

### **Plan for ground mounted solar panels on our property.**

There would be a line of 20 panels in portrait, one high, at an angle of 30-35 degrees, c.150m from the house, running underneath the national grid lines from the pylon in the field behind the property. This can be seen clearly on the maps.

Panels would be 1.134m by 2.278m (545kW panels) and therefore extend a row 22.68m long, height at 35 degrees 1.3m, plus fixing height off the ground, and front to back c.2.0m so covering an area c.45m<sup>2</sup>.

The aim is to site the panels close to (within 1-2m of) the boundary fence/hedge. There is a sloping field on the other side of the boundary. In the 20 years we have been at Long Ash, there have only ever been cows for a few weeks on the field on two occasions, and not in the last five years. The field is steep, particularly behind our house, and has a national grid pylon in it behind the solar panel site.

Screen prints below from Magic Mapping, link obtained from Cotswold District Council biodiversity self-assessment form, and the Cotswold Information Map.

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Showing that there are no SSSI SAC or SPAs on the site.

The screenshot shows the MAGIC web application interface. At the top, there are browser tabs for 'Long Ash ground mounte...', 'Planning Portal', 'biodiversity self assessmen...', 'Cotswold District Local Pla...', 'MAGIC', and 'Magic Map Application'. The address bar shows 'magic.defra.gov.uk/MagicMap.aspx'. Below the browser, there are various utility icons like Google, iCloud Photos, Xero, Lloyds, HL Hargreaves Lansdo..., Lloyds Business, iPortal | Login | Bar..., Lloyds CBO, Intralinks, HSBCNet, Santander, Gov.uk, HMRC, and Companies House.

The application interface includes a search bar with 'County, Place or Postcode...' and a 'Table of Contents' on the left. The 'Table of Contents' has sections for 'Access' and 'Administrative Geographies'. Under 'Access', 'National Trails (England)' is checked. Under 'Administrative Geographies', 'Organisation Boundaries', 'Eurostat LAU/NUTS Boundaries', and 'Other Administrative Boundaries' are listed.

A 'Legend' window is open in the center, displaying the following information:

- Legend**
- Only layers selected and visible at this map scale will be shown**
- Access**
  - National Trails (England)
- Designations**
  - Land-Based Designations
    - Statutory
      - Areas of Outstanding Natural Beauty (England)
      - Local Nature Reserves (England)
        - Local Nature Reserves (England)
      - Sites of Special Scientific Interest (England)
        - Sites of Special Scientific Interest (England)
      - Special Areas of Conservation (England)
        - Special Areas of Conservation (England)
      - Special Protection Areas (England)
        - Special Protection Areas (England)

The background map shows a topographic view of an area with 'Riverside Cottage' and 'Woodbridge' labeled. The map scale is set to 'OSGB36' and '1:500'. At the bottom, the coordinates are 'Coords: (403423,214955) Grid Ref: SP03421495'. The footer text reads 'Copyright and database rights 2024. Ordnance Survey 100022861. Powered by Landmark Solutions.' The system tray at the bottom right shows the time '14:51' and date '14/01/2024'.

Showing the site plan on Magic Mapping. The site is c.390m long by 30-35m wide.

The screenshot displays the Magic Mapping web application interface. At the top, the browser's address bar shows the URL `magic.defra.gov.uk/MagicMap.aspx`. The application header features the 'MAGiC' logo, a search bar with the placeholder text 'County, Place or Postcode...', and a toolbar with various map navigation icons. On the right side of the header, the map data source is identified as 'OSGB36' and the scale is set to '1:3,000'. The main map area shows a site plan overlaid on a topographic map. A red line delineates the site's boundary, which is approximately 390m long and 30-35m wide. Elevation points are marked along the site boundary: 146.2m, 144.4m, 146.0m, and 143.1m. The map is overlaid with a grid of red dots. A north arrow and a scale bar (0 to 100m) are visible in the bottom-left corner. An inset map in the top-right corner shows the location of the site within the 'Withington' area. The bottom of the screen shows the Windows taskbar with various application icons and the system tray displaying the time as 17:02 on 14/01/2024. Copyright information at the bottom of the map area reads: '(c) Crown Copyright and database rights 2024. Ordnance Survey 100022861. Powered by Landmark Solutions.'

Using the Cotswold Information Map to show that Long Ash (south of Riverside Cottage) is outside the Withington Conservation Area.

The screenshot shows a web browser window displaying the Cotswold Information Map. The browser's address bar shows the URL: [experience.arcgis.com/experience/45420cd71bc14bc4bad4b1bbd1a407e4/page/Page-1/](https://experience.arcgis.com/experience/45420cd71bc14bc4bad4b1bbd1a407e4/page/Page-1/). The browser's taskbar at the bottom shows various open applications including Google, iCloud Photos, Xero, Lloyds, Hargreaves Lansdown, Lloyds Business, iPortal, Lloyds CBO, Intralinks, HSBCNet, Santander, Gov.uk, HMRC, and Companies House.

The map interface includes a search bar at the top left with the text "long ash, woodbridge lane, withington" and a "Search result" dropdown. The map itself shows a green-shaded area labeled "Withington" which is the Conservation Area. Several red circular markers are placed within this area. To the south of the Conservation Area, a road labeled "Woodbridge Lane" leads to a location labeled "Long Ash". A blue line representing the "River Coln" flows through the area. Other labels on the map include "Lyon Lodge", "Riverside Cottage", and "Woodbridge".

A legend panel on the right side of the map lists the following categories:

- Tree Preservation Orders - Groups, Areas and Woodlands (represented by a green triangle)
- Conservation Areas (represented by a light green triangle)
- Cotswold Water Park (represented by a blue triangle)
- Green Belt (represented by a dark green triangle)

At the bottom left of the map, there is a scale bar showing 200 meters and 1,000 feet. At the bottom right, there is a copyright notice: "© Crown copyright and database rights 2024 OS AC0000815979 | Historic England | Powered by Esri". The system tray at the bottom right shows the time as 15:43 on 14/01/2024.

The Cotswold Information Map shows that Long Ash is not a listed building and does not have any trees with TPOs.

The screenshot displays the Cotswold Information Map web application. The browser's address bar shows the URL: [experience.arcgis.com/experience/45420cd71bc14bc4bad4b1bbd1a407e4/page/Page-1/](https://experience.arcgis.com/experience/45420cd71bc14bc4bad4b1bbd1a407e4/page/Page-1/). The page title is "Cotswold Information Map" and the URL is [www.cotswold.gov.uk](http://www.cotswold.gov.uk). The map shows a search for "long ash, woodbridge lane, withington". The legend on the right side of the map includes the following categories:

- Article 4 Directions
- Listed Buildings
- Special Landscape Areas
- Tree Preservation Orders - Individual Trees

The map also features a scale bar indicating 100 meters and 200 feet. The bottom of the screen shows the Windows taskbar with various application icons and the system tray displaying the time as 15:44 on 14/01/2024.

From the Cotswold District Local Plan, Long Ash is in the Mid Cotswold strategy delivery sub-area, nothing is shown in the plan for Withington.

The screenshot shows a web browser window displaying the Cotswold District Local Plan (2011-2031) map. The browser's address bar shows the URL: [cotswold.maps.arcgis.com/apps/MapSeries/index.html?appid=885eb94398bf4819b17bd66d64275e59](https://cotswold.maps.arcgis.com/apps/MapSeries/index.html?appid=885eb94398bf4819b17bd66d64275e59). The browser's taskbar at the bottom shows various application icons and the system clock displaying 17:06 on 14/01/2024.

The map interface is titled "Cotswold District Local Plan (2011-2031)" and features a navigation menu with the following items: Policies Map, Chapters 1-5, 6 Local Plan Strategy, 7 Delivering the Strategy, 8 Housing, 9 Economy, 10 Built, Natural and Historic Environment, 11 Infrastructure, and 12 Other Spatial Issues. The map shows the Withington area highlighted in orange, indicating it is part of the Mid Cotswold strategy delivery sub-area. A search bar at the top left of the map interface shows "Cotswold District Council" as a search result. A pop-up window displays "Strategy Delivery Sub-area" information: "Sub-area Mid Cotswold" and "Policy Policy SA2 - Chapter 7.11". The map also shows the Woodbridge area and the Woodbridge Lane. The browser's taskbar at the bottom shows various application icons and the system clock displaying 17:06 on 14/01/2024.

The Cotswold District Local Plan shows that Long Ash is in an Area of Outstanding Natural Beauty. This map shows the line of the disused railway, we own c.390m of it above Woodbridge (our neighbour).

The screenshot displays the Cotswold District Local Plan (2011-2031) map application. The map shows an orange-shaded Area of Outstanding Natural Beauty (AONB) near Withington and Woodbridge. A disused railway line is visible, with a section above Woodbridge highlighted in orange. A tooltip for 'Area of Outstanding Natural Beauty' is open, showing 'Policy Policy EN5 (Chapter 10.5)'. The browser address bar shows 'cotswold.maps.arcgis.com/apps/MapSeries/index.html?appid=885eb94398bf4819b17bd66d64275e59'. The Windows taskbar at the bottom shows the time as 17:07 on 14/01/2024.

Showing solar panel site a distance of c.150m from the house.

The screenshot shows a web browser window displaying the MAGIC map application. The browser's address bar shows the URL `magic.defra.gov.uk/magicmap.aspx`. The application interface includes a search bar with the text "County, Place or Postcode...", a toolbar with various map navigation icons, and a scale of 1:2,000. The map itself shows a house and a solar panel site connected by a blue line. A "Measurement Tools" dialog box is open, displaying the following information:

- Measurement Tools** (with close and help icons)
- Reuse Graphics:
- Measurement Result**
- Distance: 151.4 Metres
- Double click to finish drawing and see the measurement result.
- All measurements are indicative only and should not be used for official purposes.

Other map features include a north arrow, a scale bar (0 to 60m), and an inset map of Withington. The map is overlaid with a "MAGiC" watermark. At the bottom, the Windows taskbar is visible, showing the time as 12:21 on 08/02/2024. A copyright notice at the bottom right of the map area reads: "(c) Crown Copyright and database rights 2024. Ordnance Survey 100022861. Powered by Landmark Solutions."



Showing location of the solar panels in the site of the property.

The screenshot displays the MAGIC map application interface. At the top, the browser address bar shows the URL `magic.defra.gov.uk/magicmap.aspx`. The application header includes the MAGIC logo, a search bar with the placeholder text "County, Place or Postcode...", and a toolbar with various map navigation icons. On the right side of the header, the map data source is identified as "OSGB36" and the scale is set to "1:3,000".

The main map area shows a topographic map with a red boundary outlining a property site. The site is elongated and follows a road or path. Several elevation points are marked on the site: "146.2m", "144.8m", "146.0m", and "143.1m". The word "MAGiC" is overlaid multiple times across the map. In the top-left corner, there is a compass rose and navigation controls. In the top-right corner, an inset map shows the location of the site within a larger regional context, with "Withington" labeled. In the bottom-left corner, a scale bar indicates 0, 50, and 100 meters, and the coordinates are given as "Coords: (403436,214828) Grid Ref: SP03431482". In the bottom-right corner, a copyright notice reads: "(c) Crown Copyright and database rights 2024. Ordnance Survey 100022861. Powered by Landmark Solutions."

The Windows taskbar is visible at the bottom of the screen, showing various application icons and the system tray with the time "12:36" and date "08/02/2024".

The solar panels will be at least 55m from the nearest point of the river Coln (and an estimated 10-15m above it).

The screenshot displays the MAGIC Map Application interface. At the top, the browser address bar shows the URL `magic.defra.gov.uk/magicmap.aspx`. The application header includes the MAGIC logo, a search bar with the placeholder text "County, Place or Postcode...", and a toolbar with various map navigation icons. The map area shows a river (the Coln) and a solar panel array. A blue line indicates a measurement of 56.1 meters from the river to the solar panels. A red line shows a distance of 146.0m from another point on the river to the solar panels. A "Measurement Tools" window is open, displaying the measurement result and instructions: "Double click to finish drawing and see the measurement result." and "All measurements are indicative only and should not be used for official purposes." The window also has a "Reuse Graphics" checkbox checked. A scale bar at the bottom left shows 0, 5, and 10 meters. The coordinates are (403571,214786) and the Grid Ref is SP03571478. The bottom right corner of the map area contains the text: "(c) Crown Copyright and database rights 2024. Ordnance Survey 100022861. Powered by Landmark Solutions." The Windows taskbar at the bottom shows the time as 12:35 on 08/02/2024.

Showing an area just over 50m from the solar panels. Within this area there are some mixed broadleaf trees along the track of the old railway line and along Woodbridge Lane. Behind the solar panel site is a sloping field.

The screenshot shows the MAGIC map application interface. At the top, the browser address bar displays 'magic.defra.gov.uk/magicmap.aspx'. The application header includes the 'MAGIC' logo, a search bar with the placeholder 'County, Place or Postcode...', and a toolbar with various map navigation icons. The main map area shows a topographic map with a red circular area of interest. A blue line with arrows at both ends indicates a measurement of 146.0m across the red area. A 'Measurement Tools' popup window is open, displaying 'Reuse Graphics: ', 'Measurement Result: Distance: 58.1 Metres', and instructions: 'Double click to finish drawing and see the measurement result.' and 'All measurements are indicative only and should not be used for official purposes.' The left sidebar contains a 'Table of Contents' with categories like 'Access', 'Administrative Geographies', 'Countryside Stewardship T & Scoring Layers', 'Designations', 'Habitats and Species', 'Land Based Schemes', 'Landscape', 'Marine', 'Aerial Photography', 'Background Mapping', and 'Base Map'. The bottom of the screen shows a Windows taskbar with various application icons and a system tray with the time '15:11' and date '11/02/2024'. A scale bar at the bottom of the map indicates 0, 15, and 30m. Coordinates '(403524,214765) Grid Ref:SP03521476' are shown at the bottom center. A copyright notice '(c) Crown Copyright and database rights 2024. Ordnance Survey 100022861. Powered by Landmark Solutions.' is visible in the bottom right corner of the map area.

Showing field behind solar panel site is mainly a grassy, sloping field. There are some trees along the site of the old railway line and along the lane c.10m below the solar panel site (which can't really be seen between the trees, it runs parallel to our drive, which can be seen).

The screenshot displays the MAGIC Map Application interface. At the top, the browser address bar shows the URL `magic.defra.gov.uk/magicmap.aspx`. The application header features the MAGIC logo, a search bar with the placeholder text "County, Place or Postcode...", and a toolbar with various map navigation icons. The main map area shows an aerial photograph of a landscape. A large red circle highlights a specific area of the field, with two blue lines pointing to a feature within it. On the left side, there is a "Table of Contents" panel with several expandable sections: "Habitats and Species" (containing "Habitats" and "Species"), "Land Based Schemes", "Landscape" (containing "Geology and Soils" and "Landscape Classifications"), "Marine", "Aerial Photography" (checked), "Background Mapping", "Base Map" (checked), "OS Black and White Mapping" (checked), and "OS Colour Mapping". At the bottom of the map, there is a scale bar (0, 15, 30m), a coordinate display showing "Coords: (403540,214806) Grid Ref: SP03541480", and a copyright notice: "(c) Crown Copyright and database rights 2024. Ordnance Survey 100022861. | © Bluesky International Ltd/Getmapping PLC. test Key 12/06". The bottom right corner of the map area says "Powered by Landmark Solutions." The Windows taskbar at the bottom shows the time as 15:13 on 11/02/2024.

Showing the lane across the other side of the valley, which cannot be seen from the solar panel site (see photos).

The screenshot displays the MAGIC map application interface. At the top, the browser address bar shows the URL `magic.defra.gov.uk/magicmap.aspx`. The application header includes the 'MAGIC' logo, a search bar with the placeholder text 'County, Place or Postcode...', and a toolbar with various map navigation icons. On the right side of the header, the map data source is set to 'OSGB36' and the scale is '1:2,500'. A 'Table of Contents' sidebar on the left lists several map layers, including 'Aerial Photography', 'Base Map', and 'OS Black and White Mapping', which are currently checked. The main map area shows an aerial photograph of a rural landscape with a valley. A red circle highlights a specific area on the opposite side of the valley, with two blue arrows pointing towards it. An inset map in the top right corner shows the location of the main map area near 'Withington'. At the bottom of the map, a scale bar indicates 0, 30, and 60 meters, and the coordinates are shown as 'Coords: (403784,214742) Grid Ref: SP03781474'. The footer contains copyright information: '(c) Crown Copyright and database rights 2024. Ordnance Survey 100022861. | © Bluesky International Ltd/Getmapping PLC. test Key 12/06' and 'Powered by Landmark Solutions.' The Windows taskbar at the bottom shows the system time as 15:15 on 11/02/2024.

Possible mount for solar panels, which would be one panel in portrait (not two as shown here), line of 20 panels. The angle would be 30 or 35 degrees. Panels are 1.134m wide, 35mm deep, 2.278m long so the height would be ( $\sin 35 \times 2.278 =$ ) 1.3m high (1.14m high at 30 degree angle) plus the distance off the ground, say 0.5m = c.1.8m total height (distance off the ground to be confirmed). A line of 20 panels would be 22.68m long. The distance front to back would be ( $\cos 35 \times 2.278 =$ ) 1.9m (2.0m at 30 degree angle).

