Lime Down Statutory Consultation

What we know about the Scheme
How to tackle the Statutory Consultation

Sir Mike Pitt
Prof Richard Skeffington

STOP LIME DOWN

Local Presentations

February 2025

In early February 2025, we gave a series of presentations on behalf of Stop Lime Down in the villages which will be affected by the Lime Down Solar Park if it is approved.

This was to help people understand the scale and potential effects of the project, and help them fill in the feedback form provided by the developers IGP as part of their Statutory Consultation.

All technical information comes from IGP's Preliminary Environmental Information Report (PEIR). In this online version of the talks, we explain the planning process and what we have learnt about the scheme from reading some of the 4000 pages of text in the PEIR.

The authors

We are both retired and have lived in the area for more than 20 years.
We hope you will join us in opposing this destructive and unnecessary project.

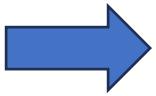
Sir Mike Pitt
Mike is a civil engineer and had a distinguished career in local and central government. From 2009 to 2014 he was the Chair and Chief Executive of the Infrastructure Planning Commission and the Planning Inspectorate.

Prof Richard Skeffington
Richard was Professor of Geography and Environmental Science at the University of Reading 1999-2018. Before that he spent 22 years as an environmental scientist in the electricity generating industry, evaluating environmental problems and trying to reduce them.

The Planning Act 2008

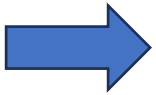
Applications for Solar over 50MW

Planning Inspectorate



Recommendation

Secretary of State



Decision

The Secretary of State (currently Ed Milliband) has the final decision.

He can overrule the recommendations of the Planning Inspectorate.

In one case (Sunnica) he overruled a recommendation to reject just 3 days after taking office.

Photo: Dept. of Energy Security and Net Zero (on X)

Lime Down Solar Park - Timeline Estimate (at February 2025)

2025 Q1	Publication Statement of Community Consultation,SoCC Statutory consultation on revised IGP proposals Publication Preliminary Environmental Information Report, PEIR
Q4	**2. ACCEPTANCE** (Minimum 28 days) Submission of application
2026 Q1	**3. PRE-EXAMINATION** (Usually 3 months) Planning Inspectorate appoints ExA SLD and others must formally register as an Interested Party SLD must give reasons for its objections
Q2	**4. EXAMINATION** (Up to 6 months) Submission of written evidence and attendance at hearings
Q3	ExA drafts recommendation (Up to 3 months)
Q4	**5. RECOMMENDATION**
2027 Q1	**6. DECISION** (up to 6 months normally)
Q2	Consider Judicial Review if appropriate

IGP's Consultation Period

29 January to 19 March

A Statement of Community Consultation (39 pages + appendices)

9 information events in local village halls

Website and online Zoom events

A Preliminary Environmental Information Report (PEIR) - 4000 pages!

A consultation leaflet

Document Navigation Booklet

A Project Information Booklet and Feedback Form

4 Library Community Access Points

Newspaper notices

Role of Consultees

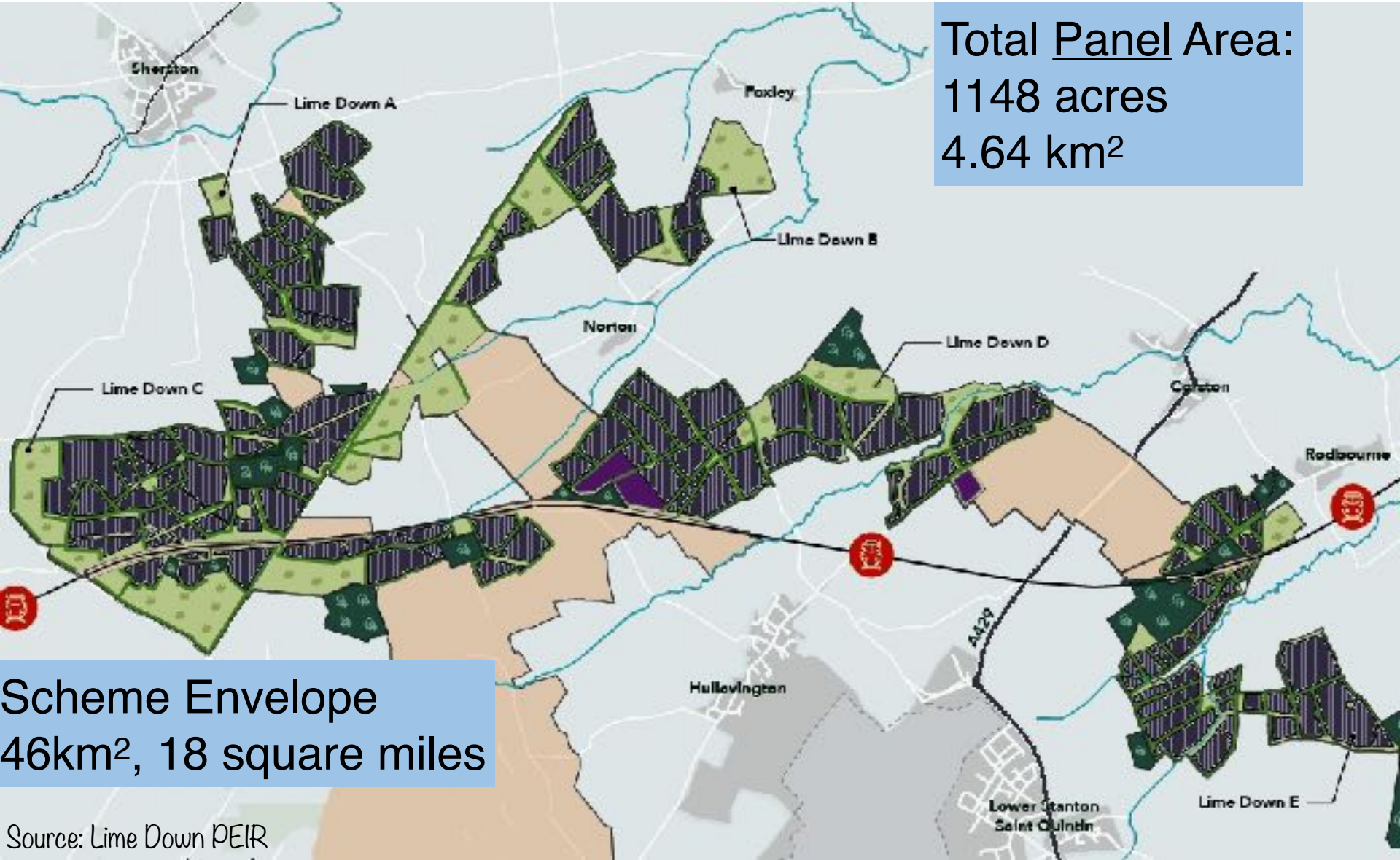
Members of the public and town and parish councils are consultees and have the right to participate in the Statutory Consultation.

Consultees should convey to IGP what they like or dislike about the scheme, and anything they are concerned about. You can be specific if you don't like panels on a particular field, for instance.

Detailed technical arguments are not necessary at this stage. They can be made to the Planning Inspectorate at the Examination Stage next year.

Larger bodies like Wiltshire Council and national agencies like the Environment Agency can also participate.

Lime Down Map



Total Panel Area:
1148 acres
4.64 km²

Scheme Envelope
46km², 18 square miles

Source: Lime Down PEIR

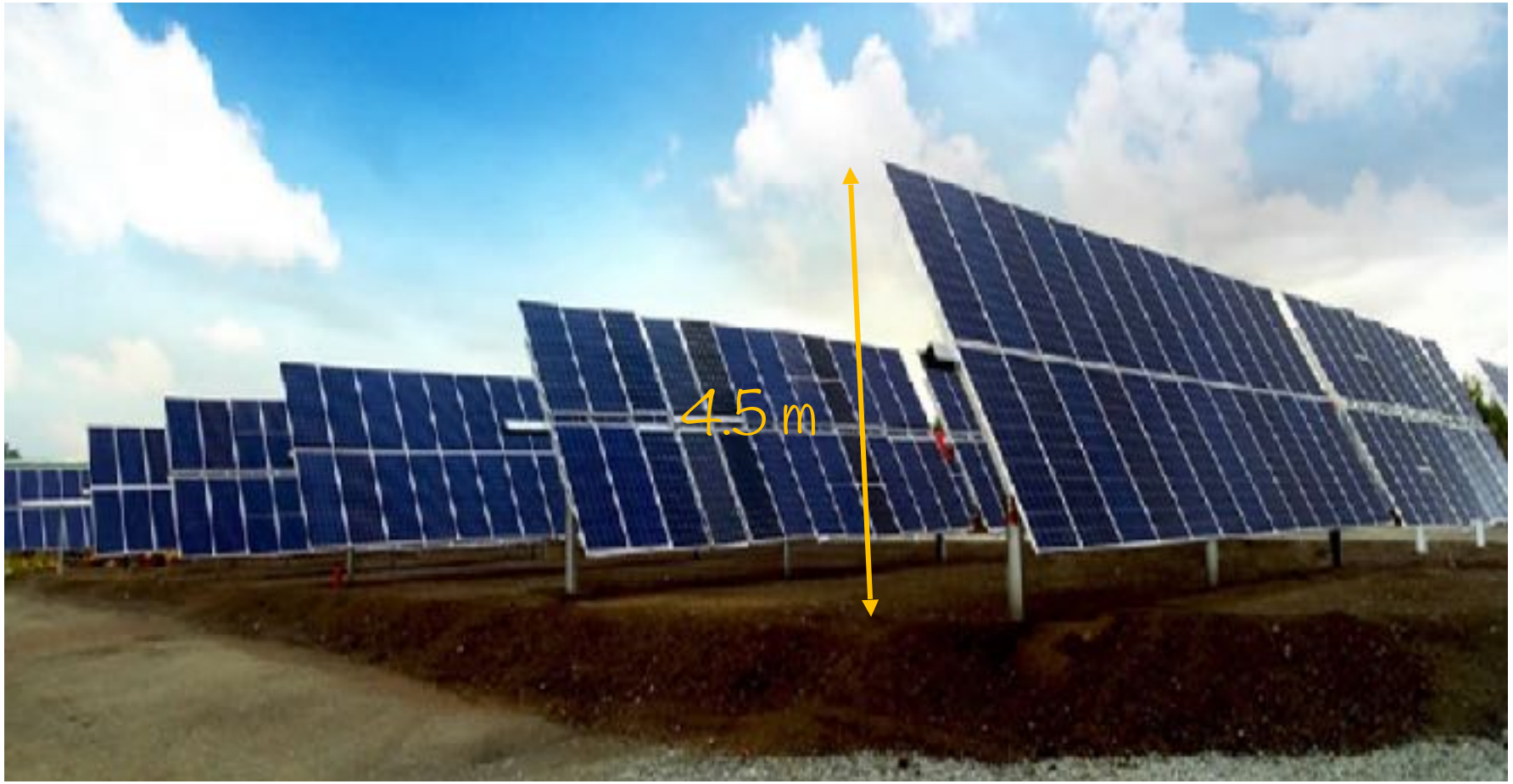
Preliminary Environmental Information Report (PEIR)

76 downloadable documents

c. 4000 pages

What we learned about the Scheme…

They want to use tracking panels where possible.



Tracking panels have motors which allow them to follow the sun. Make a noise. Need deep foundations.
The height of a double-decker bus.

Photo: Lime Down PEIR

In some cases there will be smaller, static panels, 3.5 m high
These are still larger than normal.

Inverter /Conversion Units

About 130 of these. 15 m x 5 m x 3.5m high.

Compare shipping container 6.1m x 2.4m x 2.6m high.

Each 7 times bigger volume than a shipping container

<u>Problems:</u>
Fan noise
Hum
Water runoff

33 kV substation

Up to 25 of these

Area c. 5000 m²

Max height 4m

3 m palisade fencing

132 kV substation

3 of these, Areas A, C, E

Area c. 9000 m²

Max height 7m

3 m palisade fencing

Photo: Lime Down PEIR

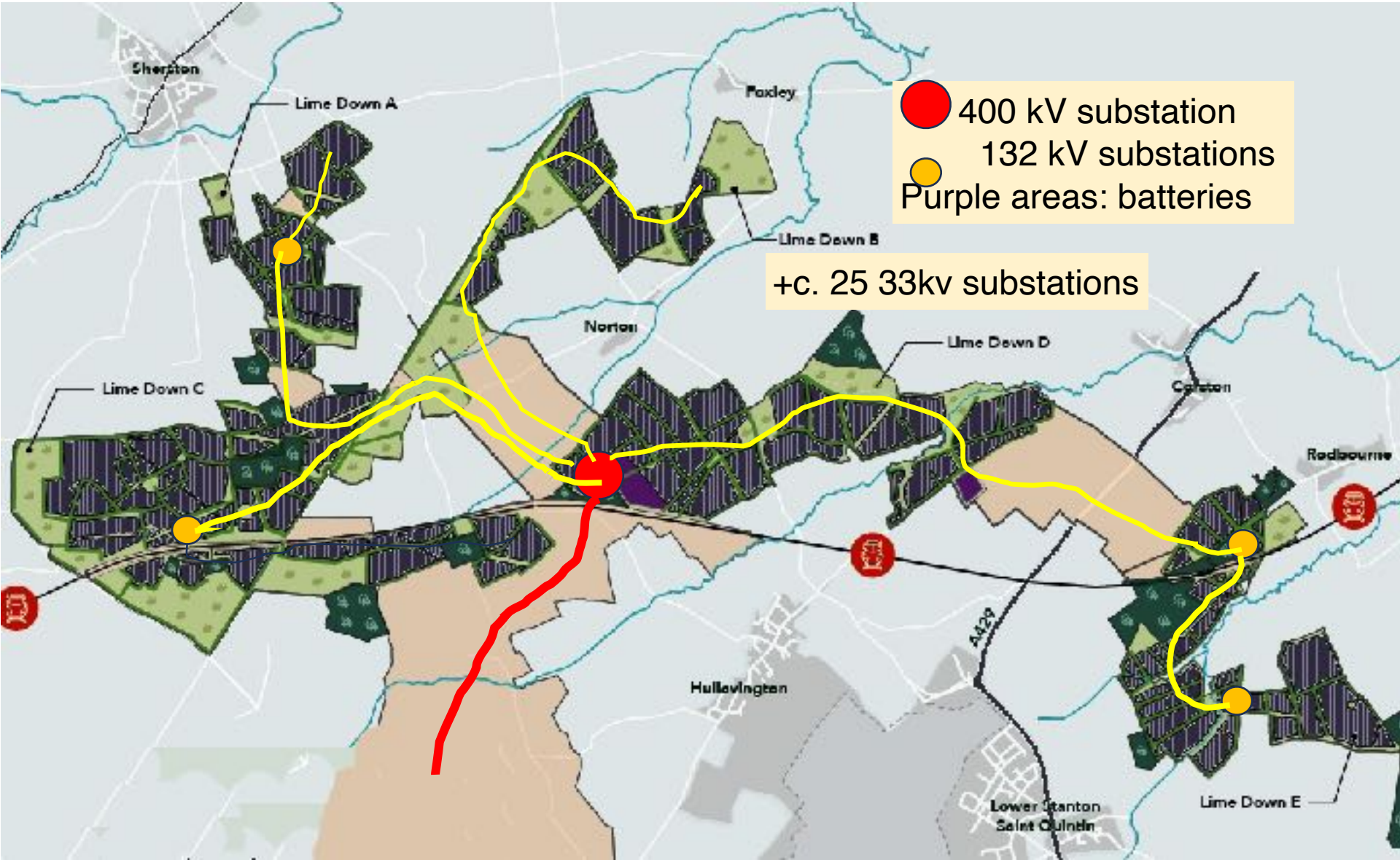
400 kV substation

One of these – at Hullavington. 42,500 m^2; height 13m.

<u>Problems</u>: hum; buzz; pesticides; water runoff

Infrastructure and Cables

Underground cables (yellow) will run to the large substation in Hullavington.
The locations are the map are speculative.



Construction

- Site preparation and civil engineering works;
- Import of construction materials;
- Upgrading of existing access points and creation of new access points and associated access tracks
- Enabling works and creation of temporary compounds;
- Erection of Solar PV Panels and Solar PV Mounting Structures;
- Installation of electrical cabling associated with the Solar PV Panels;
- Installation of the Solar PV Panels;
- Construction of electrical infrastructure including inverters, transformers and switch gear;
- Construction of electrical cables between Conversion Units and the substations;
- Construction of BESS; and
- Installation of fencing, security and lighting

Lots of tasks, lots of heavy machinery, piledriving…
Working hours 8:00 to 18:00; 9:00 to 13.30 Saturday

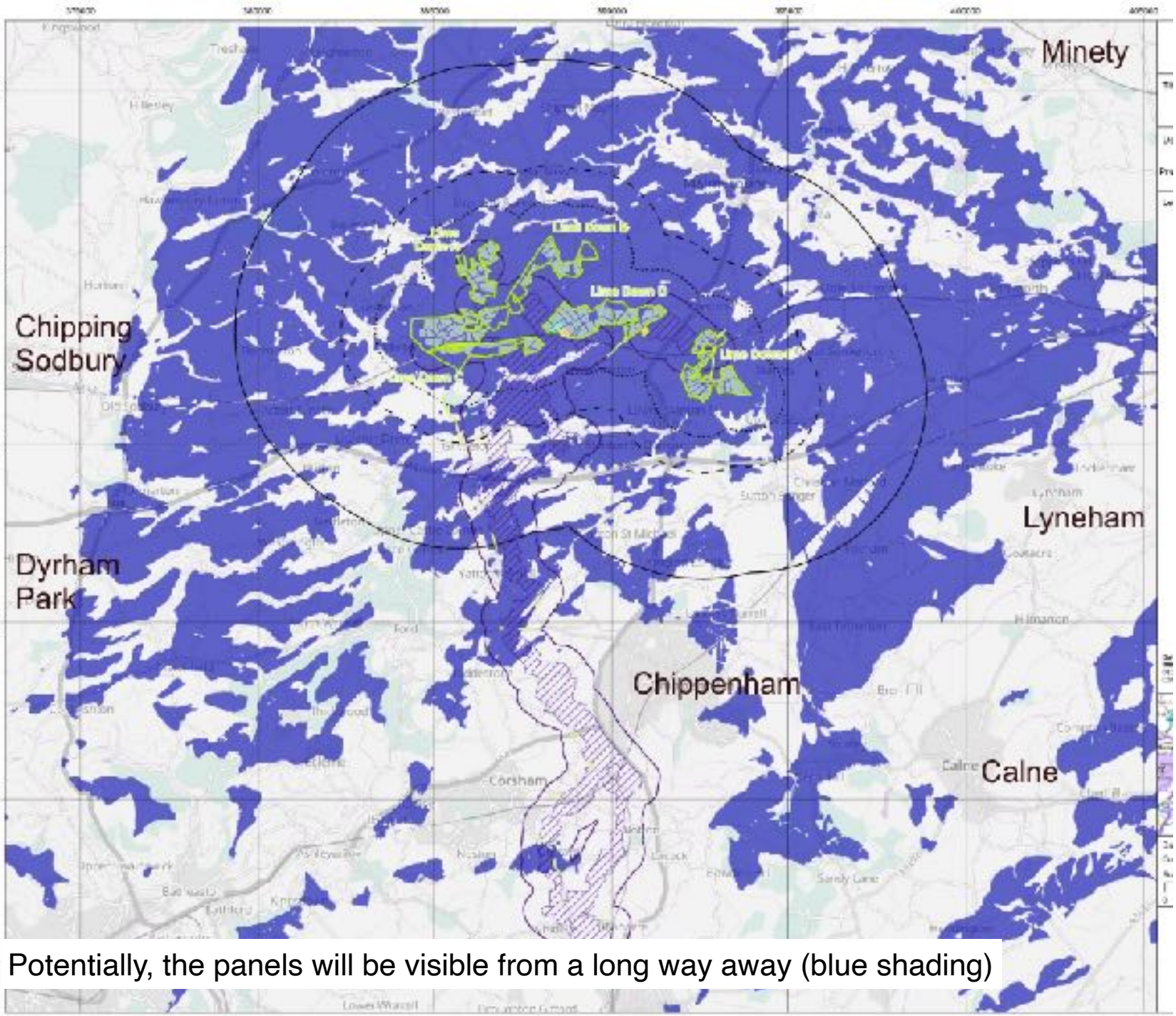
From Lime Down PEIR

Ground Conditions, Contamination and Construction

Problems on delicate soils

The aquifer which supplies drinking water to us and to Chippenham and Bath, and feeds our rivers, lies underneath the Scheme.

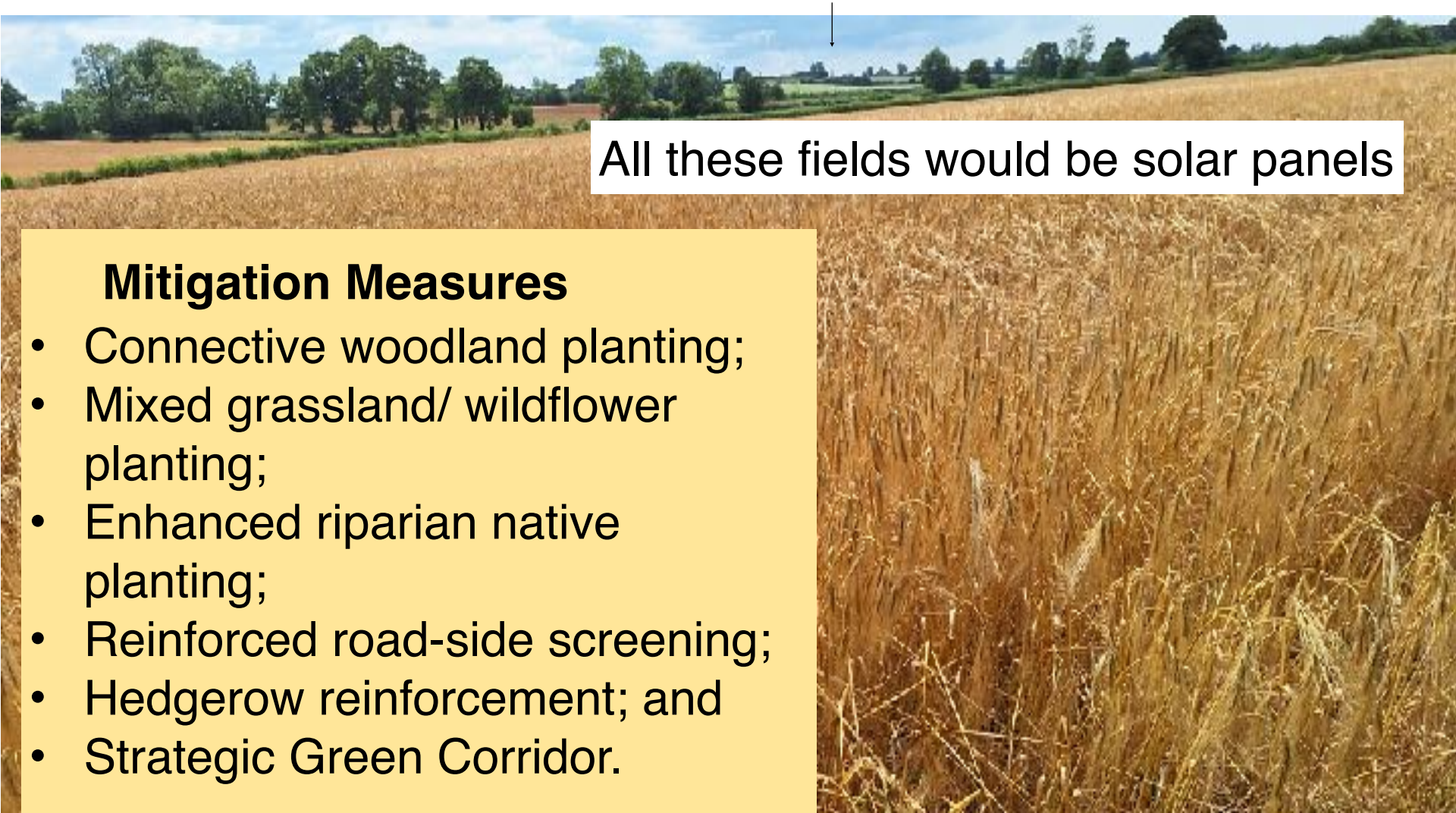
Photo: Tony Burch,
British Hydrological Society Presentation



Potentially, the panels will be visible from a long way away (blue shading)

Landscape and Visual

From Commonwood Lane, Sherston

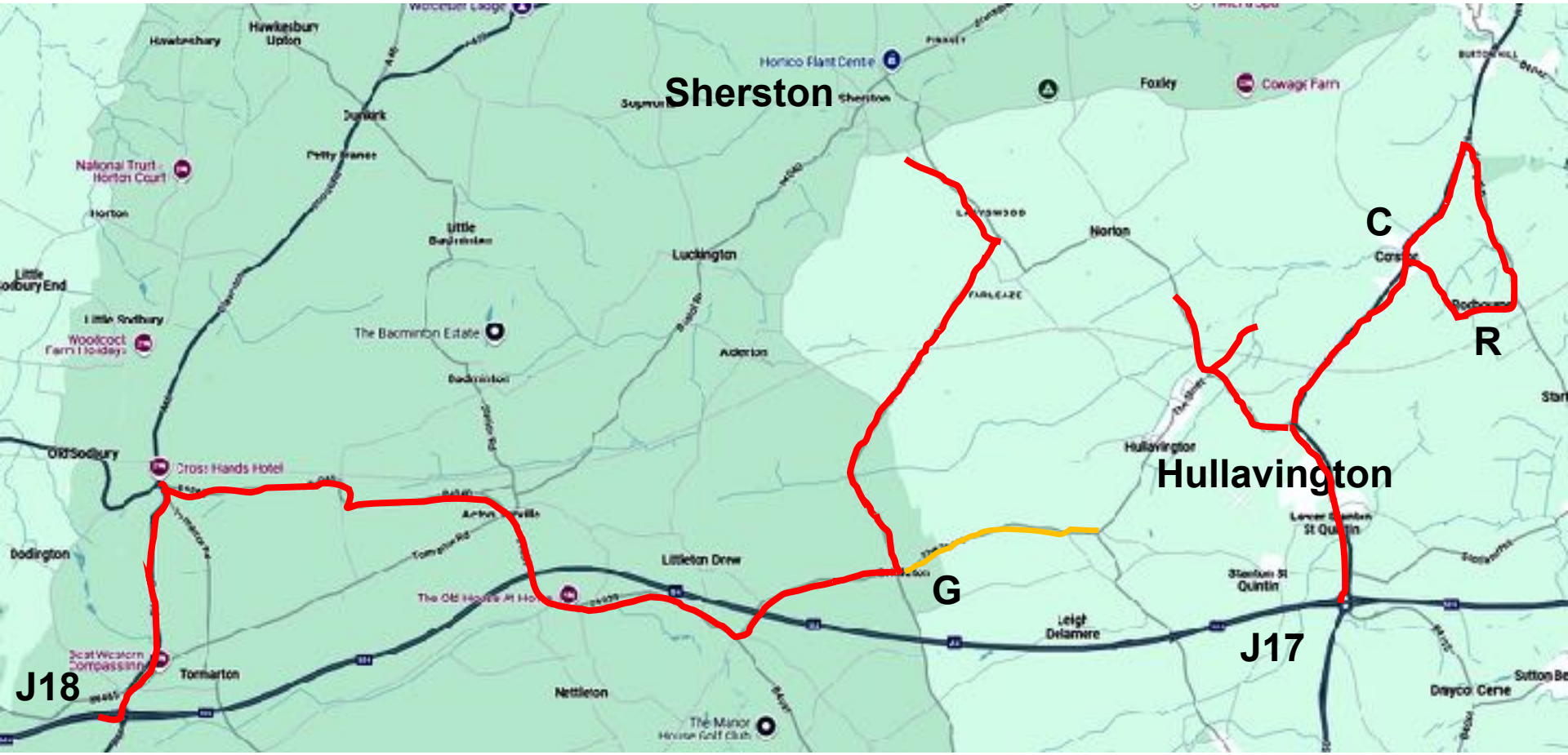


Mitigation Measures

- Connective woodland planting;
- Mixed grassland/ wildflower planting;
- Enhanced riparian native planting;
- Reinforced road-side screening;
- Hedgerow reinforcement; and
- Strategic Green Corridor.

Traffic and Transport

Total HGV movements: 22,730. Excluding cable route

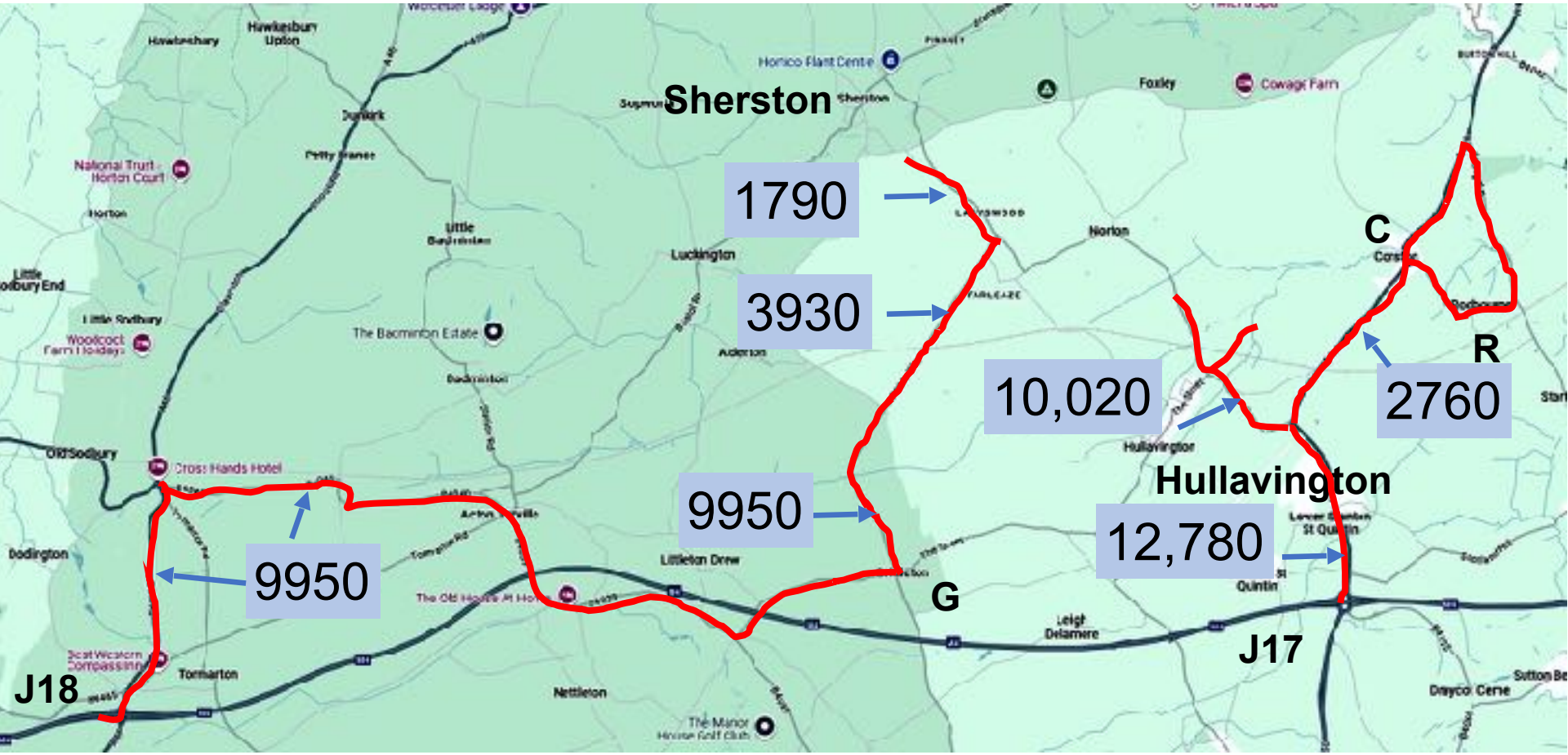


Peak HGV movements: 104 per day.
Excluding cable route

Map: Google Maps

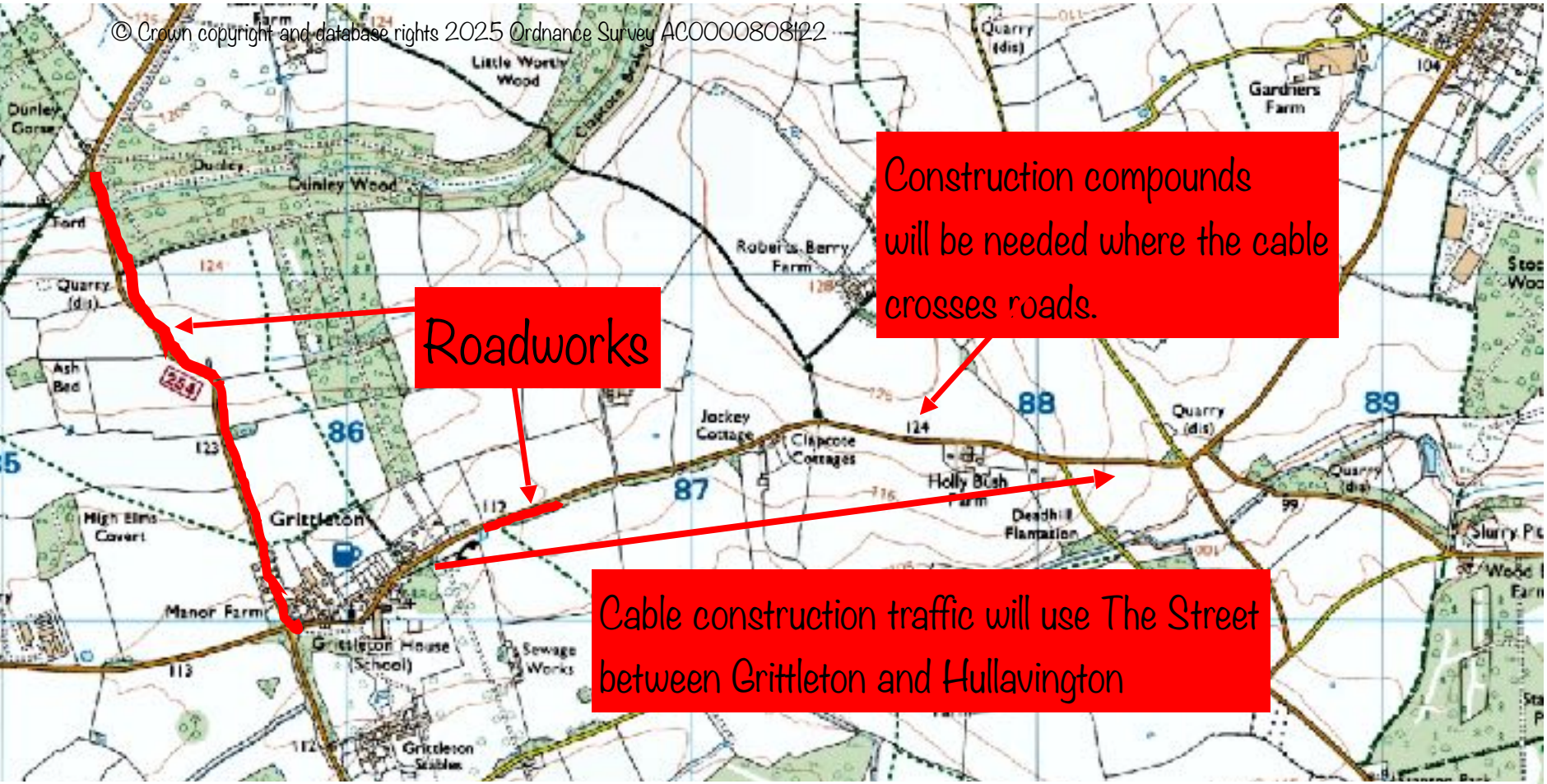
Traffic and Transport – Individual Roads

Over construction period



Plus: 500 workers on site.
22 bus trips and 334 car trips per day.

Map: Google Maps



Some rural roads will need roadworks to adapt them, such as Grittleton to the Fosse Way. Visibility splays will be needed where access tracks branch off, destroying hedges.

Agricultural Land

Surveys not quite complete - but

Grade 2	Very good quality	6%
Grade 3a	Good quality	24%
Grade 3b	Moderate quality	44%
Grade 4	Poor quality	26%

So 30% is “Best and Most Versatile” (BMV) land, where there is a presumption against development.

Even Grades 3b and 4 land can yield decent crops.

International Comparisons

The UK is the World's third largest food importer – (after China and Japan). We import 46% of our food.

Other European countries take more care of their agricultural land, even though they are more-self-sufficient:

France:

- No solar panels on agricultural land for export to the grid
- All large car parks must be covered with solar panels.

Germany:

- Solar panels strictly controlled and limited

Italy:

- Large scale solar on agricultural land prohibited

Cultural and Heritage

Ecology and Biodiversity

IGP did not want to survey for protected species

The Planning Inspectorate disagreed. Not all surveys are complete. Some species are discussed, such as bats, badgers, breeding birds, but we are waiting for other surveys to be completed.

Statutory and local conservation sites are discussed. There will be mitigation measures, but mostly these are unspecified at present.

Need to read Chapter 9!

Farming the Solar “Farm”

Farming is possible, but problematic

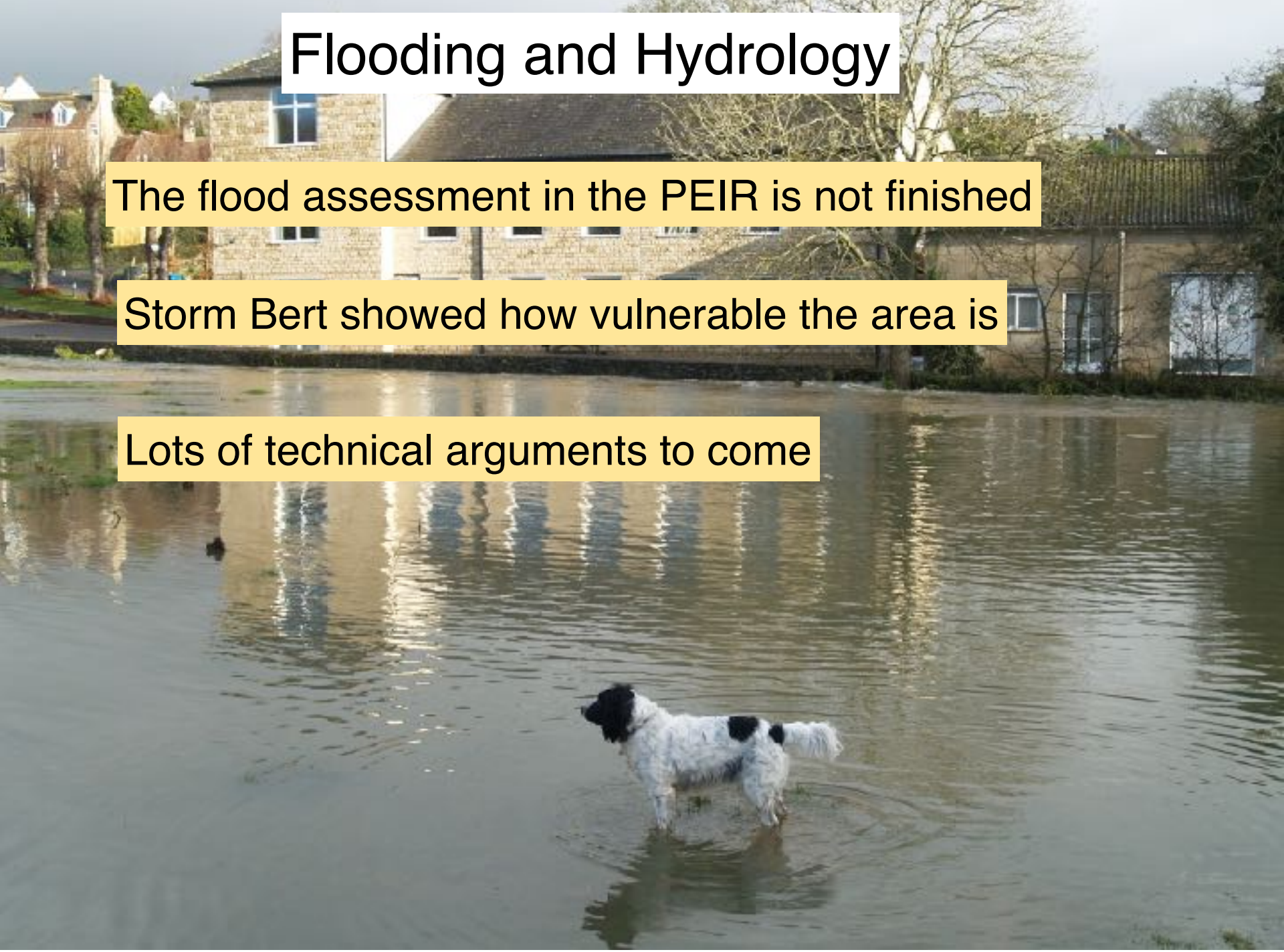
Solar developers fond of showing pictures of sheep, but they rarely last long. And they emit greenhouse gases!

Lime Down would need about 6000 sheep at least

Most solar farms are just mechanically mown.

Picture: Lime Down Website

Flooding and Hydrology



The flood assessment in the PEIR is not finished

Storm Bert showed how vulnerable the area is

Lots of technical arguments to come

One reason why solar panels could increase runoff

The panels concentrate rain 6- to 10-fold as it drips off the bottom of the panels.

This can run over the soil surface into rivers, and carries the risk of soil erosion.

Storm Bert showed how vulnerable the Gauzebrook is to flooding.

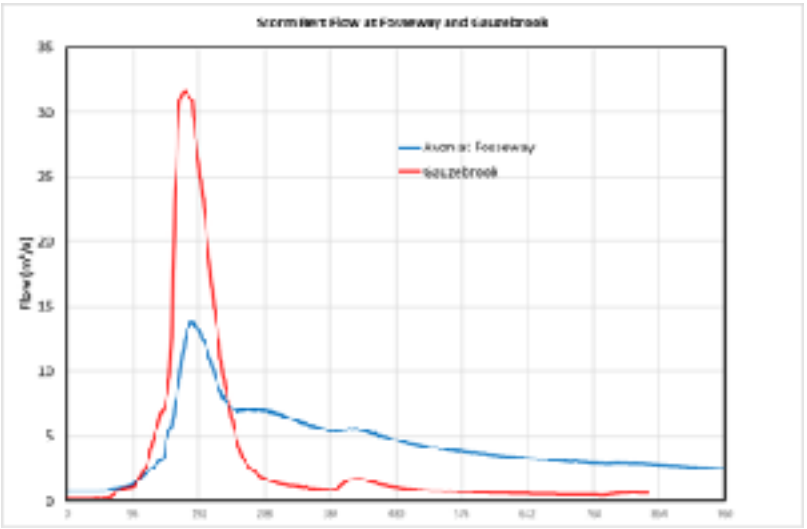


Photo: Tony Burch,
British Hydrological Society Presentation

House Prices

Developers claim there is no effect – this is untrue

Depends on how close you are.

Local estate agents have told us they are already having to discount prices. We are working on this.

At Botley West Solar Farm, near Oxford,
Prof. David Rogers estimated loss in value to houses

	100m	0.5km	1.5km
Terrace	£24,000	£18,000	£5,000
Semi	£27,000	£20,000	£6,000
Detached	£40,000	£29,000	£8,000

Total loss to community: £153 million

The Cable Route

A 400,000 volt underground cable will run from Hullavington to the substation at Whitley near Melksham.

Constructing the cable will be a major operation.

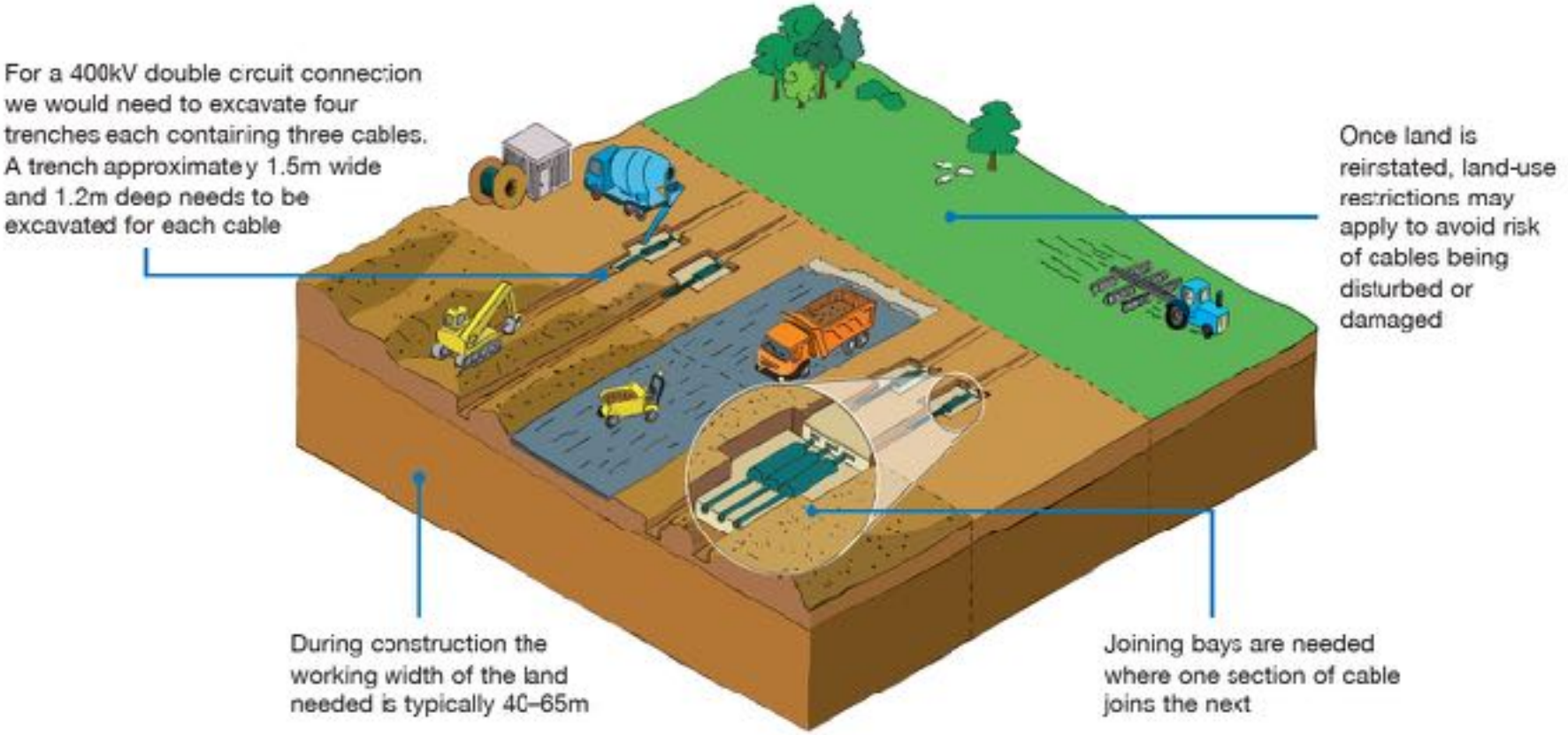
There will be three 400,000 volt cables, a fibre optic cable, and a low-voltage control cable.

Source: IGP Statement of Community Consultation

Constructing the Cable

nationalgrid

Ours will be a single-circuit 400 kV connection, but it won't be significantly smaller.



400 kV Cable Construction

This one is close to completion

Width of Cable Wayleave

c.f. Wembley Stadium. Pitch width 68m

Constructing the Cable Trench

Photo: Courtesy National Grid

Jointing Bays

Cables need to be joined.

Every 500 – 1000 m,
a permanent joint bay
is required.

Concrete walls,
4m wide, 15m long.
So longer than this one.

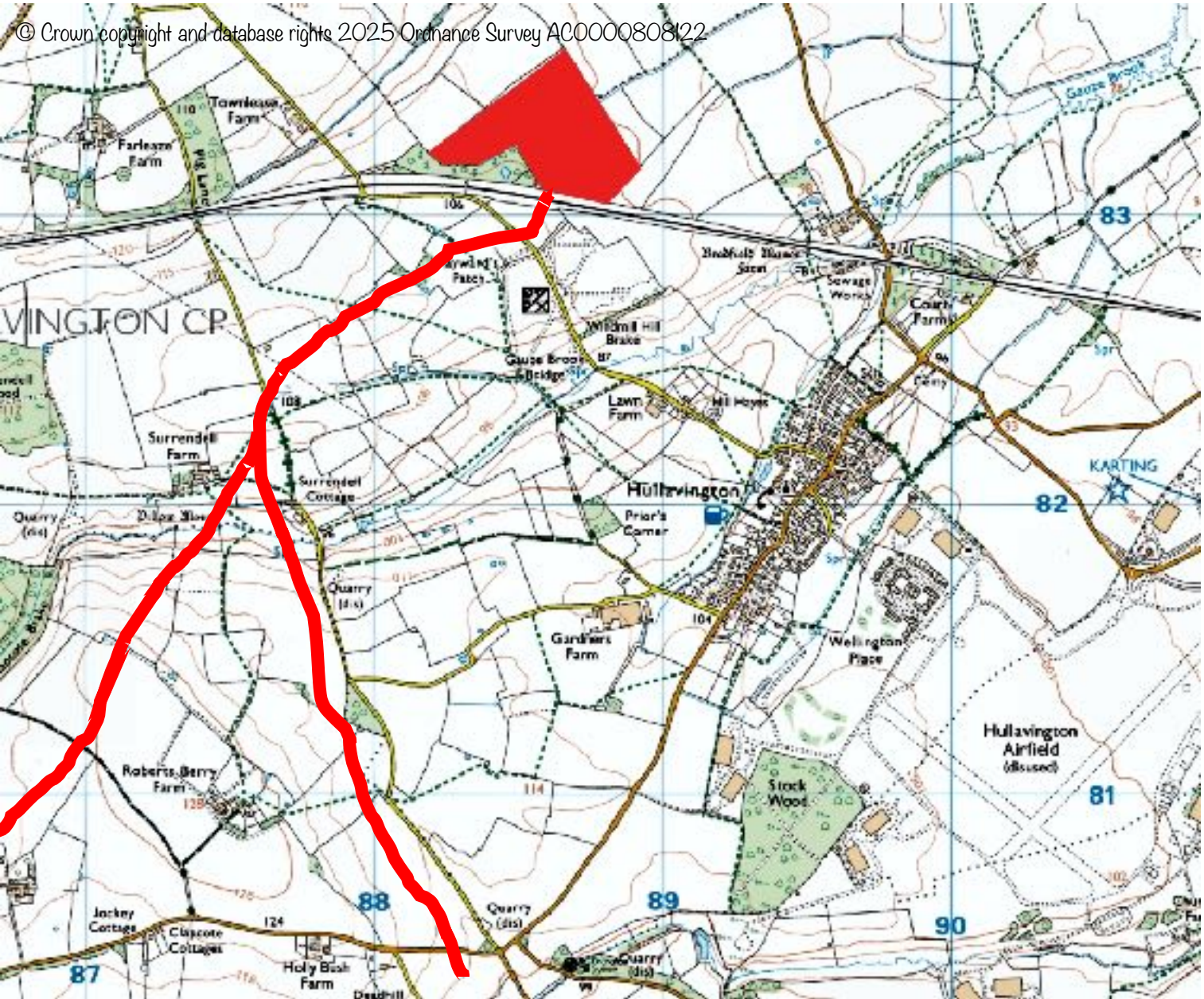
Ground surface structure,
needs manhole(s) and
permanent access track.

Photo: Courtesy National Grid

Cable Transport and Installation

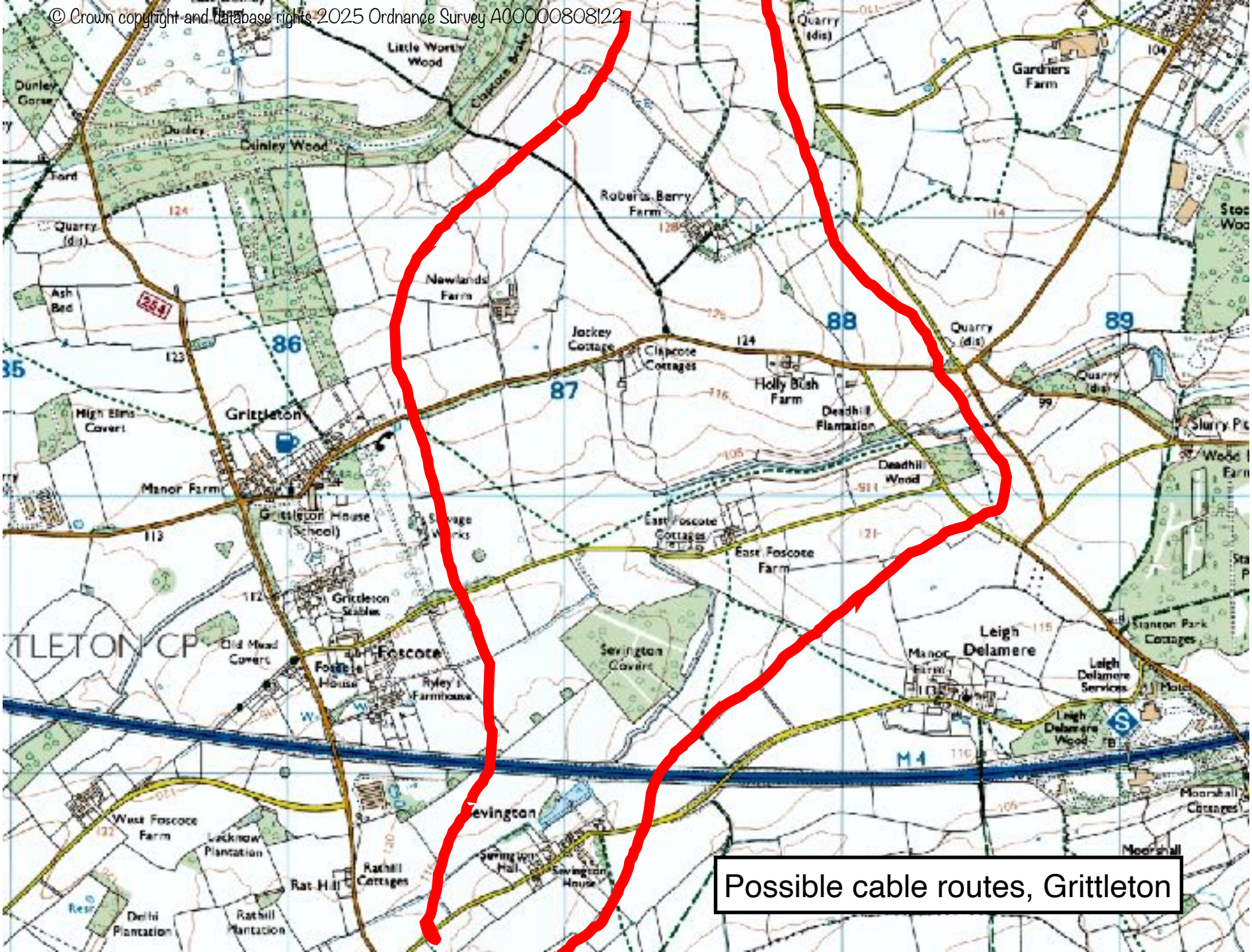
Cables come on a huge low loader. More specialised techniques under roads, railways, rivers etc. More lorry movements, unspecified in the PEIR.

Hullavington Cable Route?



Note:
The red lines are potential cable routes.

The cable route has not been precisely specified, but in most cases we can have a good guess.



Cable Route nr Yatton Keynell

The cable route is more tightly constrained round Yatton Keynell. It will pass close to the East side of Yatton Keynell and cross the B4039 near the golf driving range.

The Battery Energy Storage System (BESS)

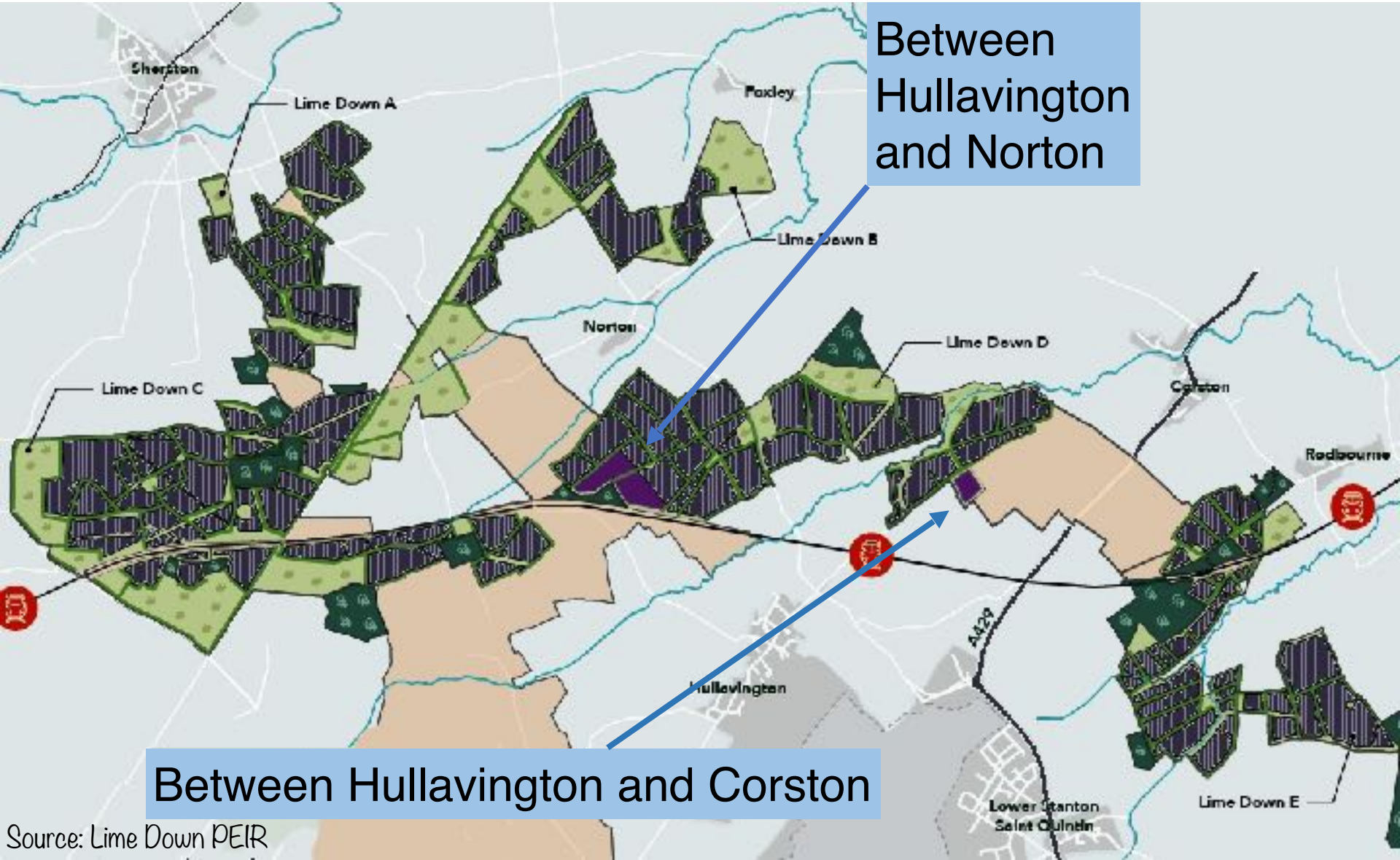
It won't look like this! "Up to" 270 Containers

Each 4 times the size of a shipping container

16m long x 3m wide x 3.2m high

Shipping container 6.1m long x 2.4m wide x 2.6m high

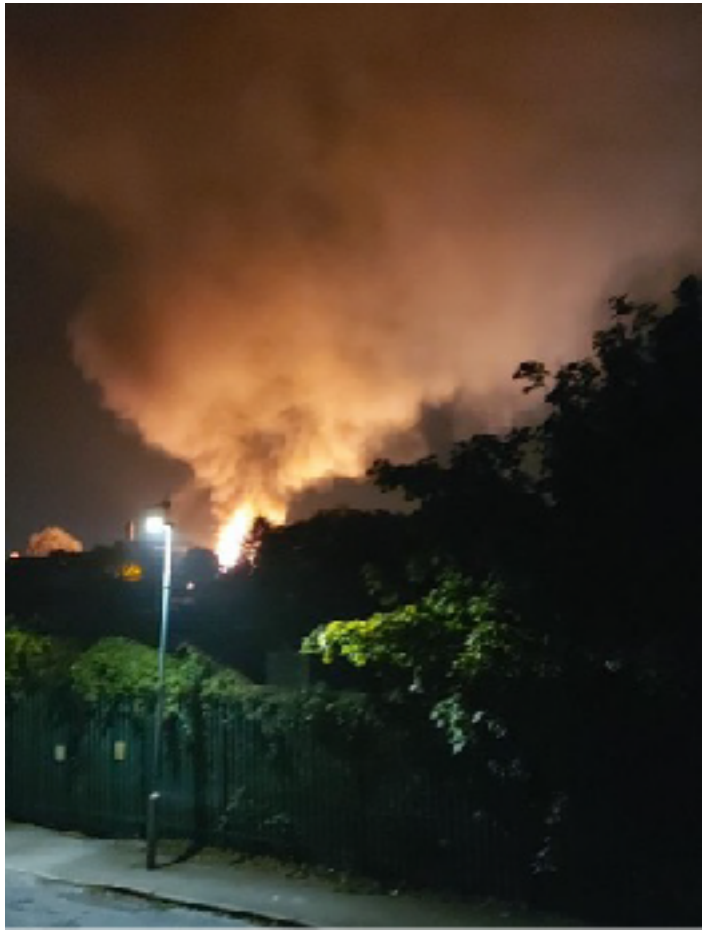
Two BESS Locations



BESS “Fires”

Fire in a BESS Unit in Liverpool, 2020.

It took 11 hours to control

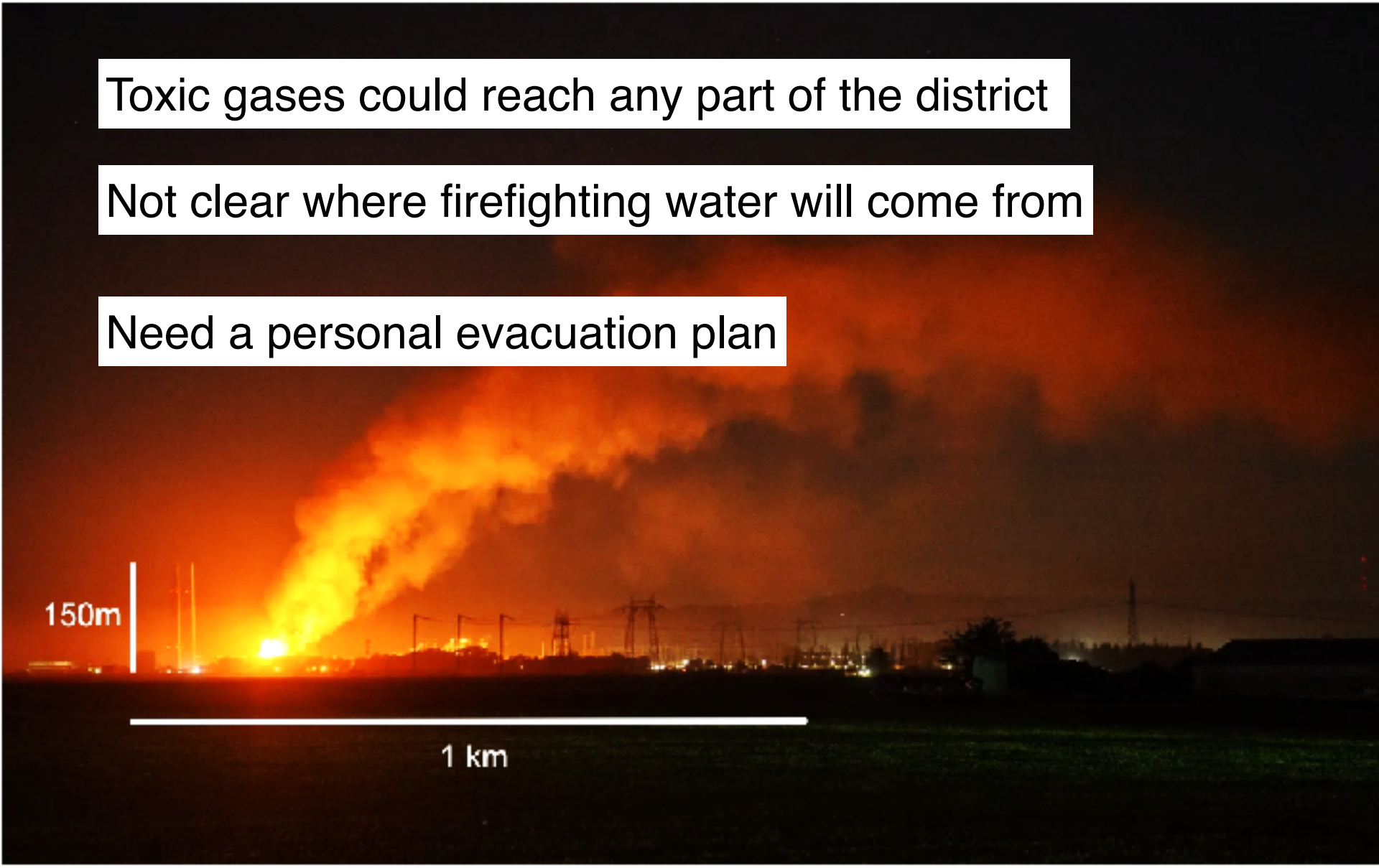


Source: Liverpool Echo

Dorset & Wilts Fire and Rescue service want adequate design and access to water supplies.
But they are not statutory consultees.

The consensus is that the “fires” are impossible to put out and need to be left to burn out. The adjacent batteries need to be kept cool during this process.
But the burning batteries can produce toxic gases like HF.

A fire rages out of control at the Vistra battery storage plant, one of the world's largest, in Moss Landing, Calif., on Thursday, Jan. 16, 2025. (Doug Duran/Bay Area News Group)



Smoke and flames are seen from Castroville as a fire at the Vistra battery storage plant burns in Moss Landing, Calif., on Thursday, Jan. 16, 2025. (Doug Duran/Bay Area News Group)

Moss Landing Fire

Still burning next day

c. 6 km evacuation zone
- e.g. Hullavington to Malmesbury

1200 people evacuated

Residents asked to stay indoors for several days due to concerns about heavy metal and PFAS contamination.

BESS fires are rare, but potentially devastating

No toxic gases were detected in this case, and no injuries

But the risks remain, and local communities are being forced to accept them without any guidance from the Health and Safety Executive on how they might be reduced.

Is Solar Energy Cheap?

In 2000, the World Bank ranked 209 countries in the World in terms of their potential for solar energy production. The UK came 208th.

Only the Republic of Ireland was worse. This does not mean that solar in the UK will not produce a useful amount of power – it just means it is more expensive.

See: https://globalsolaratlas.info/global-pv-potential-study

Cheap Solar Energy 2?

"The solar industry in the UK is little more than the product of an excessively generous set of subsidies" **Prof. Gordon Hughes, Report for Renewable Energy Foundation 2023*

Prof Hughes calculated the effect on our electricity bills of the DENZ's ambition to reach 50 GW of solar by 2035. This requires c. £4.5 billion p.a.

The effect would be to raise the average household electricity bill by about £160 p.a. (15-20%).

Officially the target is to reach 50 GW by 2030. Most informed observers think this is impossible. If it was possible, it would be even more expensive.

And, we already have the developed world's most expensive industrial electricity, and one of the highest domestic electricity costs.

*Prof. Hughes has been in energy economics all his working life. He was a Fellow of Christ Church Cambridge, Energy Economist at the World Bank, Professor of Political Economy at Edinburgh University and consultant to numerous countries. We can take it he knows what he is talking about. See his blog Cloud Wisdom on www.substack.com

Why Solar Should be on Rooftops

Cheaper to produce – no substations, high voltage cables etc.

No subsidies required for domestic production at least

Electricity used near the source, so little or no transmission loss

Less need to upgrade transmission infrastructure, so fewer pylons

No loss of farmland, does not jeopardise our food security

No increase in flood risk

No risk of contaminating our water supply

There is room – UK Warehouse Association keen to be involved CPRE calculated solar could be accommodated without damaging the countryside.

- But much less profit for developers

A word from our MP:

"Why not require all new homes to be fitted with solar panels?.... Why not use the vast roof spaces of warehouses, public buildings and car parks? These are sensible, minimally intrusive ways to contribute to our net zero goals".
Roz Savage MP, Westminster Hall Debate, 28 Jan 2025.

We Can Win This!

When the Scoping Report came out, we worked with Statutory Consultees to ensure that a lot of items IGP wanted to “scope out” were included.

As well as ensuring that a lot of relevant issues were covered, this delayed the project by about 6 months.

As the costs, both environmental and financial, of the Dept. of Energy Security and Net Zero’s obsession with solar on farmland become clearer, the political headwinds are building.

But we need your help.

Prompts for IGP Questionnaire

- The Cotswolds landscape
- Proximity to nine Cotswold villages
- Ugliness of panels, batteries, transformers fencing etc
- Loss of agricultural land, food
- Damage to businesses
- Noise
- Mental health
- Construction traffic
- Fire risk
- Flood risk
- Pollution risk
- Footpaths and cycleways
- 60 years!
- House prices

More on https://stoplimedown.com/reasons-to-object

How You Can Help

Contact us via our website: https://stoplimedown.com/home

We need funds to pay consultants and our legal advisors
Join our 1000 Club to donate whatever you can afford
by Direct Debit.

Offer help in kind. All offers appreciated.

STOP
LIME
DOWN