**Our ref: HLEF85532 – Cottered Solar Farm**

Date: 6th May 2025

**EA Comments Response Technical Note – NE/2024/137757/02 – Land to the west of the A507 betweed Cottered and Cromer, Hertfordshire, SG9 9PU**

This technical note has been prepared to provide additional information requested by the Environment Agency (EA) in the objection letter dated 18th of February 2025 in regards to the installation and operation of a solar farm including co-located energy storage facilities, onsite substation, ancillary infrastructure and landscaping at Land to the West of the A507 Between Cottered and Cromer, Hertfordshire, SG9 9PU. The objections raised by the EA are summarised below.

This technical note should also be read in conjunction with the Flood Risk Assessment (FRA) and Sustainable Drainage Strategy document HLEF85532 v3, dated October 2024.

## EA Comment

*The 1 in 30 flood extent is prone to frequent flooding, therefore the raised solar panels within this extent are likely to build up flotsam debris regularly, likely impede water flow, and affect floodplain function. This will require arrangements for frequent and consistent debris clearance to be outlined within a detailed maintenance plan. Alternatively, we suggest that solar panels be removed entirely from within the 1 in 30 flood extent, enabling the applicant to conduct maintenance works and debris clearance far less frequently, instead only after larger flood events. This will further maintain floodplain function for the area.*

## RPS RESPONSE

Regular maintenance is proposed to be undertaken monthly with litter and debris removal and vegetation management. Vegetation coverage will also be inspected monthly for the first 6 months and then quarterly for 2 years, then half yearly or as required. Weed killing will be undertaken monthly during growing season or as required. Sediments will be removed as required. A detailed maintenance plan will be prepared upon granting of planning permission and before operation commences. This can be conditioned in the planning approval decision notice.

## EA Comment

*We also require further clarification as to how the applicant has ascertained the flood depths from their flood extents.*

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## RPS RESPONSE

Flood depths have been ascertained and estimated from a comparison of the flood outlines during the high, medium and low risk scenarios with the site specific topographic survey. The flood outlines have been overlaid to the topographic survey identifying contours in mAOD of the boundary of each flood outline event during different return periods in order to estimate a potential flood level at the site. The 1 in 1000-year event estimated flood level has been considered within the FRA report as a conservative estimate for design recommendations. The drawing enclosed in Appendix E of the FRA includes the spot levels at the edges of the flood outline for a number of cross sections. The highest flood level for each cross section has been considered for design recommendations thus applying a conservative approach.

## EA Comment

*Discrepancies between the FRA and Appendix E and F*

## RPS RESPONSE

Appendix E and F have been updated to address the discrepancies highlighted in the EA comments. The updated drawings are available as Annex A and B of this technical note.

- The LLFA has confirmed that an 8m easement will be sufficient for the ordinary watercourse. Therefore a 8m easement will be applied as considered to be appropriate by both the EA and LLFA.
- Appendix E indicates the maximum flood depths for each cross section. It has been updated to indicate the level of ground clearance to the lowest leading hedge of the solar panels in mAOD. An updated copy is available as Annex A of this technical note. Appendix F indicates the proposed level of ground clearance for the solar panels at each cross section. This includes a 300mm freeboard. As the flood level varies across the site, it is not proposed that all solar panels will be raised above the maximum flood level within the site. Solar panels will be raised incrementally from west to east following the increase in flood levels. Solar panels located within two cross sections will have ground clearance from the lowest leading hedge to the upper band recommendation (e.g solar panels located within cross sections AA-BB will all be raised to 100.47m AOD.
- Flood levels in mAOD have been included in the cross sections available in Appendix E and labels to the cross sections have been included in the corresponding drawing.
- Appendix F has been updated to include a legend and the cross sections have been labelled.

## Conclusion.

We trust that this information sufficiently addresses your information requirements for removing your objections to the proposed development of the planning application reference no. 3/24/2245/FUL, however should you require any further information or clarification then we would be happy to provide this.

Yours sincerely,
for RPS Consulting Services Ltd

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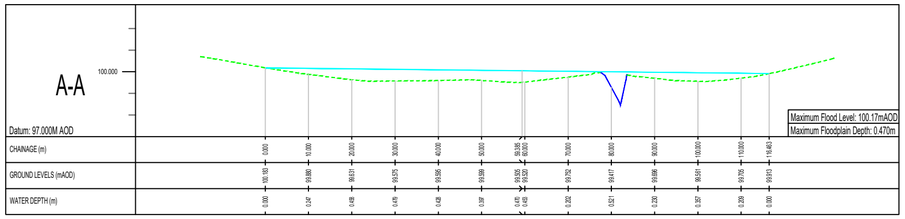
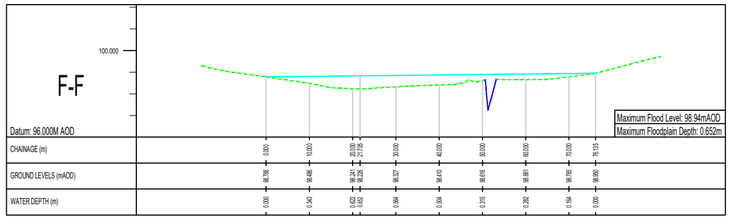
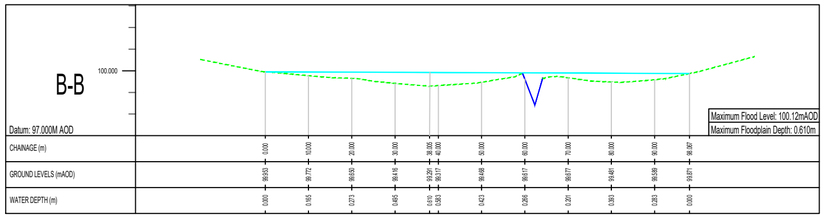
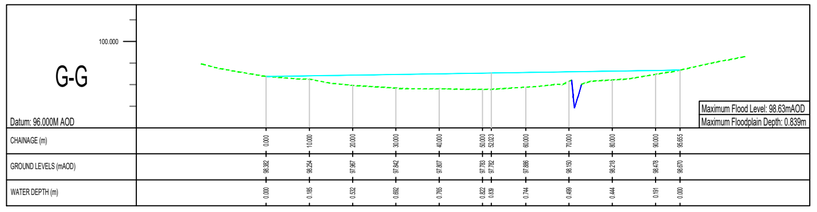
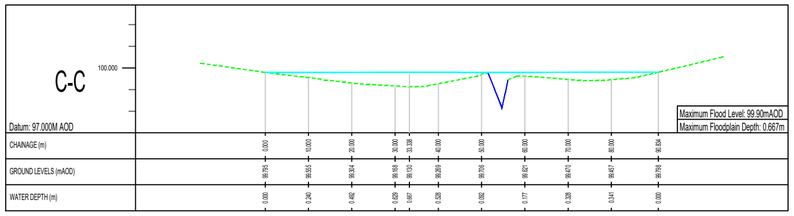
# Annex A – Level of ground clearance to the lowest leading hedge of the solar panels in mAOD and Cross-Sections (Appendix E of FRA HLEF85532 Updated_V2)

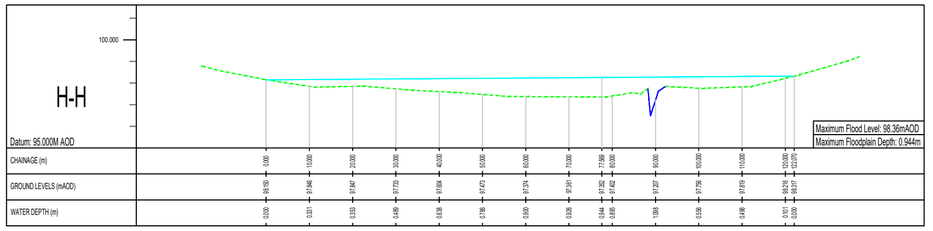


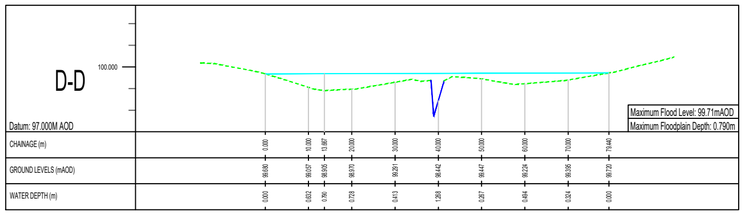



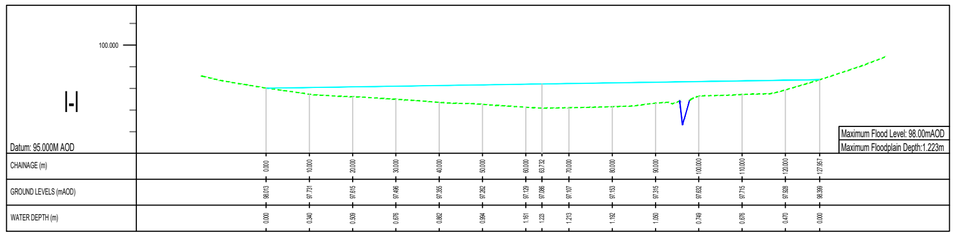



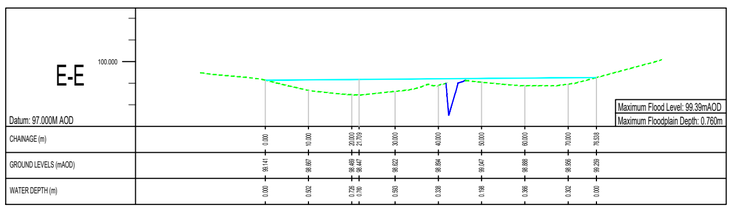



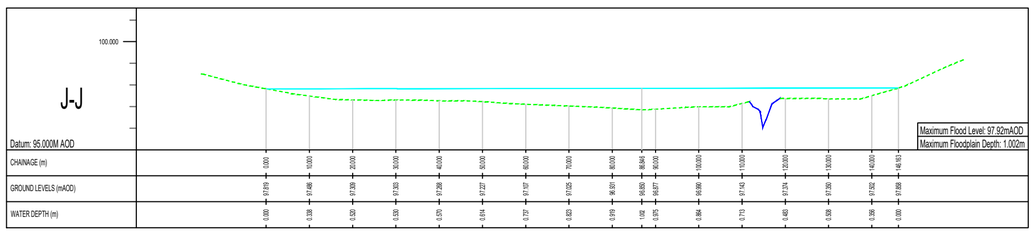



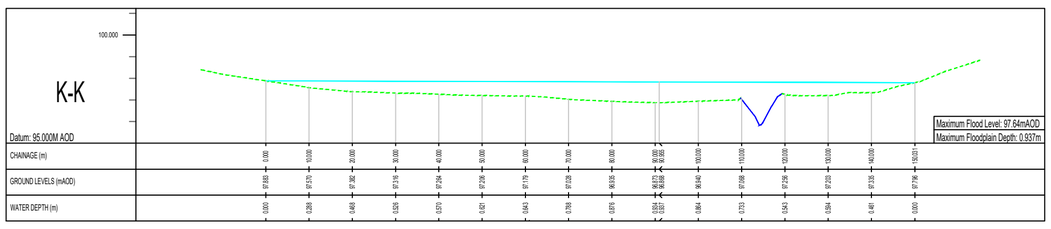






Notes

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2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.
3. This drawing should be read in conjunction with all other relevant drawings and specifications.

## For Client Issue
SUBJECT TO DETAILED DESIGN

This drawing illustrates a sketch proposal only and as such is subject to detailed site investigation including ground conditions/contaminants, drainage, design and planning/density negotiations. The layout maybe based upon an enlargement of an OS sheet or other small scale plans and its accuracy will need to be verified by Survey. Full risk analysis under the CDM Regulations has not been undertaken.

Cross sectional drawings given a 5x vertical scale.

### KEY
Existing Ground Level

Flood Water Level

Channel Profile

| Rev | Description | By | Ckd | Date |
|---|---|---|---|---|
| B | Added Maximum Flood Levels (mAOD) to cross sections | TH | FC | 10.04.25 |
| A | First Issue | TH | JM | 15/03/24 |

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Client: Elgin Energy Ltd

Project: Cottered Solar Farm

Title: Drainage Ditch Cross Sections

| Status | Scale | Date Created |
|---|---|---|
| Second Issue | 1:1000 @A2 | 09.04.2025 |

| Task Team Manager | Information Author | Task Information Manager |
|---|---|---|
| JM | TH | JM |

Document Number: RPS-HYD-ENV-85532-DSE-DO2

RPS Project Number: HLEF 85532

Revision: B

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# Annex B – Proposed level of ground clearance to the lowest leading hedge of the solar panels in mAOD (Appendix F of FRA HLEF85532 Updated_V2)

Notes

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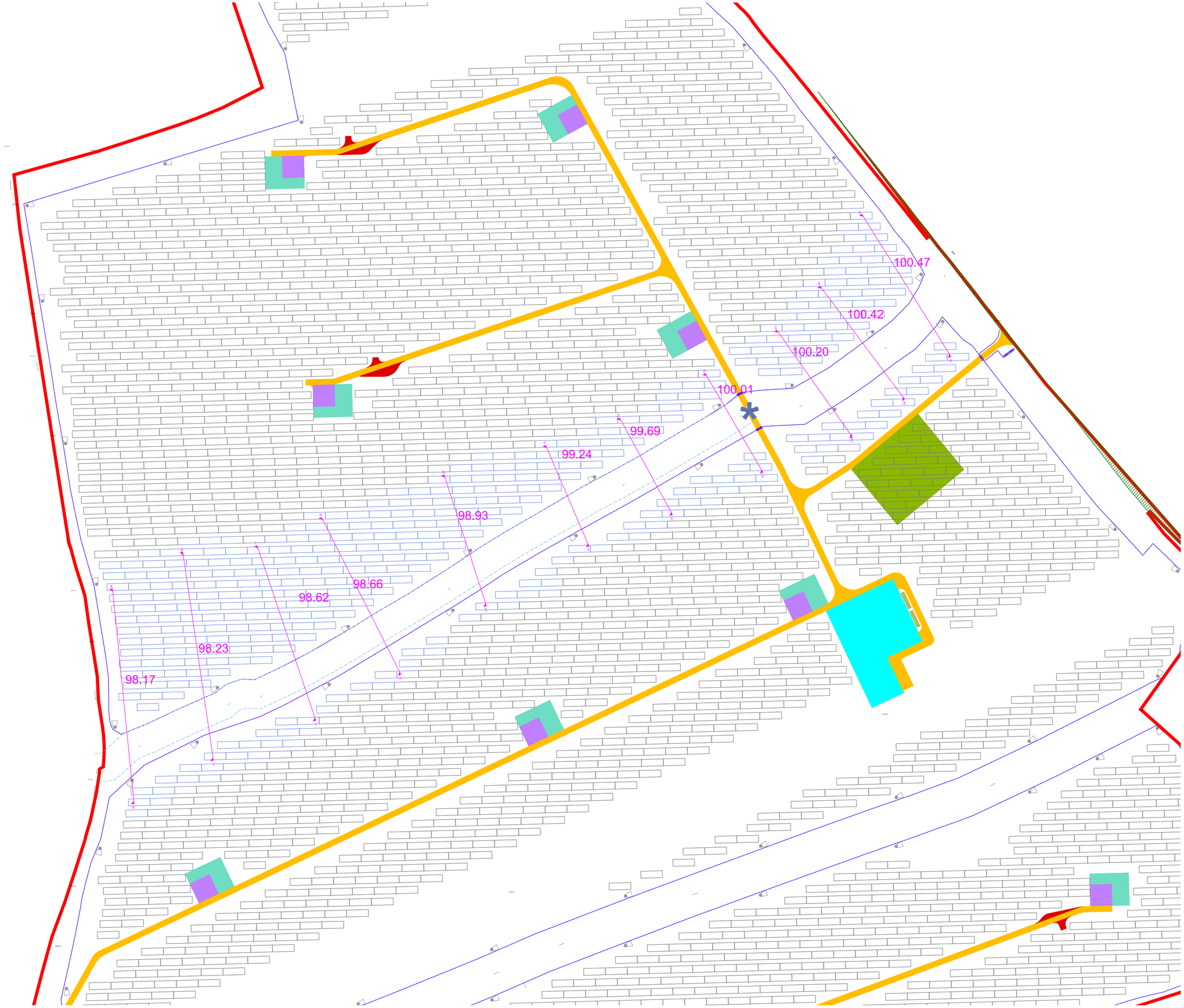


KEY

Cross Section with ground clearance level in (mAOD)

The ground clearance level from the lowest hedge of the solar panels are set 300mm above the maximum flood level. The maximum flood level is taken as the greatest value (north or south) of the edge of the Flood Zone 2 extent.

| Rev | Description | By | Ckd | Date |
|---|---|---|---|---|
| 2 | Added labels to cross sections | TH | FC | 10.04.25 |
| 1 | Level of ground clearance from lowest hedge of panels | TJ | JM | 01.08.24 |

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Client: Elgin Energy

Project: Cottered Solar Farm

Title: Finished Floor Levels

| Status | Scale | Date Created |
|---|---|---|
| DRAFT | 1:1 @A1 | 01.08.24 |

| Task Team Manager | Information Author | Task Information Manager |
|---|---|---|
| TJ | TJ | JM |

Document Number: HLEF85532-RPS-P-FFLS-DR-2-250410

| RPS Project Number | Revision |
|---|---|
| HLEF 85532 | 1 |

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