard to the **BESS**, being so close to substantial local housing, ***providing 24/7/365 days a year guaranteed noise.*** Plus, the potential of fire associated with Lithium-Ion Batteries and the complications trying to put them out as well as the extremely toxic fumes. **This large imposing/threating complex, is a potential ticking time bomb,** being approximately a mere **575 meters** away from a substantial number of houses, plus approx. **625 meters** from the Black Dog Pub, and a mere **1425 meters/1.425Km approx. from Camblesforth Village, which is also in the firing line.**

I believe there **is a place for solar panels**, to play their part in our energy needs and future strategy. **But not at the expense of negating our top-quality food producing land.**

According to the internet, we are currently importing around 40% of our food.

You are merely trying to solve one problem - by making a worse problem.

To put things simply. You cannot eat a solar panel

As you go through the planning process. Please continue to refresh yourselves by reading the local resident's objections, and what their thoughts are.

If there is any doubt in your mind. Please consider - ***what if this were me?***

PS, **you have the power,** to prevent this **potential catastrophe,** from ever getting off the ground.

Kind Regards

David Wilkinson

- **Battery containers** of up to 12.2m in length x 2.4m in width x 3.5m in height, including concrete supports 600mm in height (refer to **Figure 3.7 BESS Battery Container Elevations [EN010140/APP/6.2.3.7]**); HOW MANY?
- Control room (including a weather station, Wi-Fi antenna and satellite aerial) of up to 6m in length x 3m in width x 5.7m in height (**Figure 3.8 refer to BESS Control Room Elevations [EN010140/APP/6.2.3.8]**);
- Inverter-transformers of up to 6.1m in length x 2.4m in width x 3.5m in height, including supports 600mm in height (refer to **Figure 3.9 BESS Inverter/ Transformer [EN010140/APP/6.2.3.9]**); and
- Switch room of up to 11.7m in length x 4m in length x 3.9m in height (refer to **Figure 3.10 BESS Switchroom [EN010140/APP/6.2.3.10]**).

3.4.23. Due to the potential flood risk (identified in **Chapter 9 Water Environment [EN010140/APP/6.1.9]**) of the ES, the compound will be surrounded by an earth bund. The proposed earth bund will sit at least 600mm above the combined fluvial and tidal design flood level to protect the equipment from inundation.

3.4.24. Four water tanks sit at each entrance to the BESS compound, two of which are for the purpose of firefighting, (shown on Figure 4.3 BESS and Substation Preliminary Drainage Strategy Drawing [EN010140/APP/6.2.4.3] which will be secured through DCO requirement), up to an elevation of 3.65m above ground level and diameter of up to 3.45m (**Figure 4.4 Water Tank Elevations [EN010140/APP/6.2.4.4]**) . The attenuation basins located within the Substation and BESS Compound will have sufficient capacity to hold 228,000 ltires of fire water (1,900 litres per minute for two hours) and accommodate a 1-in-100 year storm event plus 30% allowance for climate change. The presence of a flood bund around the entire Substation and BESS Compound would contain any runoff within the bunded area in event of a fire/ storm event.

3.4.25. In order to ensure potentially contaminated water does not leach into the underlying aquifer, the BESS compound will be lined with an impermeable liner. Three attenuation basins (**Figure 4.3 BESS Drainage Strategy [EN010140/APP/6.2.4.2]**), will collect the runoff water from the impermeable liner, to ensure that flood risk is not increased elsewhere, before the clean water is discharged to existing drains via

modules into alternating current ('AC') which allows the electricity generated to be exported to the National Grid;

- Transformers are required to step up the voltage of the electricity generated by the PV modules before it reaches the Substation; and
- Switchgear is the combination of electrical disconnect switches, fuses or circuit breakers used to control, protect, and isolate electrical equipment. Switchgears are used both to de-energise equipment to allow work to be done and to clear faults downstream.

3.4.17. **The field stations comprise up to 100 stations,** with each unit measuring up to 12.2m in length x 2.4m in width x 3.5 in height, including concrete supports from a minimum of 300mm to a maximum of 600mm in height, above a 300mm permeable deep gravel sub-base within a defined BESS area (refer to **Figure 3.5 Field Stations [EN010140/APP/6.2.3.5]**). The container or cabinet will be externally finished to be in keeping with the prevailing surrounding environment, with solar farms often utilising a green painted finish.

String Inverters

3.4.18. String inverters would be mounted to the mounting structures underneath the solar PV infrastructure, and a string inverter will be required for every solar PV string.

3.4.19. Where string inverters are used, string transformers are required and would be distributed throughout the Solar Farm Zone within containers. Switchgears would be housed in these same containers or integrated with other components within the Solar Farm Zone.

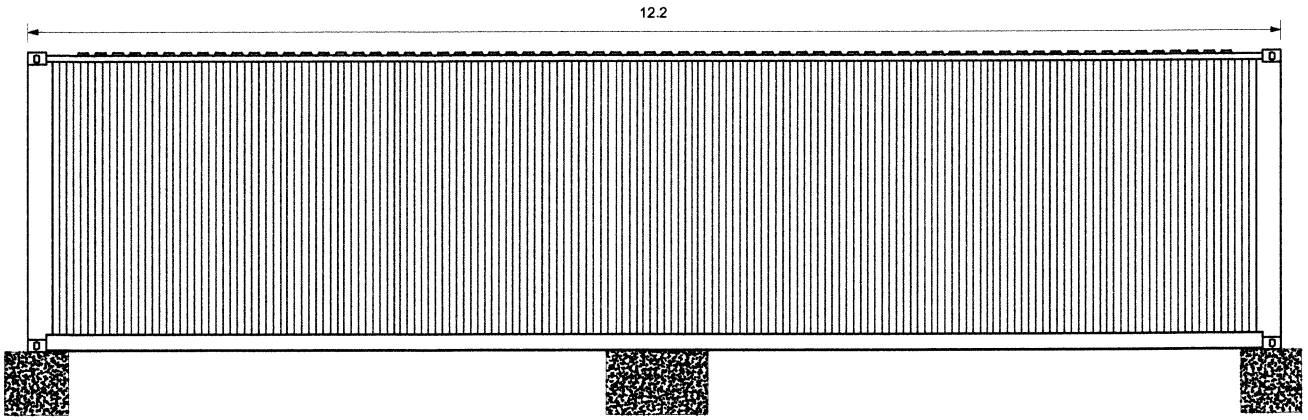
Substation and BESS Compound

3.4.20. The on-Site 132 kV Substation and the BESS will be housed together in a compound.

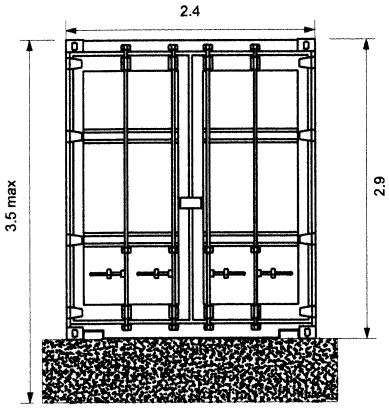
3.4.21. The Substation will comprise an earthing transformer, surge arresters, earth switch, circuit breaker, 33kV intake switch room and generator transformers. The component of the greatest height within the Substation is the generator transformer, standing up to 6.5m (as shown in **Figure 3.6 132 kV Substation [EN010140/APP/6.2.3.2]**).

3.4.22. **The BESS will include the following:**

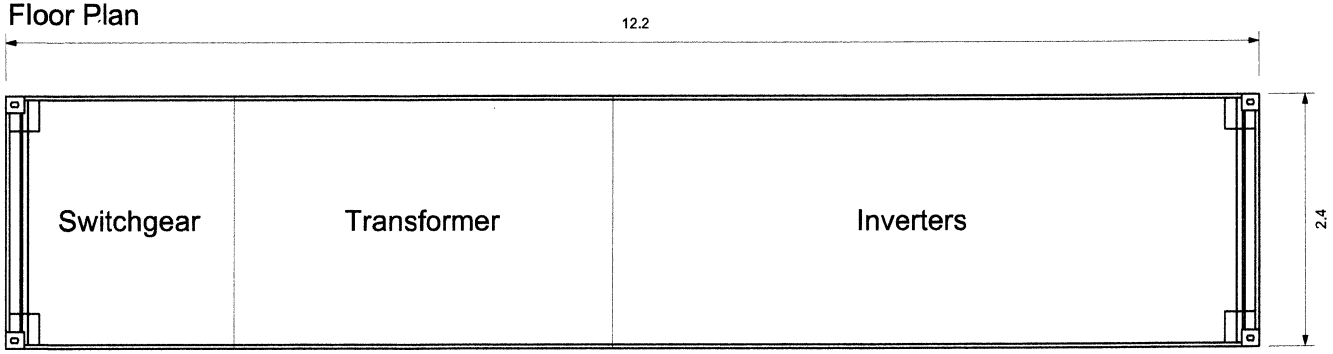
Side Elevation



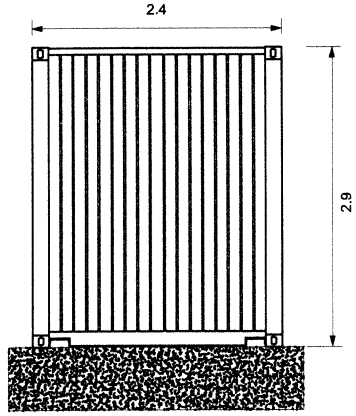
Front Elevation



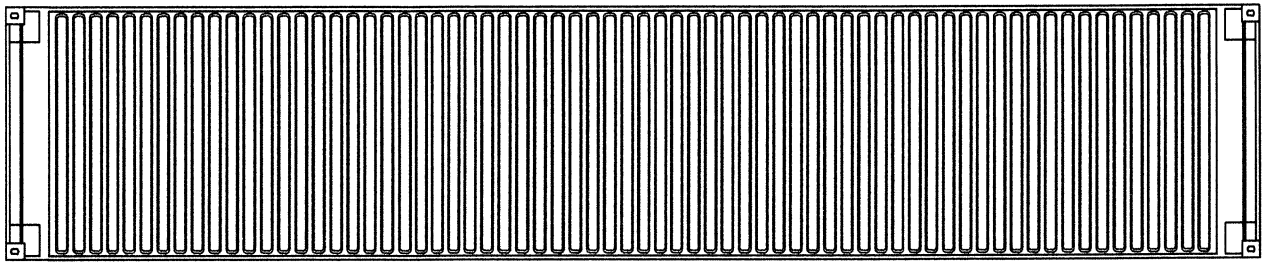
Floor Plan



Rear Elevation



Roof Plan



GENERAL NOTES:

1) ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED.

2) INVERTER STATIONS TO BE PAINTED RAL6005

3) FOUNDATIONS SHOWN INDICATIVELY ONLY. DIMENSIONS TO BE CONFIRMED BASED ON SITE CONDITIONS.

Revisions:
First Issue- 30/03/2022 JS

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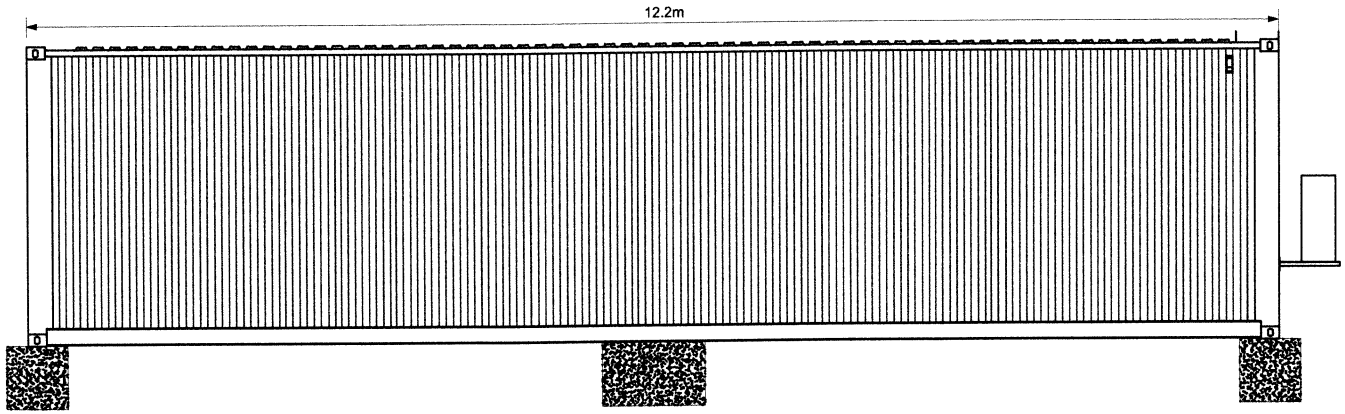
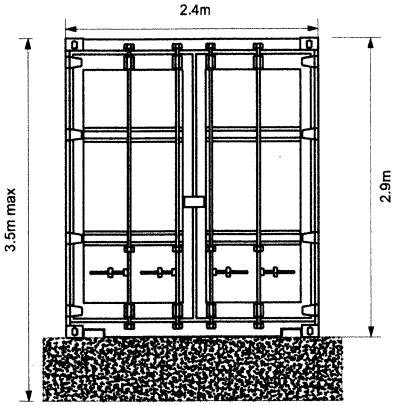
Project Title:
Helios Renewable Energy Project

Drawing Title:
Figure 3.5
Inverter Stations

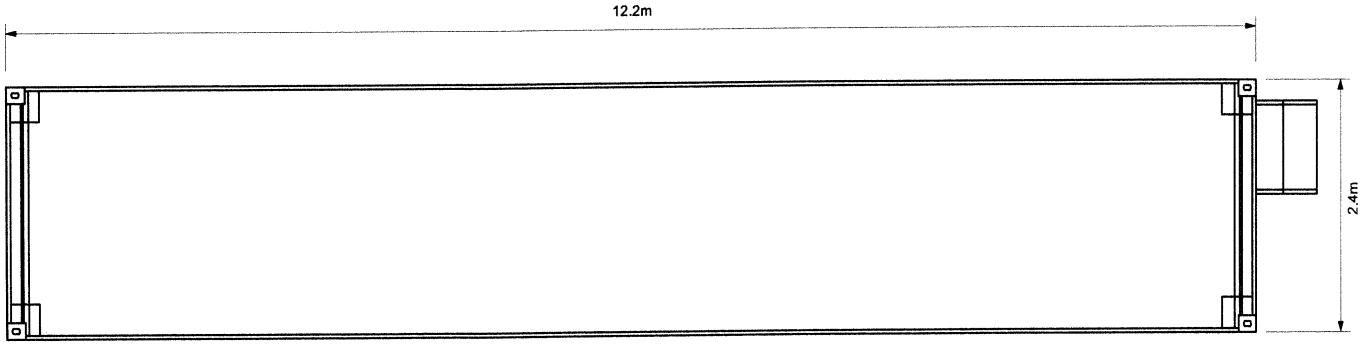
DRWG No:	Rev:	Sht no:
DX-01-P04	-	-
Drawn by : JS	Checked by: KL	
Scale: 1:50 @ A3	Date: 30/03/2022	



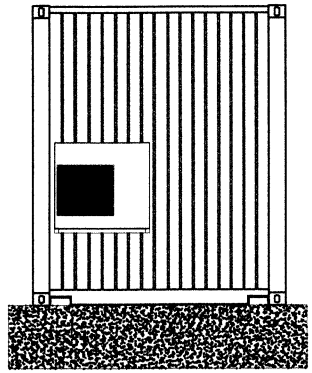
Side Elevation



Front Elevation

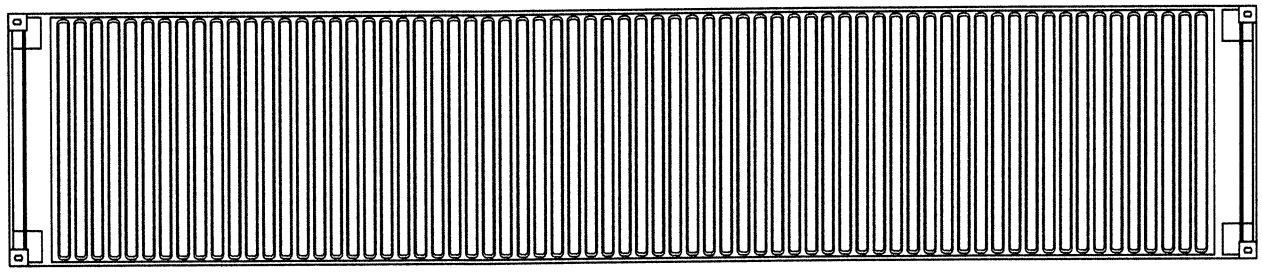


Floor Plan



Rear Elevation

Revisions:
First Issue- 30/03/2022 JS

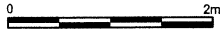


Roof Plan

GENERAL NOTES:

1) ALL DIMENSIONS ARE IN METERS UNLESS SPECIFIED.

2) BATTERY CONTAINERS TO BE PAINTED RAL6005



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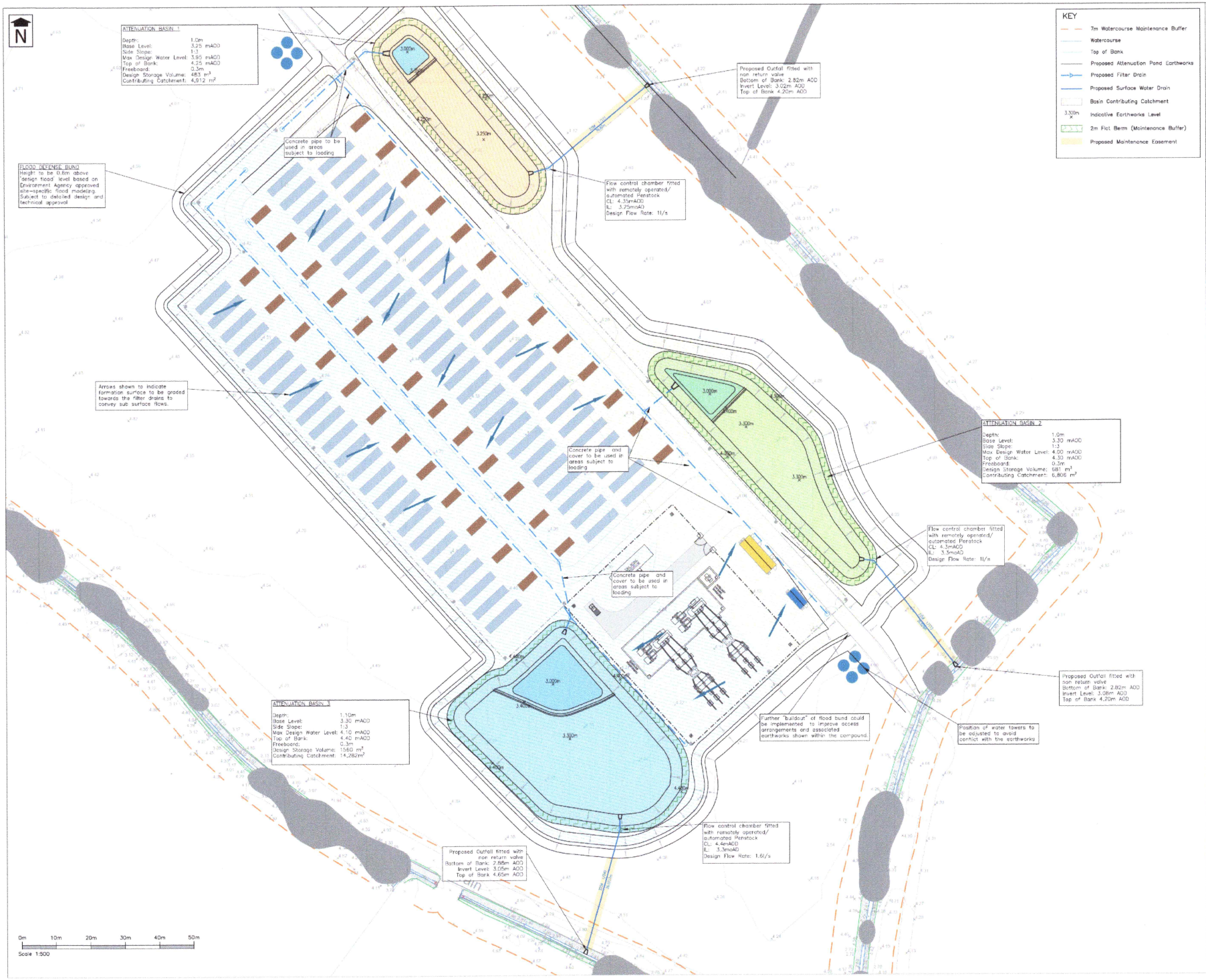
Project Title:
Helios Renewable Energy Project

Drawing Title:
Figure 3.7
BESS Battery Container Elevations

DRWG No:	Rev:	Sht no:
DX-01-P12	-	-
Drawn by : JS	Checked by: KL	
Scale: 1:50 @ A3	Date: 30/03/2022	



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For Planning
This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing, or construction purposes.

NOTES

1. Drawing based on Substation/BESS Block Plan, produced by Enso Energy, Drawing No. DX-01-P42, (Dated 01/02/24).
2. Drawing based on Topographical Survey, produced by Stirrn Geomatics, Drawing Nos. 851/15 and 851/16 (Dated: 09/10/2023)
3. Surface water drainage for the BESS area subject to detailed design and technical approval.
4. Basins shown with indicative 300mm deep sediment forebays with a 100mm bund above the base of the feature.
7. Drawing to be read in conjunction with Flood Risk Assessment (including drainage strategy), Document Reference: E216-00C01-FRA.
8. Greenfield Runoff Rate for the entire compound contributing catchments (2.600ha);
   Q_{BAR}: 4.1 l/s
   Q_{1}: 3.6 l/s
   Q_{100}: 8.6 l/s
9. Selby Area IDB runoff rate restriction 1.4 l/s/ha or 3.6 l/s.
10. BESS compound, including areas under Attenuation Basins, to be lined with an impermeable liner to prevent the formation of a pathway between the surface and underlying aquifer.

Rev	Date	Description	Drawn	Check
#	09/06/23	First Issue.	IS	SM
A	13/02/23	Updated in accordance with latest layout and updated drainage strategy	DAB	BF
B	03/04/23	Penstock valve details amended. Note 10 revised to confirm impermeable liner extending under Attenuation Basins.	SAM	SAM

Status
FOR PLANNING

Client
Enso Green Holdings D Ltd

Project
Helios Renewable Energy Project

Drawing Title
BESS and Substation Preliminary Drainage Strategy

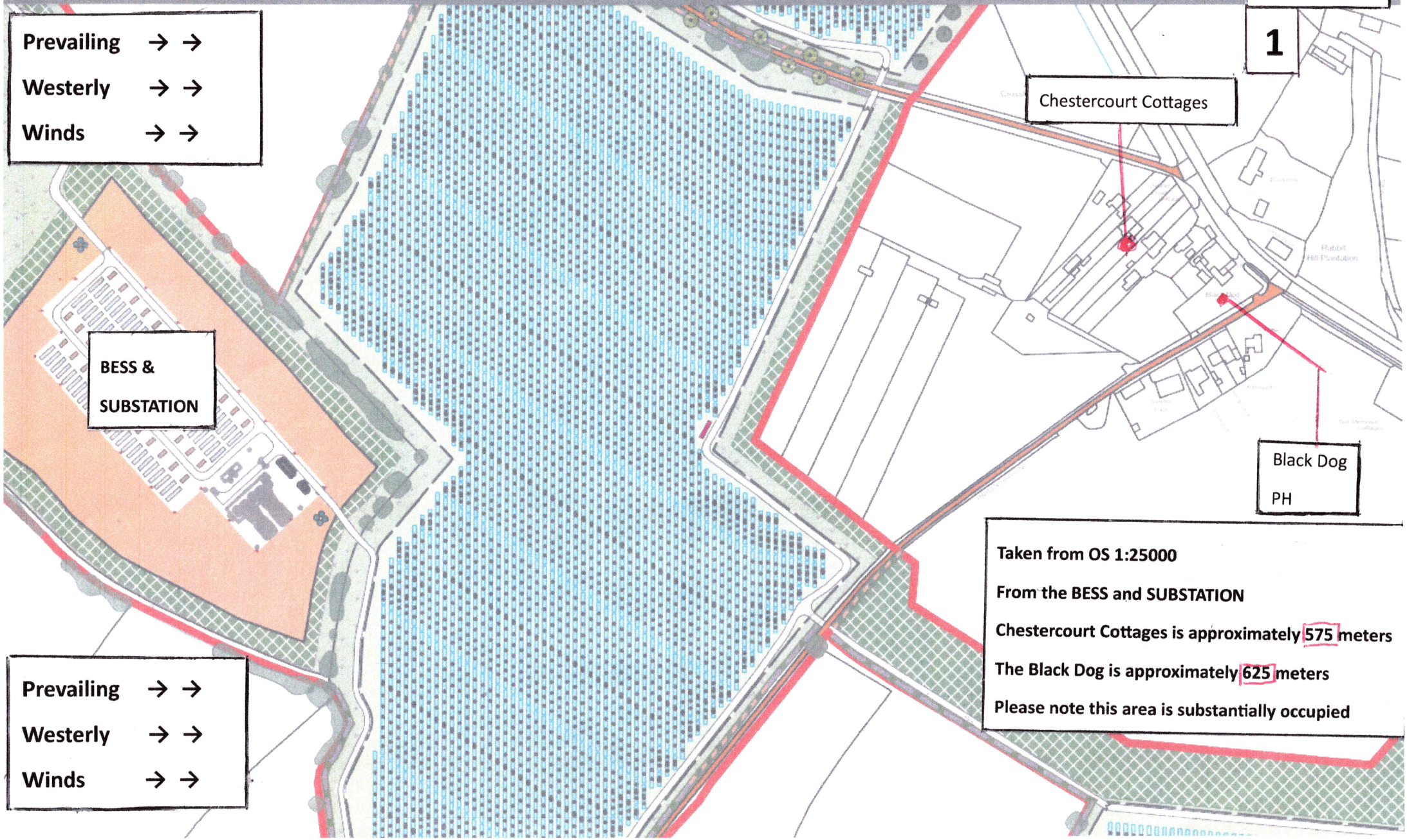
Drawing No. **E216/88** Rev B

Date: May 2023 Scale: 1:500 @ A1

E-Mail: [redacted]@pfaplc.com

FIG 7.19

1



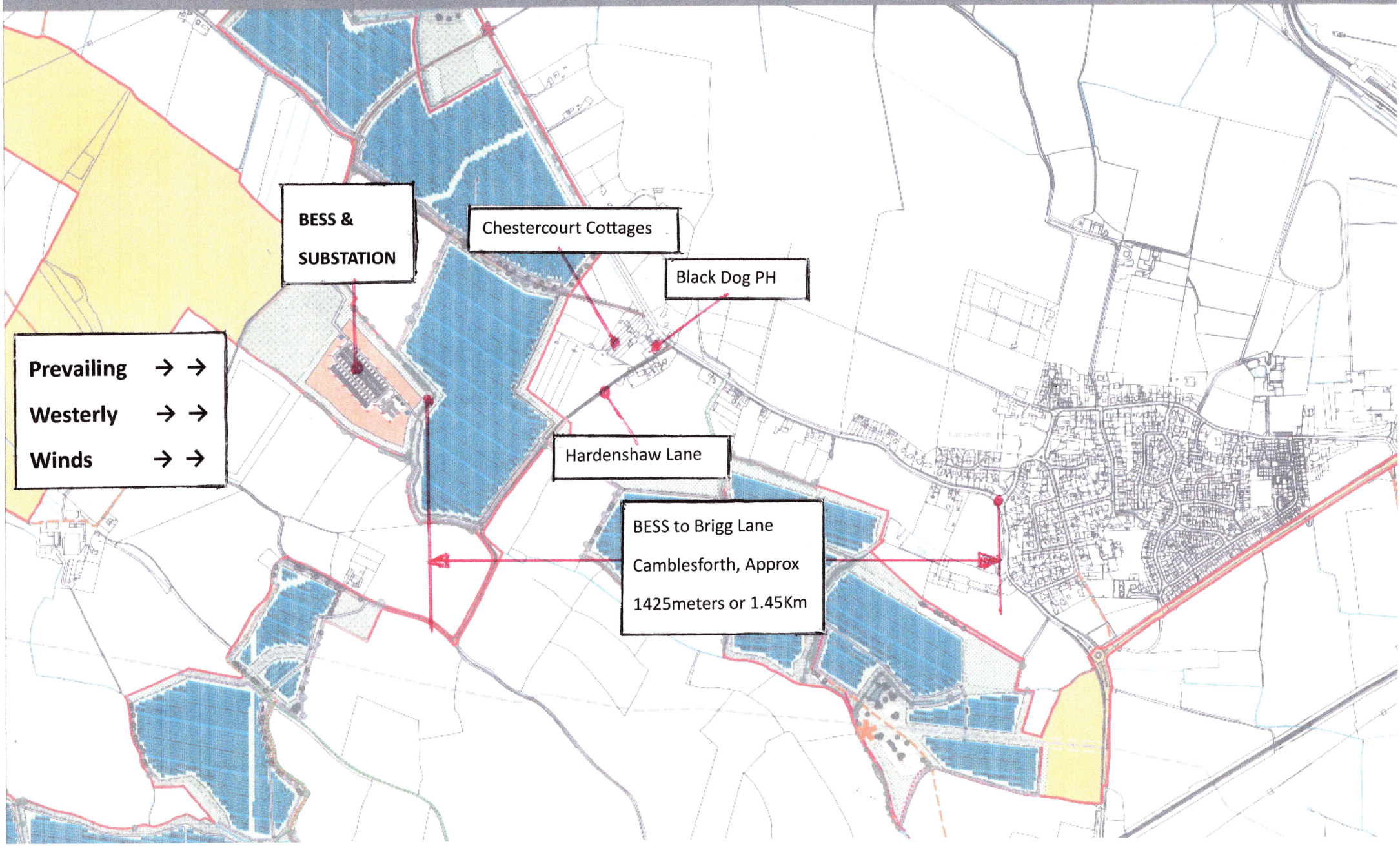
Taken from OS 1:25000

From the BESS and SUBSTATION

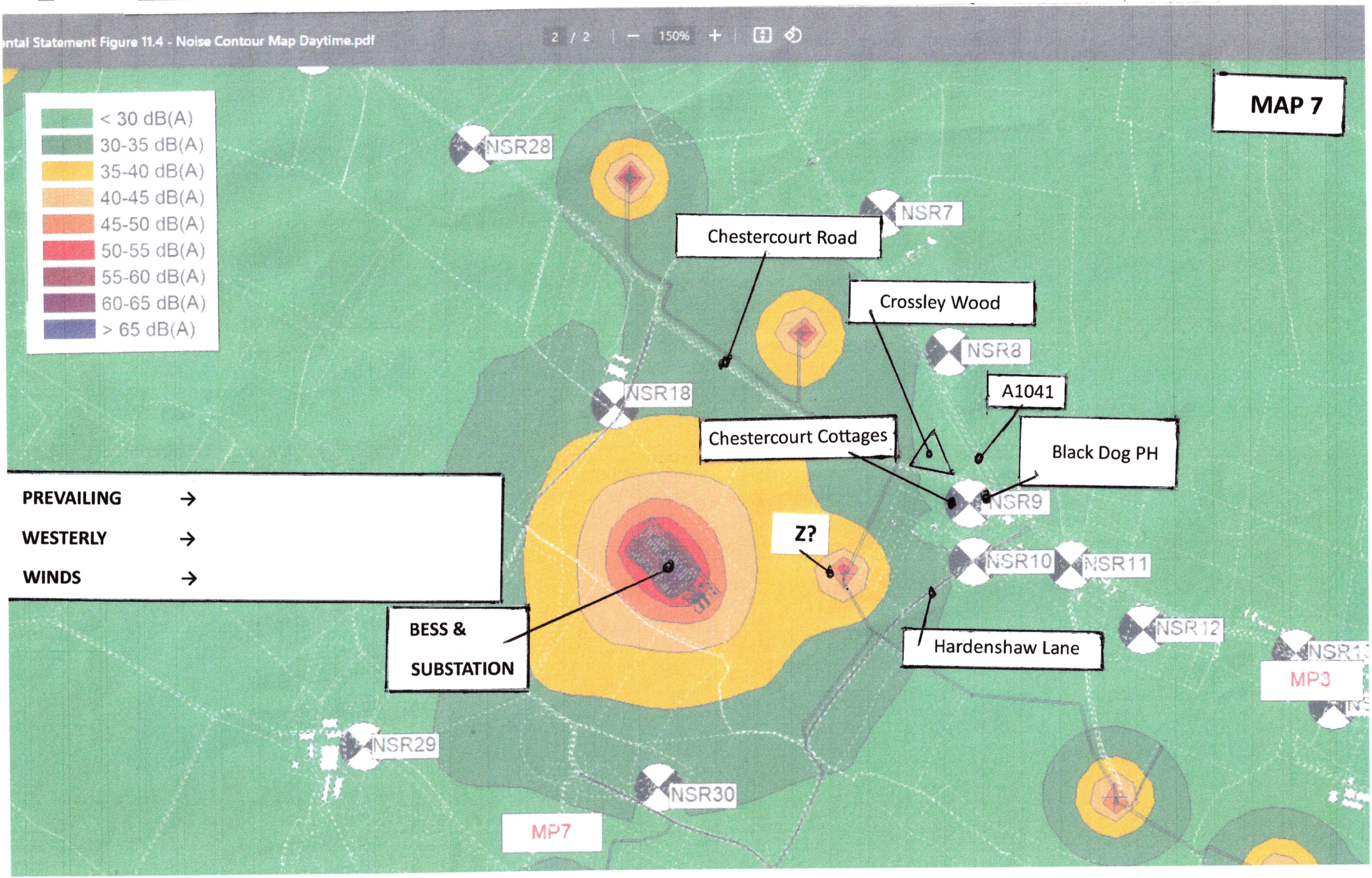
Chestercourt Cottages is approximately 575 meters

The Black Dog is approximately 625 meters

Please note this area is substantially occupied



EN010140-000271-6.2 Environmental Statement Figure 11.4 - Noise Contour Map Daytime.



Google Maps

Please note the Substantial housing plus The Black Dog Pub from the BESS

MAP 8