Berryhill Solar Farm

Presentation to Community

10th June 2021

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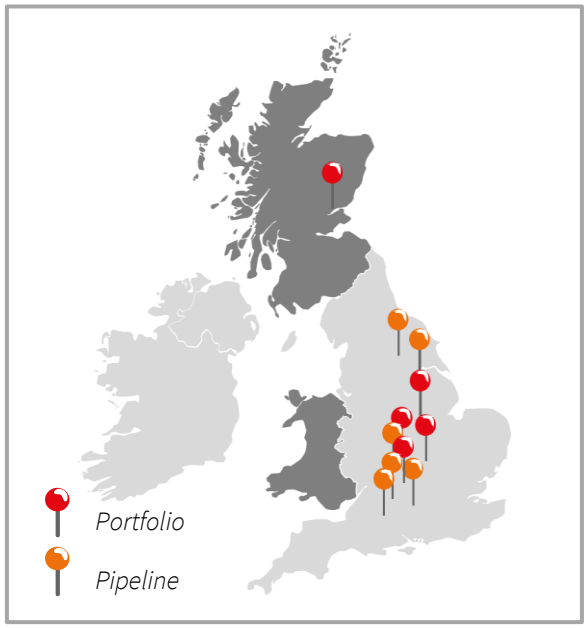
Solar 2 Ltd Introduction



Offices & Staff in Perth, Edinburgh, Cromarty, Mold, nr. Ipswich

2020: Wind 2 enter framework agreement with large European Utility to develop onshore wind projects

2016: Wind 2 founded by Gerry & Paula Jewson. Team combines over 100 years of experience gained from roles at leading industry players.

1996- 2014: WCE/RDC develop 600MW+ UK Wind & Solar projects

2019: Solar 2 founded to leverage team's existing experience

2014: WCE acquired by French utility GDF Suez (ENGIE) as part of their UK growth

1996: West Coast Energy "WCE" and Renewable Development Company ("RDC" are both founded by Gerry Jewson.

What is Solar PV

Typical ground mounted configuration

Comprising of mounting, panels and inverters collecting the power from the panels and transporting the power to the project substation

What is Solar PV

Panels arranged in rows generally 2-3m high either vertically or horizontally arranged.

Rows are faced to the south and the panels are mounted at a 30˚ angle to capture the maximum sunlight.

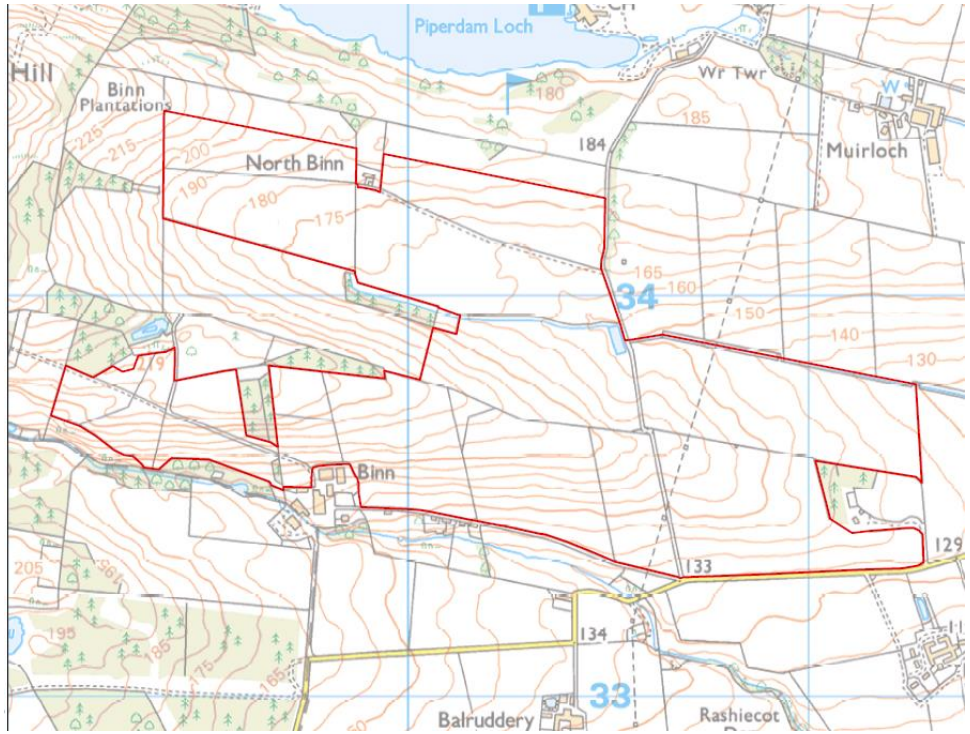
The Berryhill site will total an export capacity of 49.9MW and will cover 100- 120 Ha

Land use will essentially remain the same as sheep will graze below the panels.

Insurance requirements dictates that the projects will be enclosed by fences

Berryhill Solar Farm – Survey Update

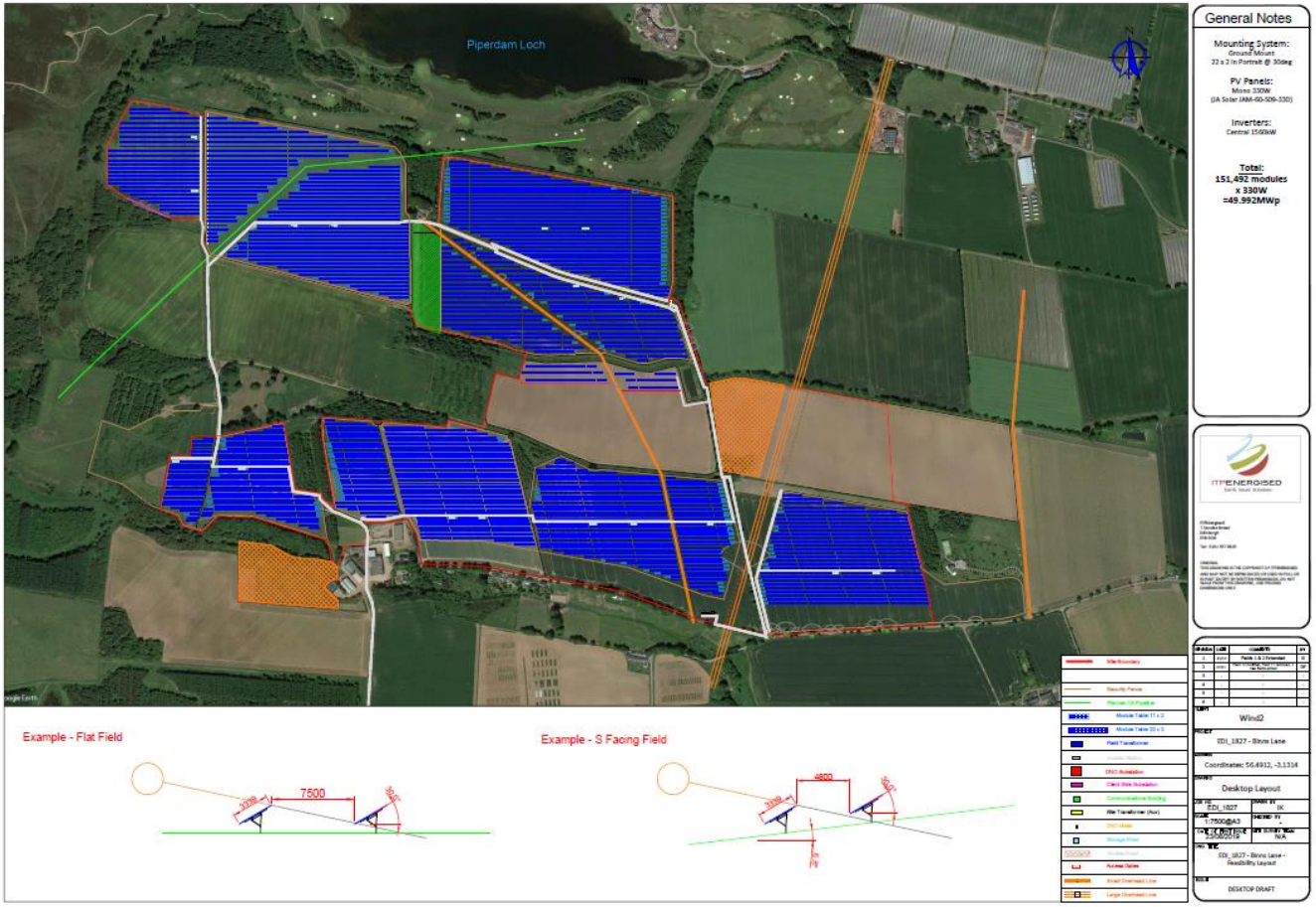
- Over the past two months, surveys have been carried out to assess the potential impacts of the proposed solar farm on Ecology, Hydrology, Landscape, Local Residents, Cultural Heritage, Traffic, Aviation, Agricultural Land.
- Survey methodology was agreed with Angus Council in advance. Neighbouring Perth & Kinross Council has also been made aware of the project.
- The Scottish Govt. Chief Planner and Angus Council planning were consulted with regards to holding an “in person” public exhibition. This will be held at Fowlis Easter Hall on Saturday 12th June from 10AM – 2PM



Berryhill Solar Farm- Design Update

Initial layout, designed to

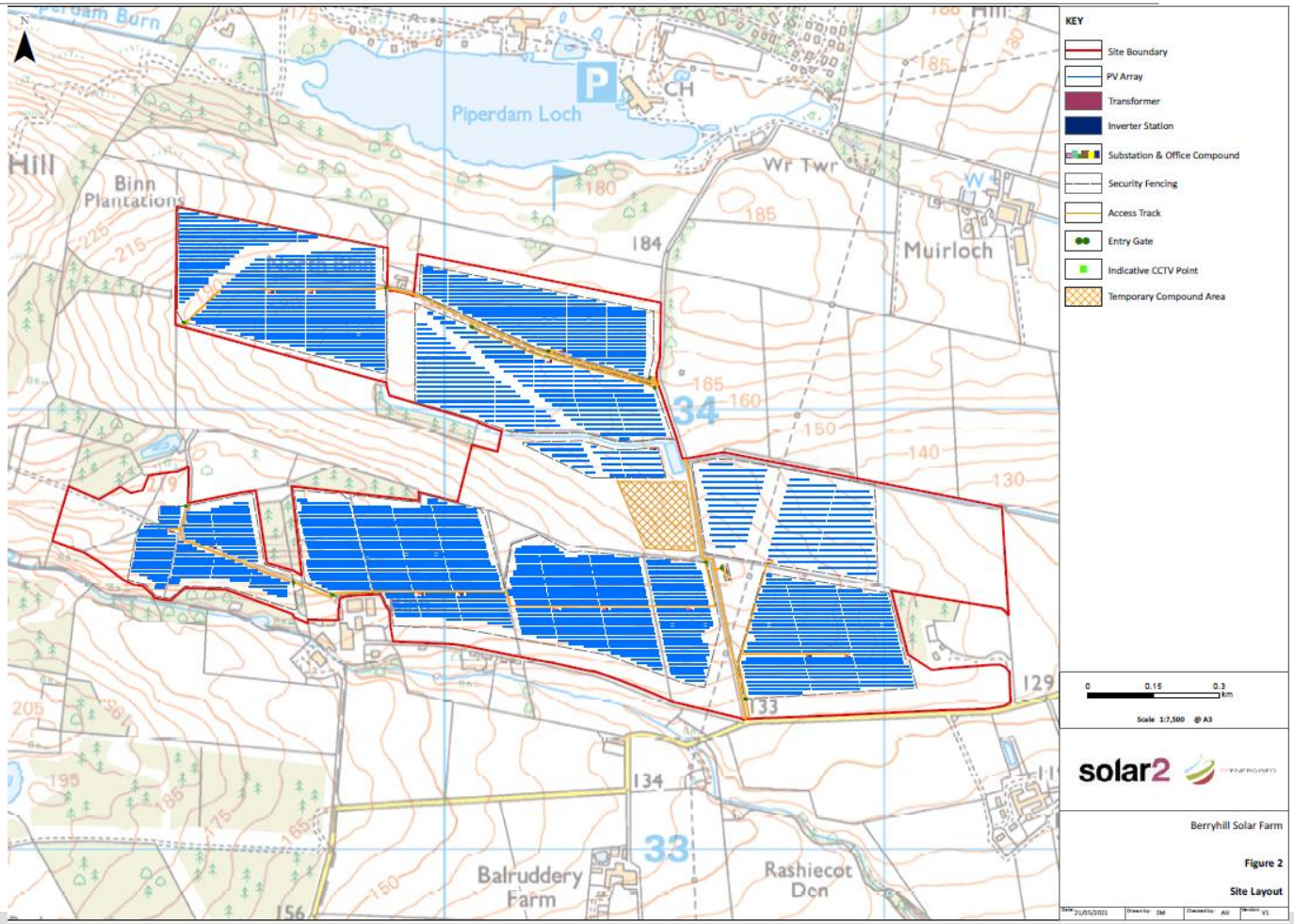
- maximize output
- Buffer from houses to the South of the project
- Buffer from electricity and gas pipelines
- Focus on South Facing/ Flat Land



Berryhill Solar Farm- Design Update

Updated layout, designed to

- Buffer from Bats & Badgers
- Reduce views from Fowlis Easter
- Buffer from Golf Course at Piperdam
- Remove most visible areas at the Northern part of project
- Buffer off main views from North Binn Cottage



Key Findings from Surveys

Ecology – No designated species will be negatively impacted

Buffers incorporated to protect potential Bat Roosts & Badger Setts

Hydrology – No adverse impact on drainage systems or flood risk.

Current drainage system will not be changed

Landscape & Visual – It is expected that none of nearby homes identified will have major impact once screening is in place.

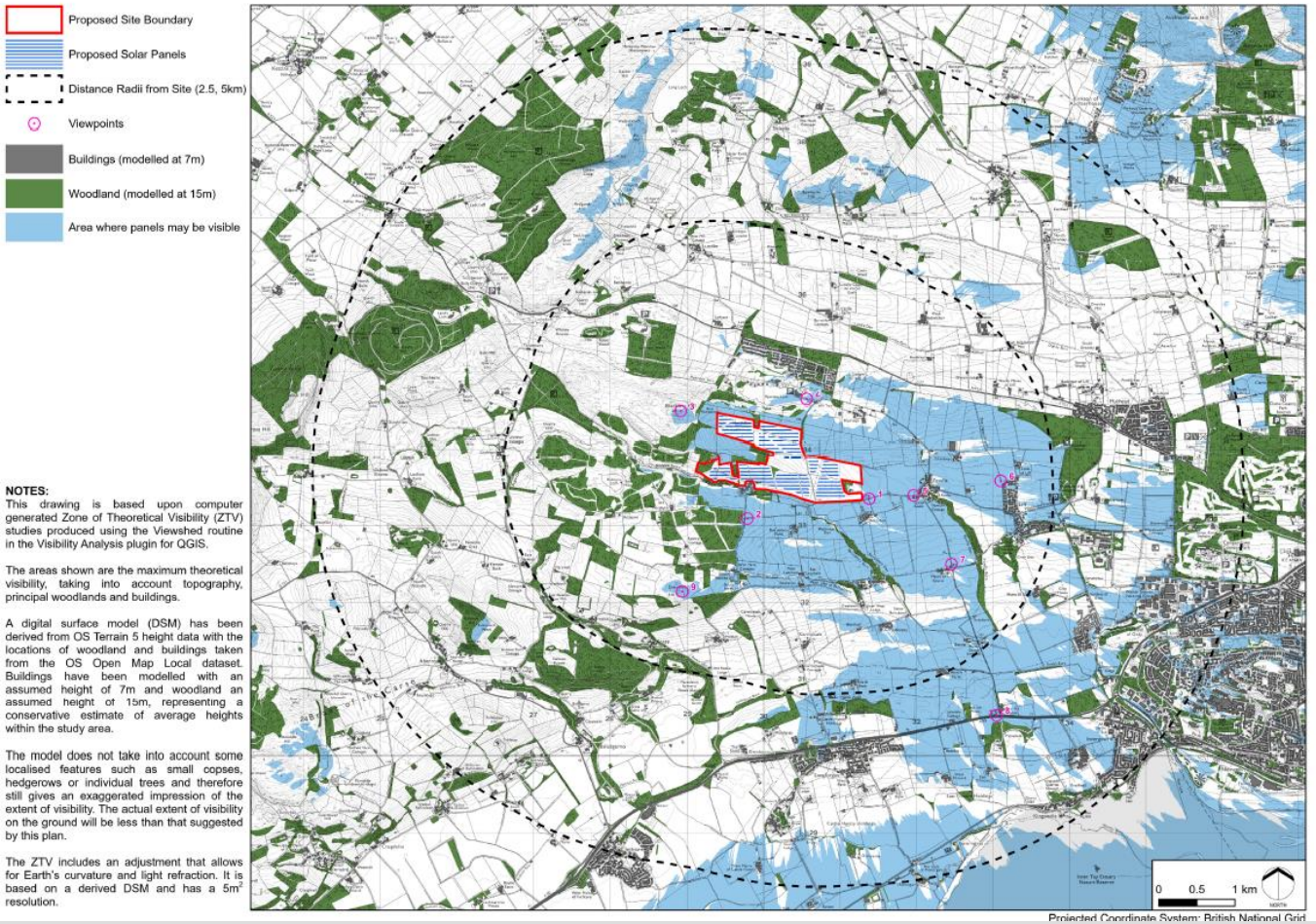
Detailed programme of tree, hedgerow planting to be done to reduce views from South and East

Cultural Heritage – No impact on Cultural Heritage assets is anticipated

Socio – Economic/ Recreation – No change to access through the farm on key walking routes.

Key Findings from Surveys

Landscape & Visual Impact



Key Findings from Surveys

Landscape & Visual Impact

A list of 9 VPs were agreed with Angus Council and these assessed.

VP	Location	Distance / direction	Scale of Visual Effect (Short-term)	Scale of Visual Effect (Long-term)
1	Berryhill	0.1km, E	Medium, Adverse	Small, Adverse
2	Minor road south of Site	0.4km, S	Large, Adverse	Large, Adverse
3	Blacklaw Hill	0.5km, W	Medium, Adverse	Medium, Adverse
4	Piperdam	0.4km, N	Small, Adverse	Small, Adverse
5	Fowlis	0.7km, E	Medium-Small, Adverse	Small, Adverse
6	Liff	1.8km, E	Small, Adverse	Small, Adverse
7	Mains of Fowlis	1.4km, SE	Negligible, Neutral	Negligible, Neutral
8	A90 at Star Inn	3.3km, SE	Small, Adverse	Small, Adverse
9	Dron Hill	1.5km, S	Medium-Small, Adverse	Medium-Small, Adverse

Photomontage from Fowlis Easter

Date	By
May 2021	GS
Image Size	CA
600 x 25mm	DT
Paper Size	Rev
A40 x 297mm	-
SHL-0640-Exhibition-Montages-banner	

Viewpoint Information:		Photography Information:	
Grid Reference:	331962E 733381N	Camera:	Canon EOS 5D MkII
Ground Height:	118.03m AOD	Lens:	80mm Fixed Focal Length
Direction of Centre of View: °	288.70°	Camera Height:	1.6m
Horizontal Field of View:	96°	Photography Date:	19/05/2021
Vertical Field of View:	27°	Photography Time:	10:01
Viewing Distance:	532mm	Enlargement Factor:	approx. 46%

STEPHENSON HALLIDAY
Planning, Landscape & Environment

Berryhill Solar Farm

Viewpoint 5: Fowlis
PHOTOMONTAGE (type 4)

Zoomed in Photomontage extract from Fowlis Easter

Photomontage from South of Site

Date May 2021	By SS
Image Size 820 x 251mm	QA DT
Paper Size 840 x 297mm	Rev -
BHL-004G-Exhibition-Montages-banner	

Viewpoint Information:

Grid Reference:	329780E 733089N
Ground Height:	182.98m AOD
Direction of Centre of View: °	8.40°
Horizontal Field of View:	90°
Vertical Field of View:	27°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D MkII
Lens:	50mm Fixed Focal Length
Camera Height:	1.5m
Photography Date:	18/05/2021
Photography Time:	09:30
Enlargement Factor:	approx. 96%

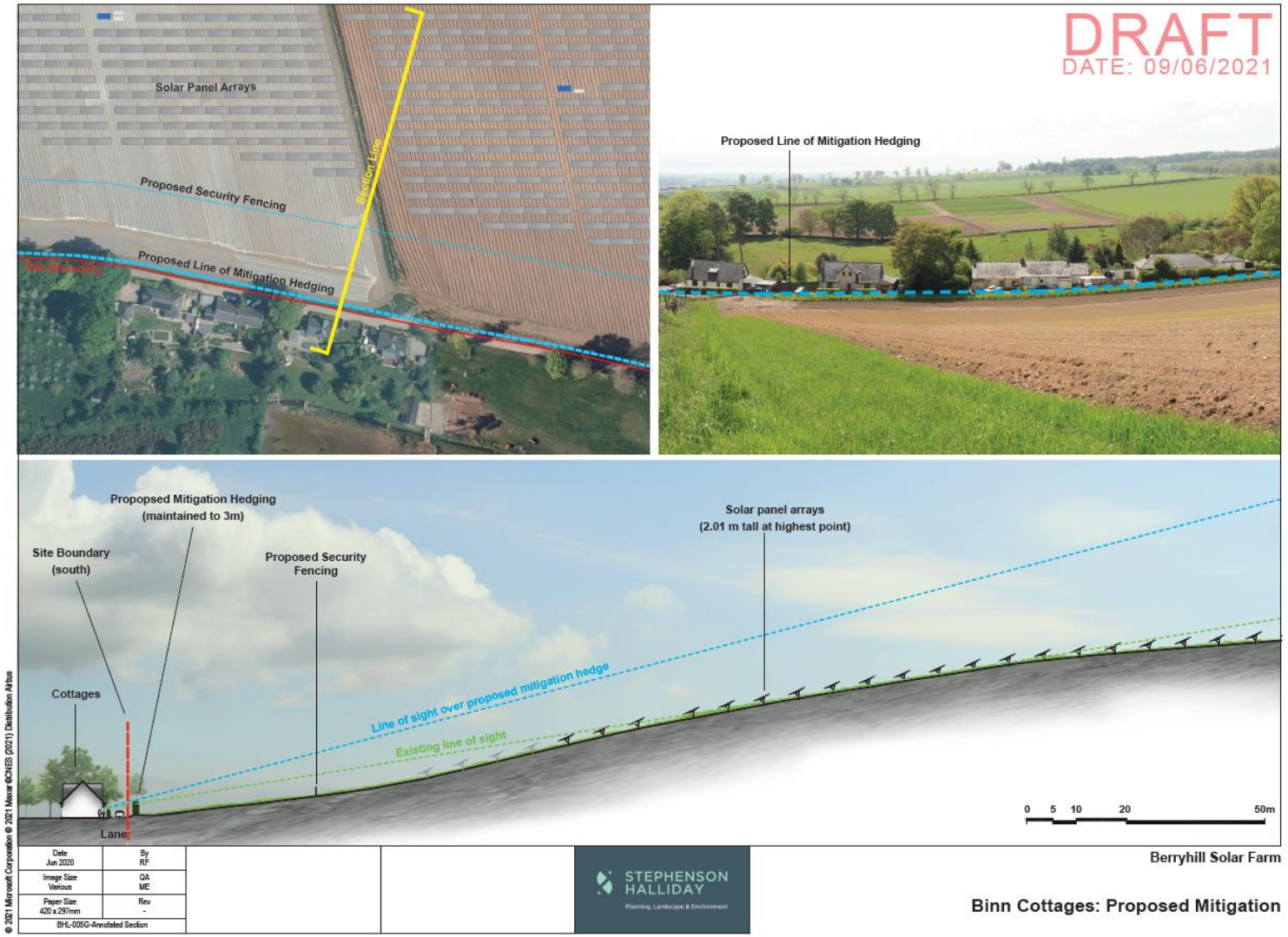
STEPHENSON HALLIDAY

Planning, Landscape & Environment

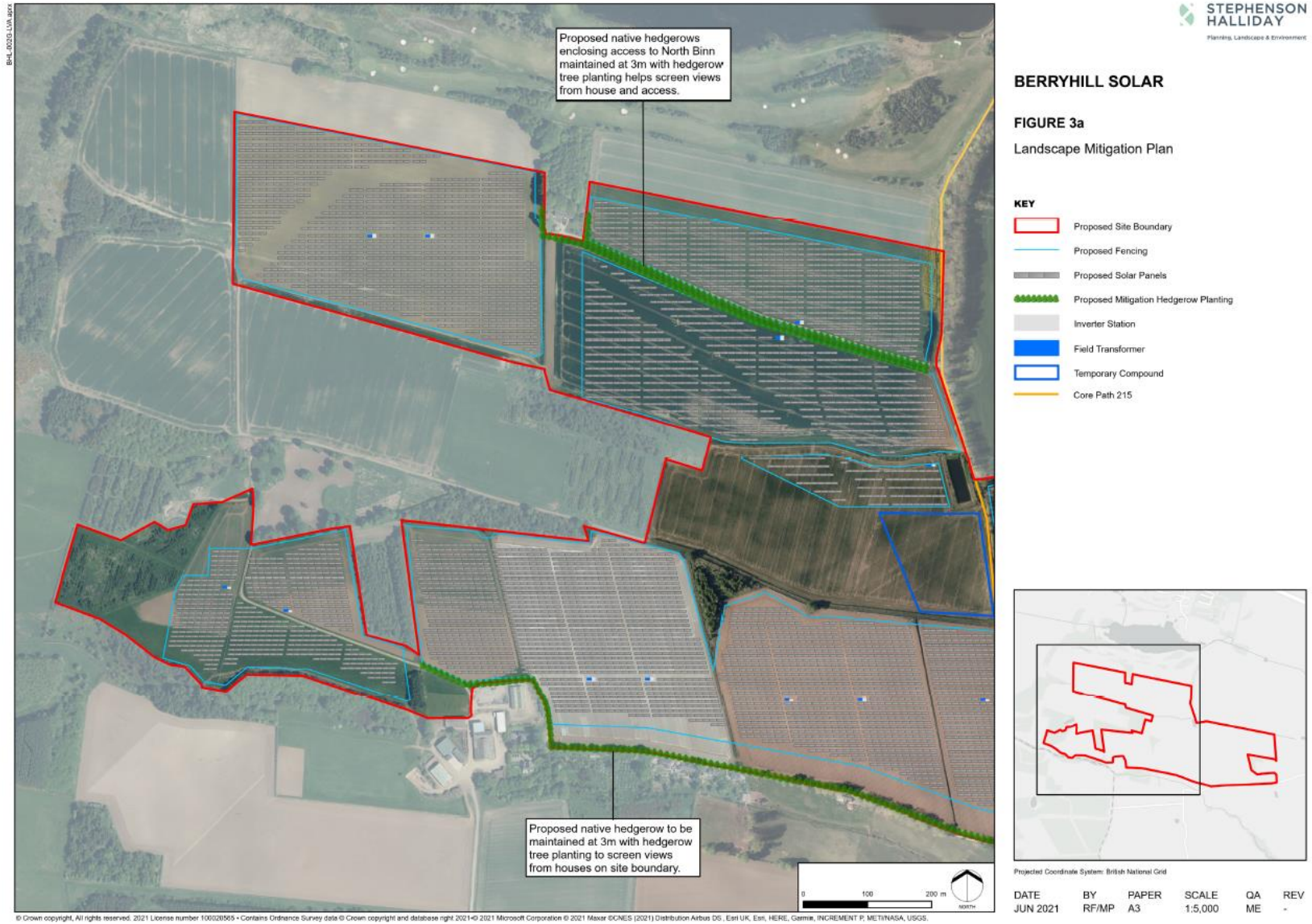
Berryhill Solar Farm

Viewpoint 2a: Minor road south of Site
PHOTOMONTAGE (type 4)

Effects of Screening



Proposed Landscape Mitigation Plan



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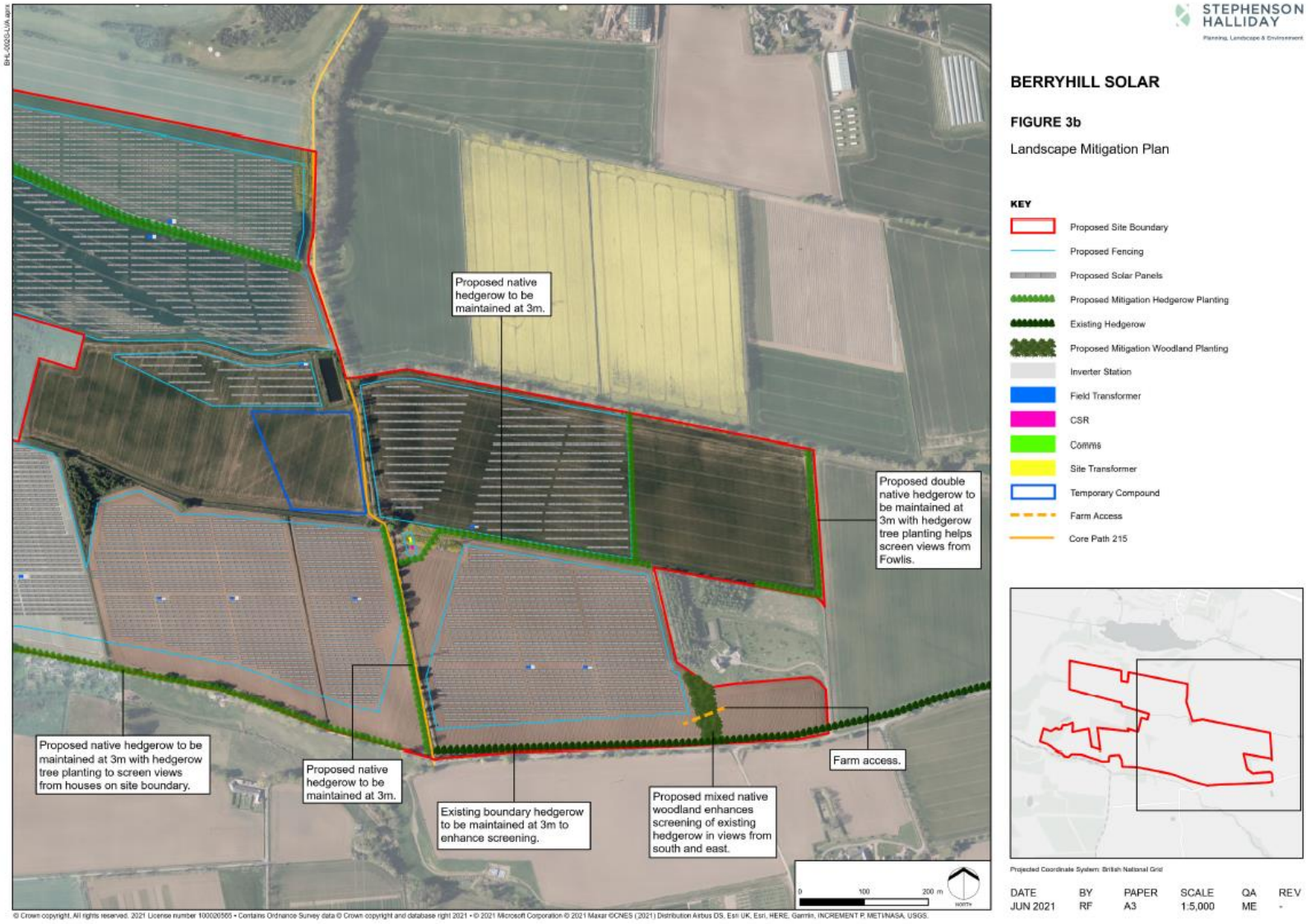


Key Findings from Surveys

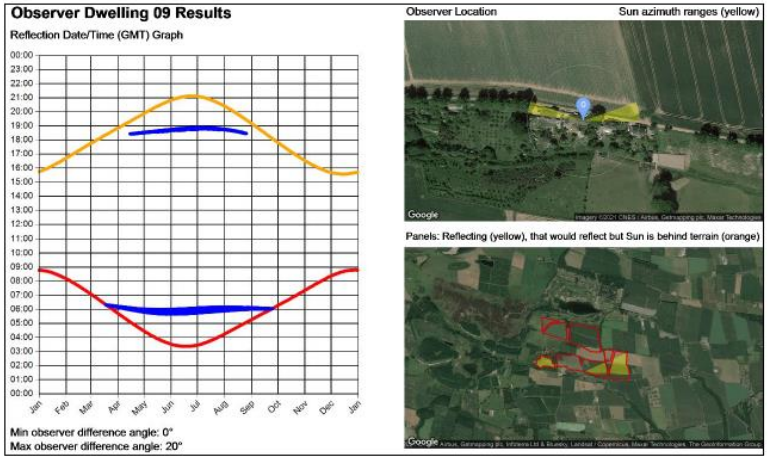
Glint & Glare – No impact on Aviation and minor impact on nearby properties.

"Where effects last for more than 3 months per year and more than 60 minutes per day, the worst-case impact is high, and mitigation is required. In the case of Berryhill, there are no instances of high impact, even under worst-case conditions."

Screening will reduce or remove this impact

Traffic & Construction – Traffic Strategy to be agreed with Angus Council prior to construction.

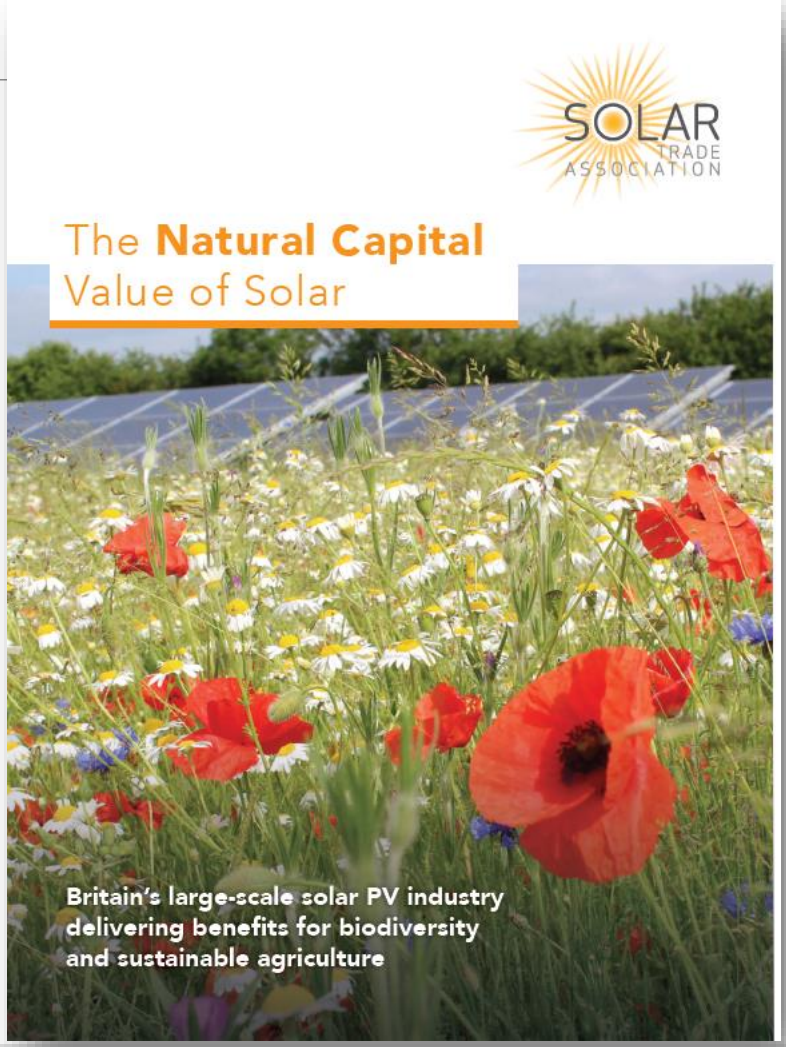
Key activities to be undertaken in non amenity hours.



Dwelling Receptor(s)	Stephenson Halliday landscape team initial comments on predicted visibility	Pager Power conclusion regarding remaining impact
4	Views are predicted to be entirely obstructed, primarily by existing vegetation. Any further visibility is likely to be screened by proposed hedgerows on the southern site boundary. East of core path likely screened by existing vegetation/landform. West of core path screened by proposed hedgerow/trees on southern site boundary.	If views are obstructed, no impact is predicted.
6		
7		
8		
9		
10		
11		
26	Views are predicted to be entirely obstructed for ground-floor observers, with some potential filtered views through trees from upper floor windows.	This substantial level of screening will adequately mitigate impacts, remaining effects due to partial visibility from upper floors are of low significance.
27	Views are entirely obstructed by existing vegetation.	If views are obstructed, no impact is predicted.
49	Views are predicted to be approximately 50% obstructed to the west and entirely obstructed to the east, with the exception of one upper storey window. Views of panels on the upper slopes are possible through the proposed hedgerow trees, however these would be filtered.	Overall, the effects are predicted to be significantly reduced. Remaining visibility will be filtered and/or restricted to upper floors. The remaining level of effect is judged to be acceptable based on the level of mitigation that is proposed.
50		

Benefits from Project

- Biodiversity gain – wild flower planting to be undertaking to encourage pollinators & birds. Will become a more nature friendly environment when compared to activity farmed land.
- Hedgerow & Tree planting will be with local species and allow for wildlife movement corridors.
- Current field system layout will not be changed.
- Once operational, there will be a reduction in farm traffic due to reduced farming area
- Land will continue to be used for farming - sheep grazing & environmental programmes



Benefits from Project

- **Energy demand reduction.** Reductions in the demand for energy services and other GHG emitting activities helps reduce future emissions. Changes in future energy demand can come from measures to improve energy efficiency and/or changes in the underlying demand for a service (such as changes in dietary preferences).
- **Decarbonisation of energy supply.** The carbon intensity of energy is reduced to near-zero around mid-century in all scenarios that achieve the Paris Agreement long-term temperature goal. Key to this is a very rapid phase-out of unabated coal and widespread electrification of energy demand, alongside a widespread and rapid roll-out of renewable and other low-carbon power sources.
- **Greenhouse gas removals**. All scenarios require some active removal of GHG from the atmosphere. This enables net emissions to fall faster than gross emissions can be reduced and compensates for residual sources of emissions. Most current emissions pathways only consider bioenergy with carbon capture and storage (BECCS) and afforestation/reforestation as methods of GHG removal.

Table 7.2. Assumed costs and cost reductions in key low-carbon technologies

Technology	Cost in 2025	Cost in 2050	Percentage cost reduction
Power generation			
Offshore wind	69 (£/MWh)	51 (£/MWh)	26%
Solar PV	47 (£/MWh)	41 (£/MWh)	13%
Nuclear	98 (£/MWh)	71 (£/MWh)	28%
Gas CCS	79 (£/MWh)	79 (£/MWh)	0%

Solar PV Target: “40 by 30”
40 GW by 2030, currently 14GW

Community Benefit

Solar2 Ltd would like to provide annual donations from the project to support local initiatives.

This would be based on annual payments of £500 per MW. So if 50MW were built, then the annual payments would be £25,000 or £1,000,000 over the project life

Meeting held with CC to introduce this.

Next Steps

4th June	Local Residents written to with newsletter and invitation to events listed below
10th June	Public Exhibition – Zoom Call 5-7pm registration via the website
12th June	Public Exhibition – Fowlis Easter Hall 10.30AM-2PM
19th June	End date for feedback
End June/ Early July	Planning Application submitted

Questions

Contact

If you have any questions, please contact

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Thank you