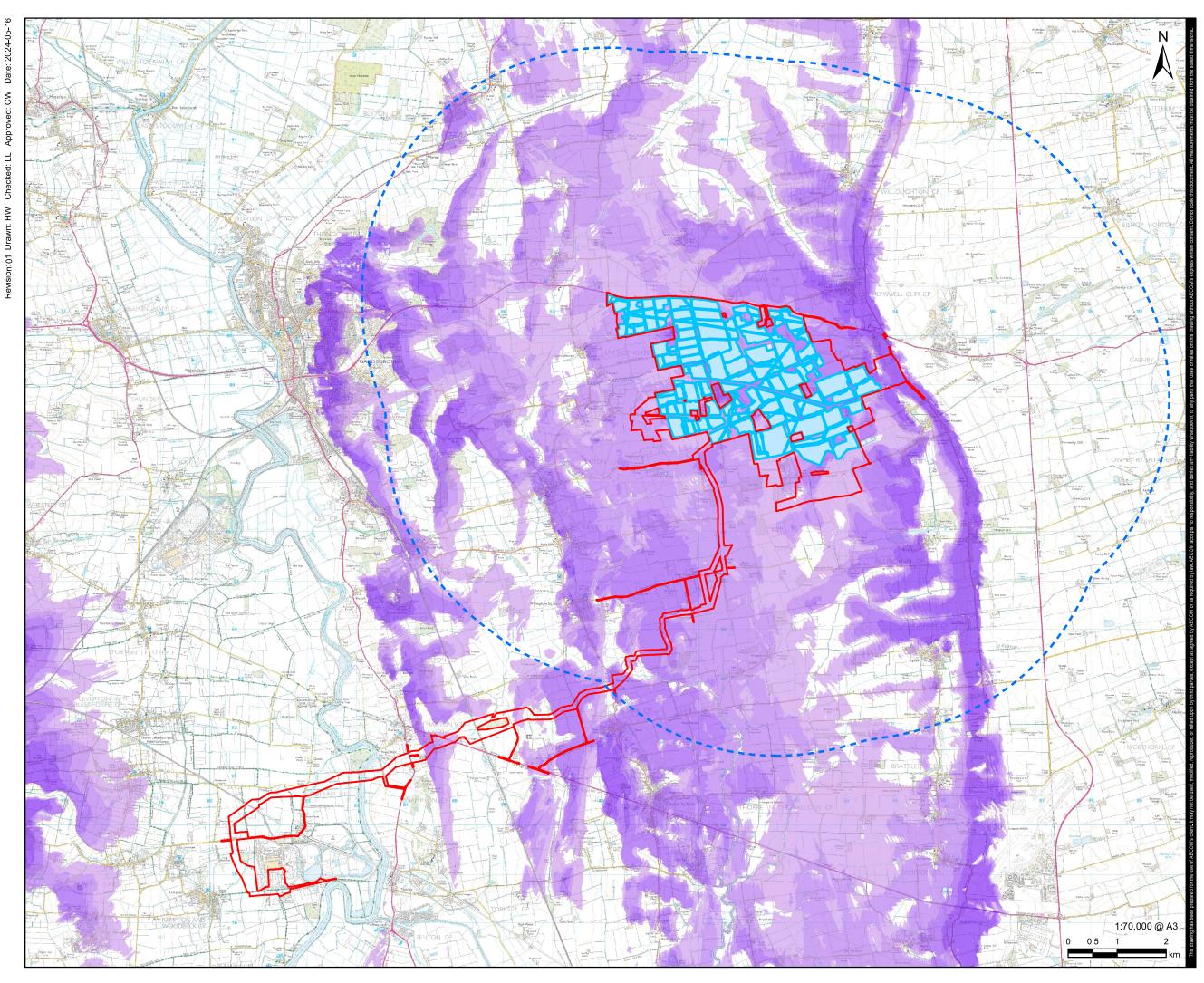


# Volume 6 Environmental Statement Figure 12-4A-H: Zones of Theoretical Visibility Document Reference: EN010142/APP/6.3

Regulation 5(2)(a) Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

> June 2024 Revision Number: 01

tillbridgesolar.com





#### CLIENT

### Tillbridge Solar Ltd

#### CONSULTANT

Aldgate Tower 2, Leman Street London, E1 8FA United Kingdom T +44-0207-645-2000

#### LEGEND



Order limits

Principal Site - 5km Buffer

Indicative Solar Panel Boundary

# Zone of Theoretical Visibility -Degree of Maximum Visibility of the Solar Panel Area



25 - 50%

- 50 75%
- 75 100%

#### NOTES

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located within the external solar panel boundary. 2. The ZTV has been generated using Environment Agency Digital Terrain Model (DTM) with a 2m resolution. 3. The ZTV has been produced in order to inform 'on the ground' visual assessment and is based user the arth was delived.

is based on a 'bare earth' model that does not include effects of screening derived from buildings or vegetation.

buildings or vegetation. 4. ZTV calculated using ArcGIS 10.8.1 Viewshed tool. 5. Reproduced from Ordnance Survey digital map data © Crown copyright 2024. All rights reserved. Licence number 0100031673.

#### ISSUE PURPOSE

#### DCO Submission PROJECT NUMBER

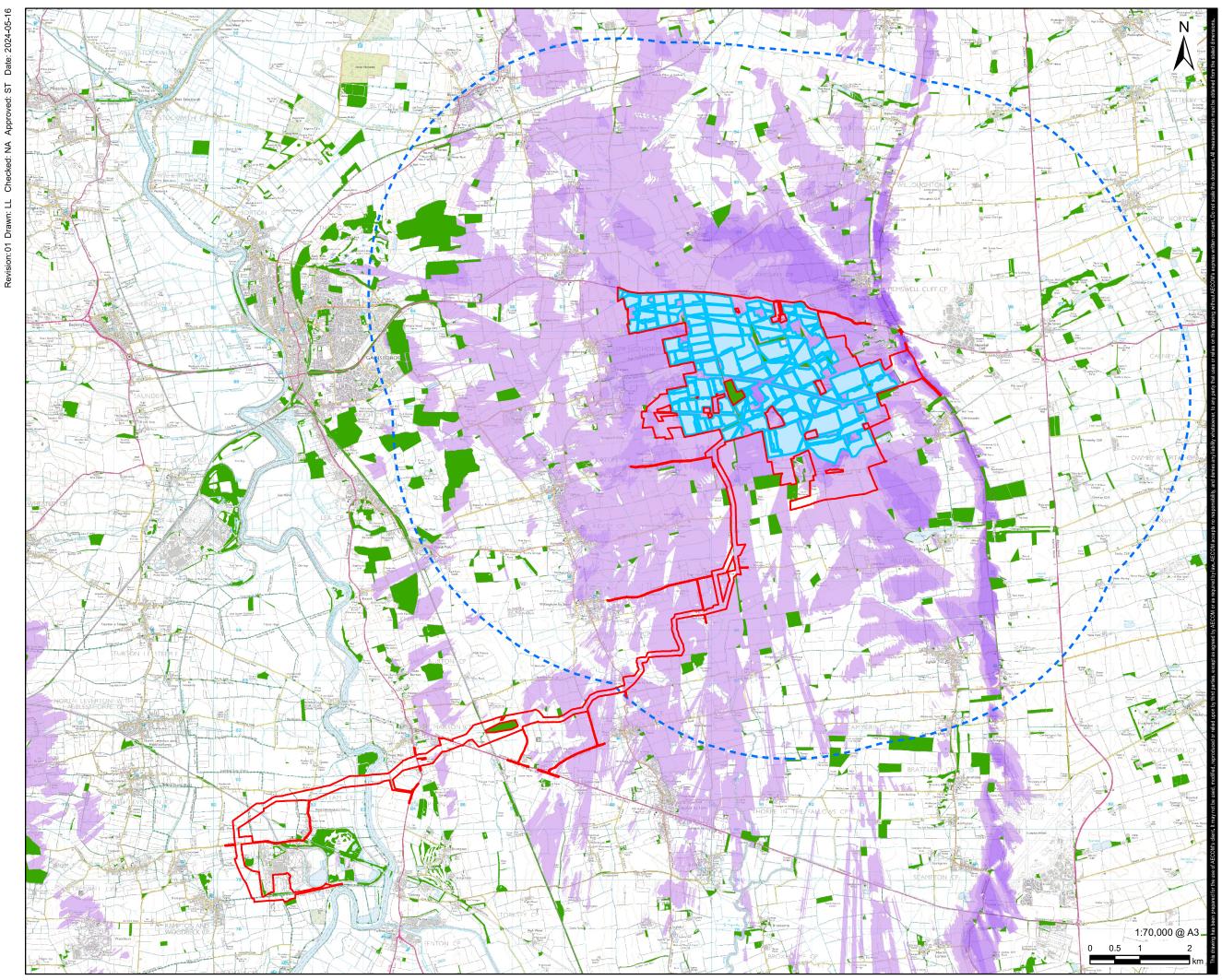
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#### FIGURE TITLE

Zone of Theoretical Visibility - Panels Bare Earth

#### FIGURE NUMBER

Figure 12-4a





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#### LEGEND



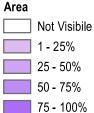
Principal Site - 5km Buffer

Indicative Solar Panel Boundary



Building Woodland

# Zone of Theoretical Visibility - Degree of Maximum Visibility of the Solar Panels



#### NOTES

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2. The ZTV has been generated using Environment Agency Digital Terrain Model (DTM) with a 2m resolution. To provide evidence of theoretical screening, two additional databases have been

screening, two additional databases have been included: OS Open Data with assumed height for buildings of 8m; and the Forestry Commission National Forestry Inventory (2021) and OS Open Data, with an assumed height of 11m. 3. The ZTV has been produced in order to inform 'on the ground' visual assessment and does not include effects of screening derived from hedgerows or trees not included within the woodland database noted above

above. 4. ZTV calculated using ArcGIS 10.8.1 Viewshed

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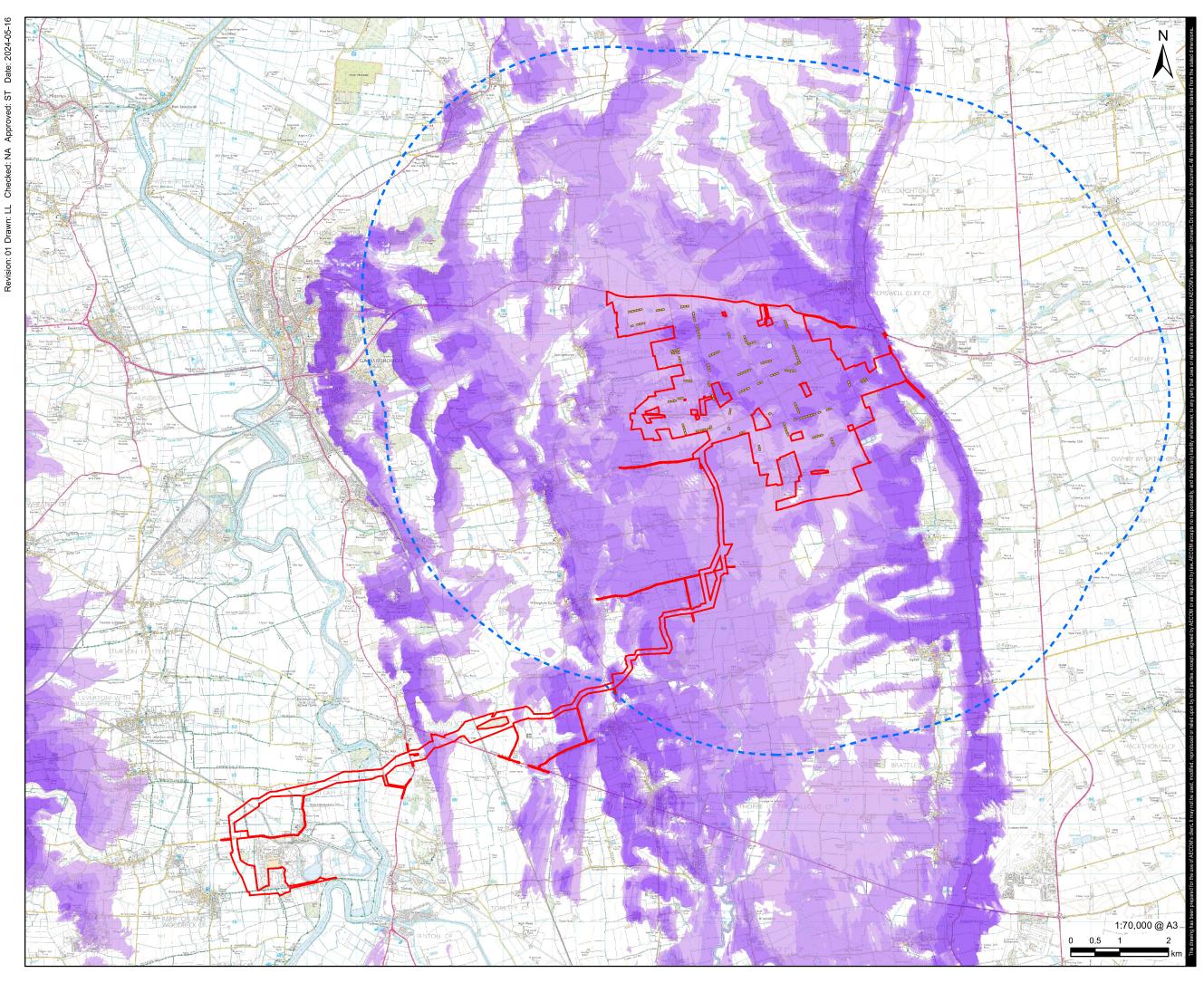
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# FIGURE TITLE

Zone of Theoretical Visibility - Solar Panels with Buildings and Woodland Screening

#### FIGURE NUMBER

Figure 12-4b





#### CLIENT

# Tillbridge Solar Ltd

#### CONSULTANT

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#### LEGEND



Order limits

Principal Site - 5km Buffer

Indicative BESS/Solar Station Boundary

# Zone of Theoretical Visibility - Degree of Maximum Visibility of all Solar Stations/BESS Combined

Not Visible

1 - 25%

25 - 50%

50 **-** 75%

75 - 100%

#### NOTES

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 The ZTV has been produced in order to inform 'on the ground' visual assessment and is based on a 'bare earth' model that does

not include effects of screening derived from buildings or vegetation.

A. ZTV calculated using ArcGIS 10.8.1
 Viewshed tool.
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#### **ISSUE PURPOSE**

DCO Submission PROJECT NUMBER

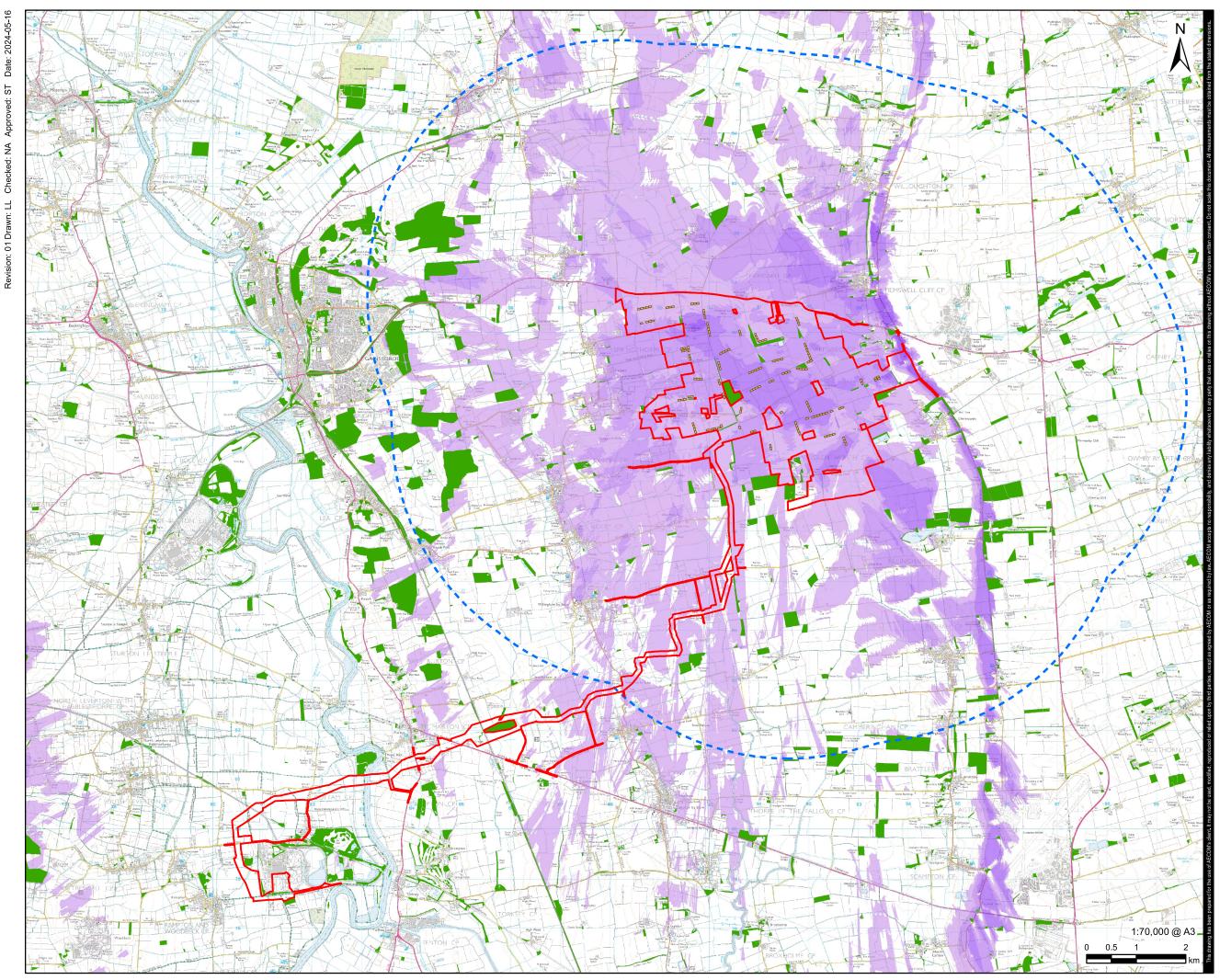
# 60677969

FIGURE TITLE

Zone of Theoretical Visibility - Solar Stations and Battery Storage (BESS) -Bare Earth

FIGURE NUMBER

Figure 12-4c



TV\_Solar



# Tillbridge Solar Project

#### CLIENT

# Tillbridge Solar Ltd

#### CONSULTANT

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#### LEGEND



Principal Site - 5km Buffer

Building Woodland

> Indicative BESS/Solar Station Boundary

# Zone of Theoretical Visibility - Degree of Maximum Visibility of all Solar Stations/BESS Combined



50 - 75%

75 - 100%

#### NOTES

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effects of screening derived from hedgerows or trees not included within the woodland database noted

above. 4. ZTV calculated using ArcGIS 10.8.1 Viewshed tool. 5. Reproduced from Ordnance Survey digital map

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#### ISSUE PURPOSE

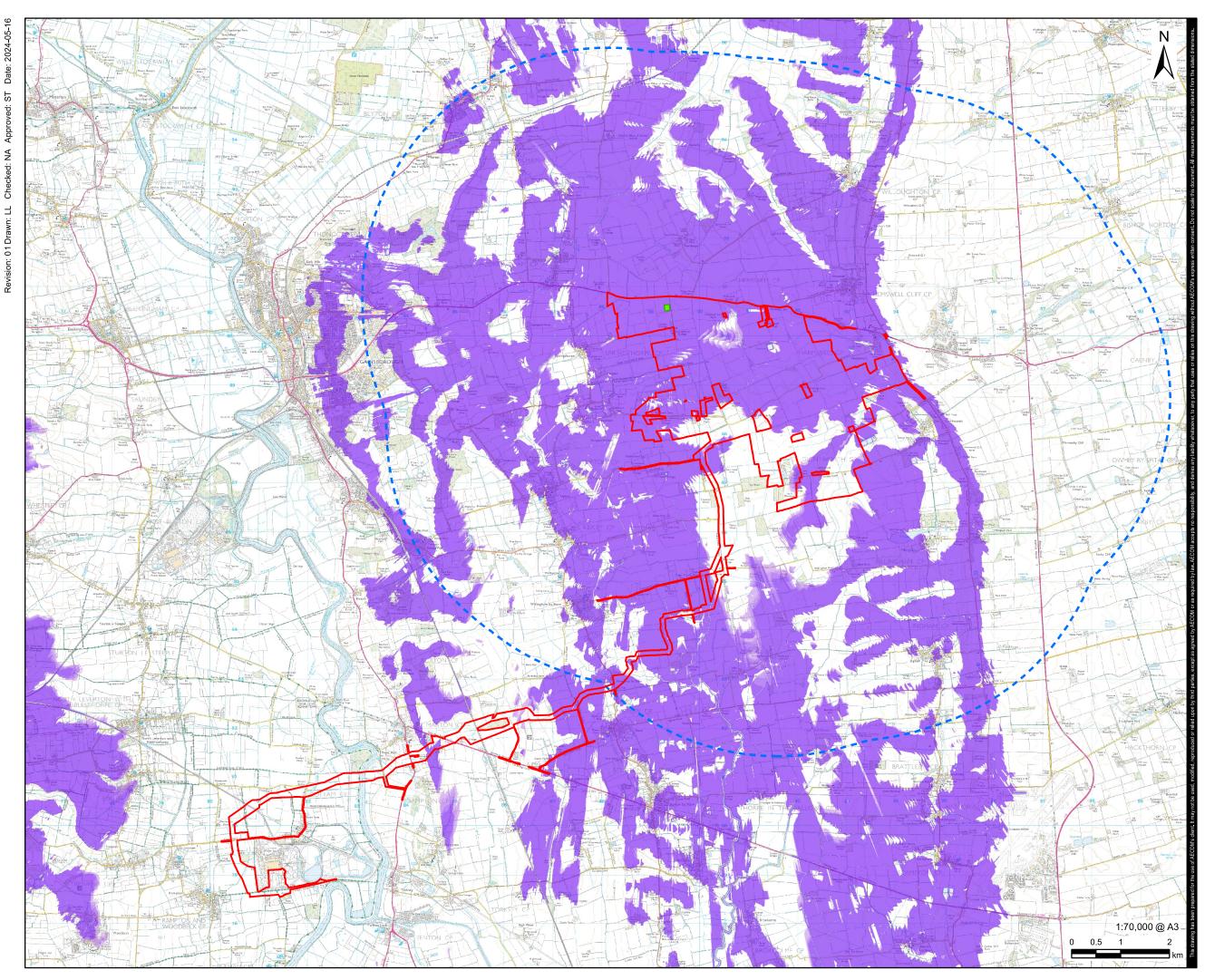
PEI Report PROJECT NUMBER 60677969

# FIGURE TITLE

Zone of Theoretical Visibility - Solar Stations and Battery Storage (BESS) with Buildings and Woodland Screening

FIGURE NUMBER

Figure 12-4d





#### CLIENT

# Tillbridge Solar Ltd

#### CONSULTANT

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#### LEGEND



Order limits

Principal Site - 5km Buffer

Indicative Location of Substation B

# Zone of Theoretical Visibility -Degree of Maximum Visibility of Substation B Area



- 50 75%
- 75 100%

#### NOTES

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 The ZTV has been generated using Environment Agency Digital Terrain Model (DTM) with a 2m resolution.

3. The ZTV has been produced in order to The ZTV has been produced in order to inform 'on the ground' visual assessment and is based on a 'bare earth' model that does not include effects of screening derived from buildings or vegetation.
 ZTV calculated using ArcGIS 10.8.1

Viewshed tool.

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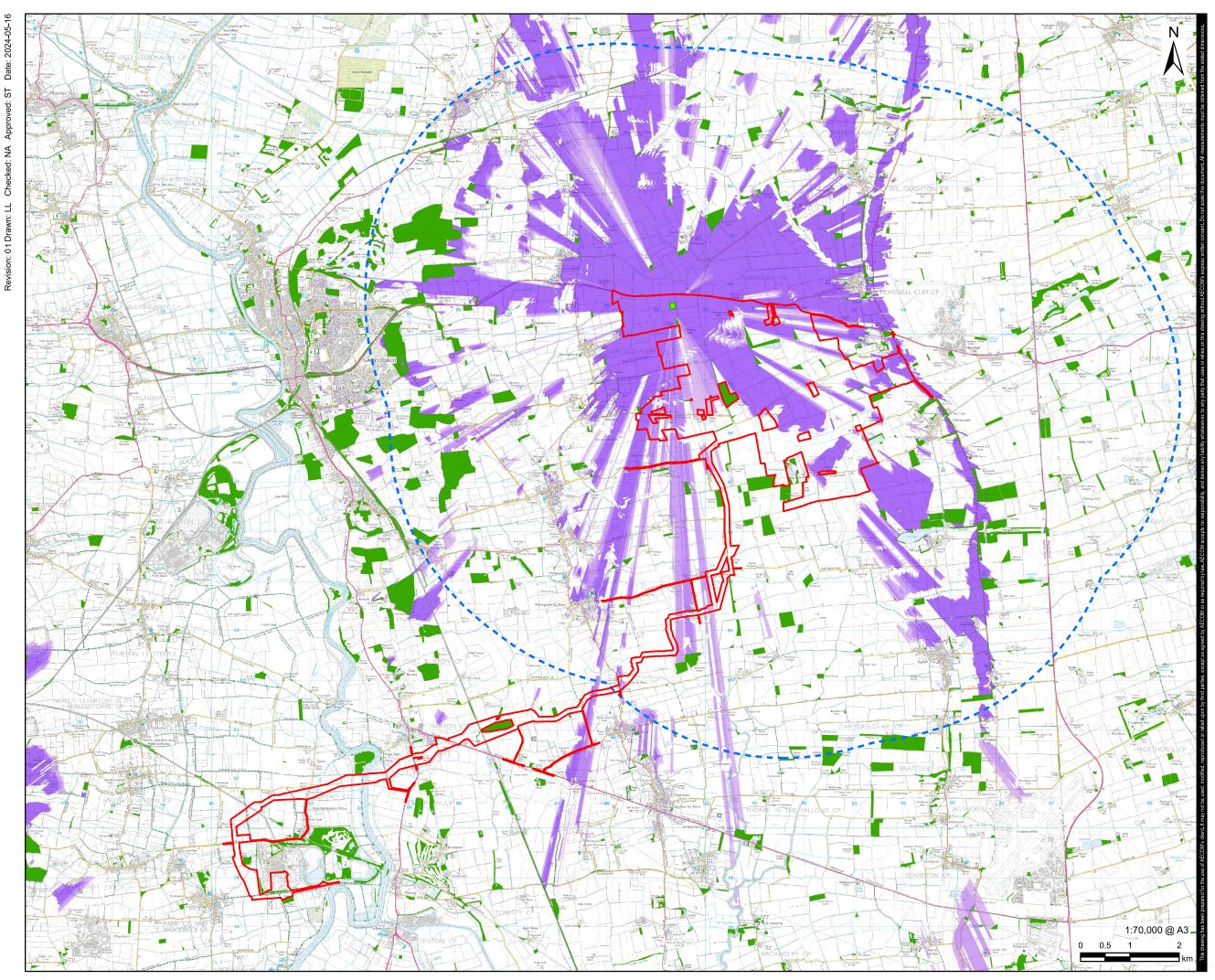
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FIGURE TITLE

Zone of Theoretical Visibility -Substation B Bare Earth

#### FIGURE NUMBER

Figure 12-4e





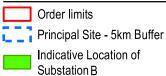
#### CLIENT

# Tillbridge Solar Ltd

#### CONSULTANT

Aldgate Tower 2, Leman Street London, E1 8FA United Kingdom T +44-0207-645-2000

#### LEGEND



Building

Woodland

#### Zone of Theoretical Visibility - Degree of Maximum Visibility of Substation B Area



75 - 100%

#### NOTES

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1. The Zone of Theoretical Visibility (ZTV) is based upon points along the external boundary to the indicated Substation A Area with an anticipated station height of 10m and an observer height of 1.5m. It does not take account of theoretical visibility arising from panels within the solar panel area.
2. The ZTV has been generated using Environment Agency Digital Terrain Model (DTM) with a 2m resolution. To provide evidence of theoretical screening, two additional databases have been included: OS Open Data with assumed height for buildings of 8m; and the Forestry Commission National Forestry Inventory (2021) and OS Open Data, with an assumed height of 11m.
3. The ZTV has been produced in order to inform 'on the and OS Open Data, with an assumed height of 11m. 3. The ZTV has been produced in order to inform 'on the ground' visual assessment and does not include effects of screening derived from hedgerows or trees not included within the woodland database noted above. 4. ZTV calculated using ArcGIS 10.8.1 Viewshed tool. 5. Reproduced from Ordnance Survey digital map data © Crown copyright 2024. All rights reserved. Licence number 0100031673.

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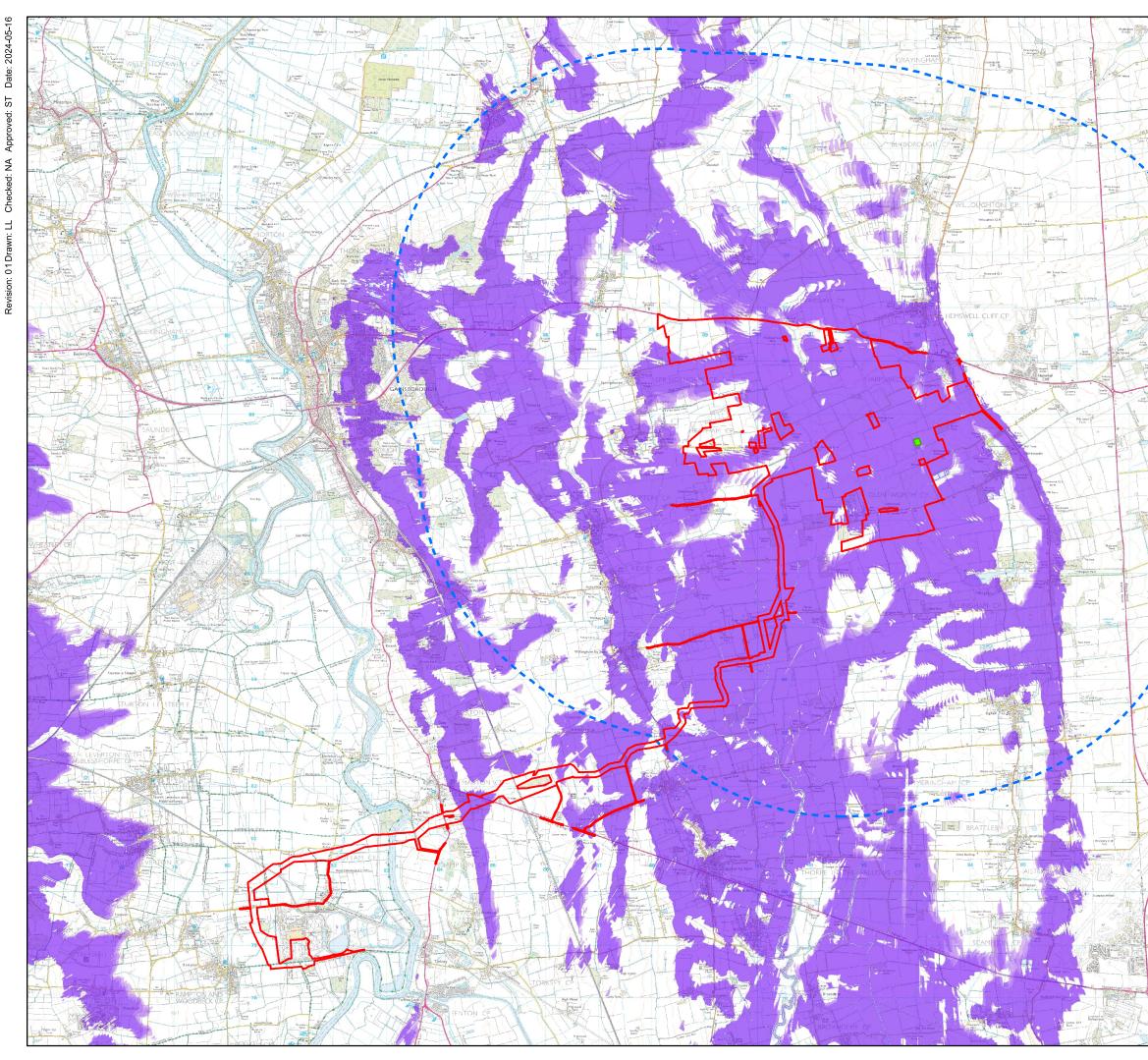
# 60677969

FIGURE TITLE

Zone of Theoretical Visibility -Substation B with Buildings and Woodland Screening

#### FIGURE NUMBER

Figure 12-4f







#### CLIENT

# Tillbridge Solar Ltd

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#### LEGEND



Order limits

Principal Site - 5km Buffer

Indicative Location of Substation A

#### Zone of Theoretical Visibility - Degree of Maximum Visibility of Substation A Area



Not Visible 1 **-** 25% 25 **-** 50%

50 **-** 75%

75 - 100%

### NOTES

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based upon points along the external boundary to the Substation B Area with an anticipated height of 10m and an observer height of 1.5m.

2. The ZTV has been generated using Environment Agency Digital Terrain Model (DTM) with a 2m resolution. 3. The ZTV has been produced in order to

inform 'on the ground' visual assessment and is based on a 'bare earth' model that does not include effects of screening derived from

hot include effects of screening derived from buildings or vegetation.
4. ZTV calculated using ArcGIS 10.8.1
Viewshed tool.
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#### **ISSUE PURPOSE**

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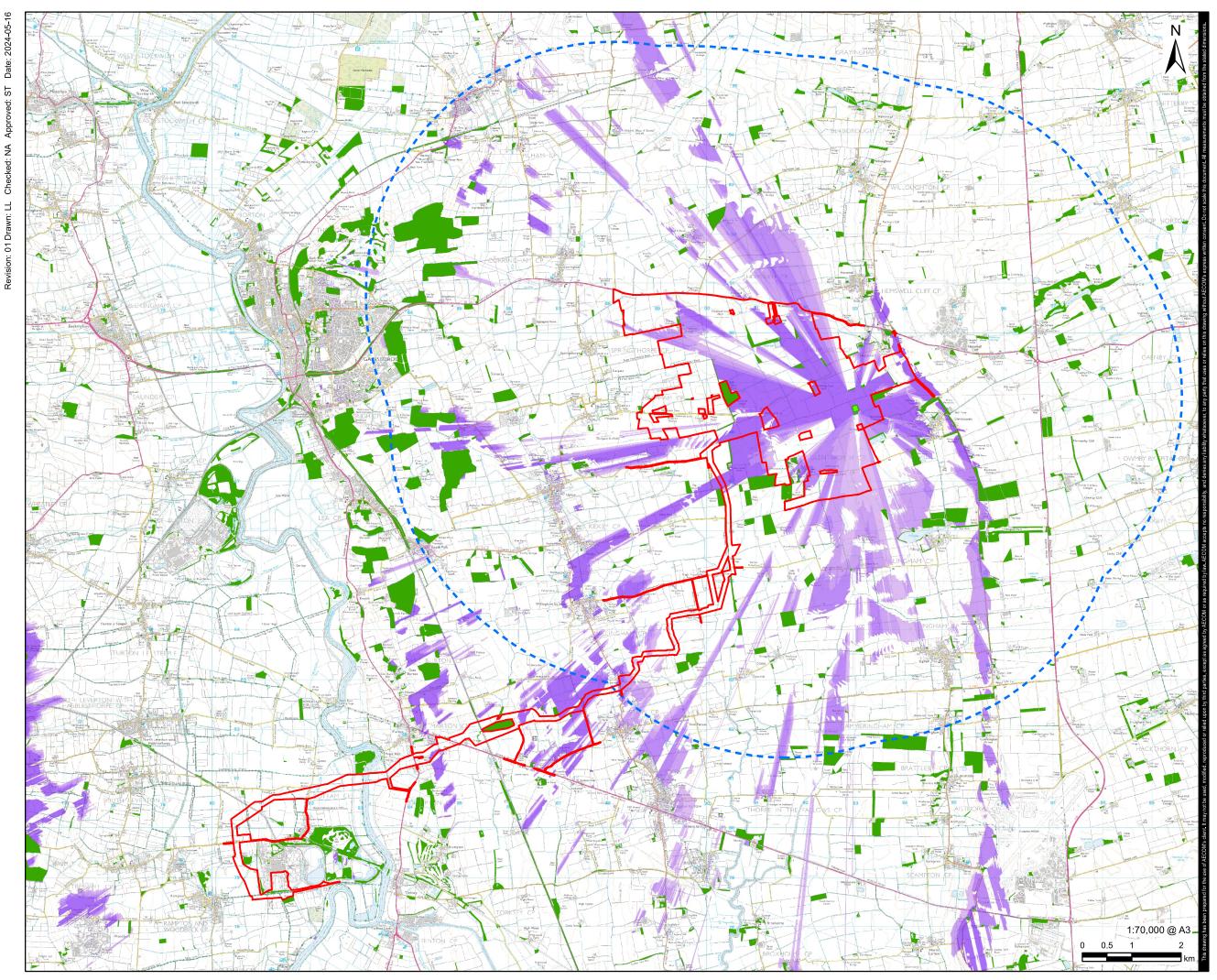
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FIGURE TITLE

Zone of Theoretical Visibility -Substation A Bare Earth

#### FIGURE NUMBER

Figure 12-4g





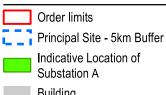
#### CLIENT

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#### CONSULTANT

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#### LEGEND



Indicative Location of Substation A

Building

Woodland

#### Zone of Theoretical Visibility - Degree of Maximum Visibility of Substation A Area



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theoretical visibility arising from panels within the solar panel area. 2. The ZTV has been generated using Environment Agency Digital Terrain Model (DTM) with a 2m resolution. To provide evidence of theoretical screening, two additional databases have been included: OS Open Data with assumed height for buildings of 8m; and the Forestry Commission National Forestry Inventory (2021) and OS Open Data, with an assumed height of 11m. 3. The ZTV has been produced in order to the and OS Open Data, with an assumed height of 11m. 3. The ZTV has been produced in order to inform 'on the ground' visual assessment and does not include effects of screening derived from hedgerows or trees not included within the woodland database noted above. 4. ZTV calculated using ArcGIS 10.8.1 Viewshed tool. 5. Reproduced from Ordnance Survey digital map data © Crown copyright 2024. All rights reserved. Licence number 0100031673.

#### **ISSUE PURPOSE**

#### DCO Submission PROJECT NUMBER

# 60677969

FIGURE TITLE

Zone of Theoretical Visibility -Substation A with Buildings and Woodland Screening

#### FIGURE NUMBER

Figure 12-4h