

DESIGN, ACCESS & HERITAGE STATEMENT

LISTED BUILDING CONSENT FOR THE ERECTION OF A ROOF MOUNTED SOLAR ARRAY ON THE SOUTH FACING ROOF PLANE AT No2, OVERTON HALL BARN, OVERTON ROAD, CW12 3QW



Image courtesy of Google Maps

December 2025 (revision C)

DESIGN & ACCESS STATEMENT

INTRODUCTION / CONTEXT

This statement is produced to support a planning application and subsequent Listed Building Consent for the erection of a roof mounted solar array on the south facing roof plane of a former agricultural barn, now a dwelling.

The application site is located on the edge of the Staffordshire Moorlands border. The subject barn once formed part of the curtilage of Overton Hall, which was first listed on the English Heritage register as Grade 2 for its special architectural or historic interest (list entry number 1374750).

The application barn is also listed as being grade 2 in its own right, and is recorded on the English Heritage register as 'Barn approximately 30m south of Overton Hall, having a list entry number of 1037815.

The application building is a 'sister building', forming a pair of stone former agricultural buildings, which have been converted into dwellings.

The pair of former barns together with Overton Hall were first listed according to English Heritage in 20 Nov 1987. An application was submitted to Staffordshire Moorlands DC to convert the pair of outbuildings into dwellings, and was approved on 4th March 2003 (SMD/202/1191 & SMD/2002/1192 – listed building consent)

The details for the application building, commonly known as no2 Overton Hall Barns are as follows:

A dated lintel over the east gable window indicates the building was built in 1749. There are also scarring marks on the gable to indicate a single storey double pitched roof once abutted the East end of the barn.

Details

BIDDULPH C.P. OVERTON ROAD SJ 86 SE 3/43 Barn approximately - 30m south of Overton Hall

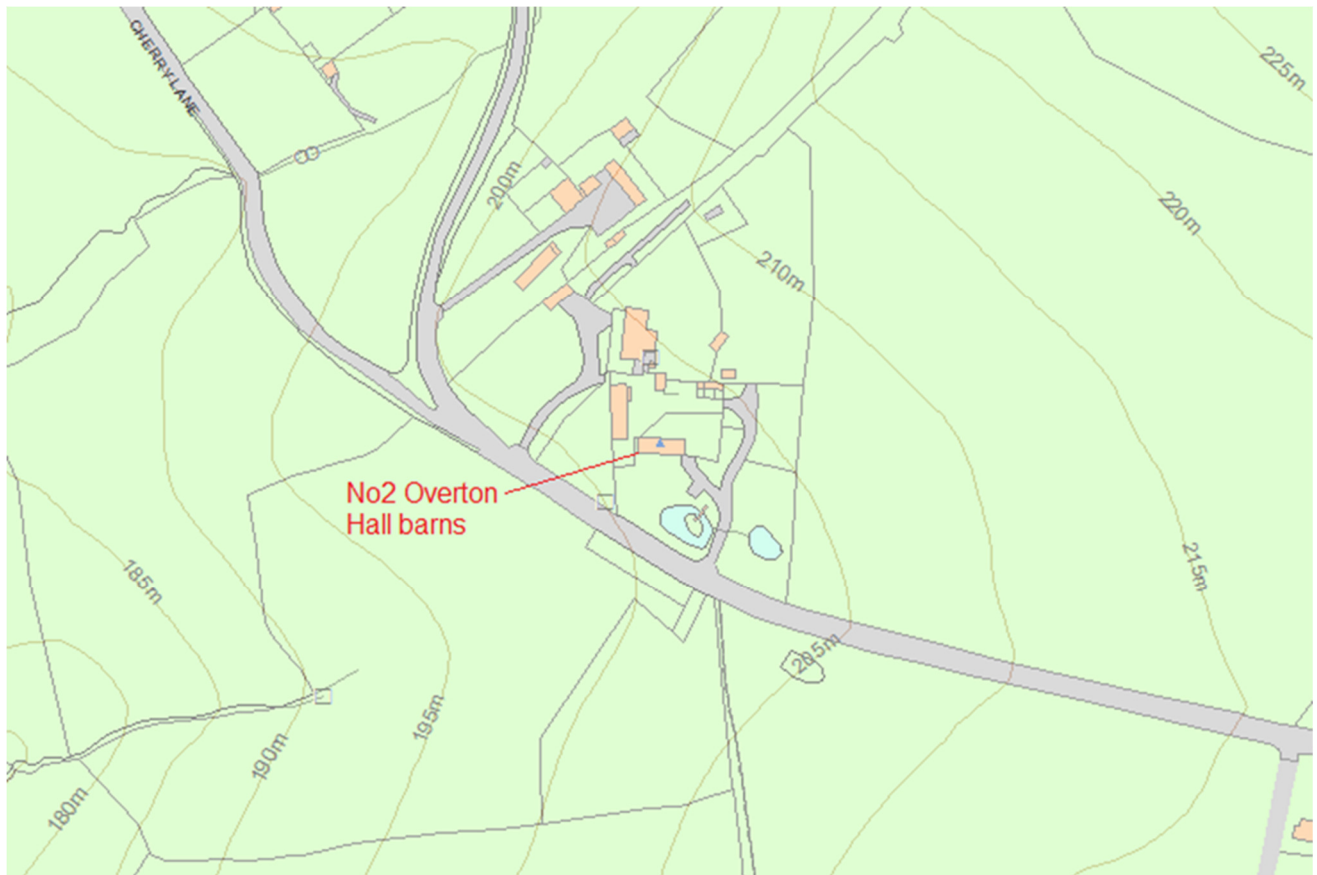
GV II

Barn. Mid-C19 with remains of earlier work. Coursed stone; blue machine tile roof; verge parapets. 2 levels of hay loft over byre. Long frontage to south with 2 widely-spaced top-hung casements to ground floor, and 2 rows of 7 slit vents to upper level.

Listing NGR: SJ8948061603

A dated lintel over the east gable window indicates the building was built in 1749. There are also scarring marks on the gable to indicate a single storey double pitched roof once abutted the East end of the barn.

The property when converted into a dwelling had the original, or at least the roof structure and covering fitted at the time stripped back. The rafters were replaced and new/reclaimed tiles were fitted. The front, north facing plane of the roof was refitted with large natural stone slates, whilst the rear was fitted with Staffordshire Blue plain clay tiles.



The application site comprises a listed barn dwelling which is part of a farm complex, now mostly residential to the north of Overton Road in the open countryside to the south-east of Congleton and northeast of Biddulph. Winter can be extremely cold in this location, with some strong winds affecting the reliability of the power supply. The site is quite exposed overlooking Congleton and the Cheshire plain beyond. Electricity is pole mounted cables, and due to the rural location on the end of the cable runs, they are constantly affected by electrical main outage, especially during the winter months and after storms. The remote location means that there are of course no street lights, and as such when the power cuts out the whole site is in darkness impacting also on household lighting and other facilities. This is especially a concern in the remote location as security alarms, outdoor lighting are also cut off. The property being a former barn, has retained the original small windows, so in the winter months even during the day time, the interior can be quite dark requiring lights on for most of the day. The applicants are both of retirement age, so it can be dangerous for them to be negotiating stairs and the outside areas in darkness. The applicant is on the National Grid Priority Register for health reasons (osteoporosis/currently treatment for compression fracture of spine). Any falls due to lack of electric lighting etc could potentially cause further fractures. Unfortunately being on the register doesn't help with power cuts, they simply email with a notification of the power cut after the fact.

Like many houses, they are mains electricity dependent for a digital telephone, but with very poor satellite signal and little or no Wi-Fi or cell phone signal, they cannot communicate with the outside world during a power cut, so they cannot contact emergency services or anyone else if needs be. Although they have a woodburning stove, this will only supply heat to the living room, the rest of the property will require electricity for the central heating boiler to function. Of course without the boiler in operation they have no hot water for cleaning and hygiene. The property has electric underfloor heating on the ground floor and upstairs bathroom. This obviously goes off when there is a power cut and every electric thermostat/timer in every room then needs resetting

The remote location means as a household they tend to keep a larger stock of frozen and refrigerated food, than perhaps a dwelling nearer to a supermarket, or convenience store.

The world is changing, the government are promoting the use of an electric car, in a location where the main electricity supply is unreliable, especially when they need it the most. An electric car without a sustainable power source is unsuitable for this location.

The solution to the problems is to install a roof mounted solar charging system, supplying power to the household or a battery during the day. The main element of a PV system is the photovoltaic (PV) cell, which converts sunlight into electrical energy. A PV cell consists of layers of a semi-conducting material that absorb energy from sunshine to create an electric field, causing electricity to flow. The greater the intensity and duration of sunlight, the greater the flow and quantity of electricity. These individual cells combine to form panels.

Although PV panels can still generate some electricity on a cloudy day, they will only generate electricity whilst there is daylight, so the energy must either be consumed as it is being generated, stored in batteries, or exported to the National Grid (the grid).

The government is committed to achieving net-zero carbon emissions by 2050, which requires near-complete decarbonisation of homes, which includes the homes that have already been built. The carbon budget and growth delivery plan was published on 29th October setting out how the UK will continue to reduce emissions to lower bills in line with the 2008 Climate Change Act. Key policies include phasing out new gas boiler installations by 2035, achieving high energy efficiency standards in homes, and expanding support for low-carbon heating systems like heat pumps. The government aims for as many homes as possible to have an Energy Performance Certificate (EPC) band C by 2035, with a focus on fuel-poor homes by 2030.

With the government drive towards phasing out the use of fossil fuels, and replacing them with electric vehicles, electricity powered air or ground source heating, and in increased reliance on electrical gadgets within a household, there is a greater need for electricity in the home. As the cost of energy rises more households are seeking solar generated electricity to be self-sustainable, or simply reduce the reliance on the grid and reduce their bills.

Government support for solar panels on listed buildings primarily focuses on making it easier to get permission, not on specific grants. While direct financial incentives are not the main focus, the UK government, through bodies like Historic England, is encouraging local authorities to approve applications for solar panels on heritage sites, as long as they don't cause "unacceptable harm" to the building's special interest. This doesn't offset the need to apply for and receive Listed Building Consent (LBC). Adapting Historic Buildings for Energy and Carbon Efficiency Historic England Advice Note 18

PROPOSAL

The ideal position for a solar panel would be a south facing aspect in order to benefit from the maximum daylight as the sun rises in the east and sets in the west. The position identified as the most suitable within the site. The building is surrounded by tall trees which would obscure a ground mounted array from suitable levels of sunlight during any particular day, making them inefficient. The building is orientated with the ridge almost east-west, having the planes of the roof facing north-south, which is the ideal orientations for solar panels mounted on the south facing roof, maximising the available daylight exposure. The roof plane identified is road facing but it would be obscured from onlookers by dense trees, hedges and the distance across the garden.

The building itself along with the sister barn also now a dwelling were originally presumably listed due to the location within the curtilage of the Listed Building, Overton Hall are both relatively simple coursed stone two storey linear barns with very little significant importance on their own merit and unlikely to have been listed if they were located elsewhere.

The south facing roof slopes will have 10no. Aiko Stellar 1N+ 645W N-Type ABC, 72 Cell, black Frame Dual Glass solar panels. dark matt finished panels fitted, each panel being approx. 2.278m tall and 1.134m wide, only 30mm high, fitted on an MCS approved system. The installation system would require a tile to be removed where the fixing for the frame is located and set aside for future re-use. A bracket fixed to the rafter beneath would be specially flashed to retain weather proofing and allow the

solar panel framing to the secured. The installation is completely reversible if circumstances were to change.

A single battery with Off Grid capable Gateway and Intelligent Charging shall be installed on the external gable and hidden from view inside the bin store wall which will allow the storage of electrical energy for peak time usage and off-peak charging. The system will also supply power to the house in the event of a mains failure.



USE & AMOUNT

The energy generated by the panels shall be used to power the dwelling, improving the carbon footprint and efficiency rating of the building by using a renewable energy source.

The panels themselves will not significantly change the size, height or massing of the original roof.

The National Planning Policy Framework has a presumption in favour of sustainable development. The introduction of solar PV to the property shall render it more sustainable and potentially self sufficient in the future.

LAYOUT

The panels are laid out on the roof's planes in the most efficient way. The 10 panels shall be arranged on the south facing roof.

The hybrid inverter and battery storage unit will be fitted to the external wall of the property. It is externally mounted, but is hidden from view inside the bin store wall, so will not detract from the appearance and character of the building.

APPEARANCE

The 10 solar panels will not greatly detract from the appearance of the building. The panels protrude by a minimal amount and are of a similar colour to the clay tiles. The roof plane has been identified as the most suitable position for solar panels, considering both the visual impacts on the listed building, the wider landscape and the feasibility of installation. Below is a photo of the buildings with images of solar panels super-imposed, to reflect the appearance of the panels on the roof.



SCALE

The number of panels has been calculated by a competent energy assessor, taking into account both the available area of roof and the usage/storage capacity of the dwelling. The panels are raised off the roof tiles by a minimal amount, with suitable bird protection etc.

LANDSCAPING

There are no proposed landscaping works.

ACCESS

There are no access restrictions for the building, it is approached via a private driveway off Overton road. There are no proposals to alter the current access

Left road side view onto property below across the gardens to the dwelling.



HERITAGE STATEMENT

A description of the heritage asset, its history and setting.

The application property was once an agricultural building on the estate of Overton Hall, which is a 17th Century Grade II listed residence dating back to around 1650. The former agricultural building was converted into a residential dwelling around 2003 and is one of two barns converted at this time, orientated at 90 degrees to each other and lie south of the original farm house. The subject property is the southern most building, aligned with Overton road.

We have no access to the original documents from the conversion or photographs from the period before the conversion, presumably it was predominantly grass/meadow land suitable for agricultural use. Currently the property enjoys mature gardens with trees on the boundary and inside the curtilage. The conversion of the property has been carried out in a sympathetic manner, the original features such as the ventilation slits have been retained but sealed with glazing, as are the window openings which were sufficient enough for the farmer to adequately tend to any livestock in the building. The property has been maintained to a high standard by the owners.

Statement of significance

The property lies within the original curtilage of a grade 2 listed building, Overton Hall, and is also grade 2 listed in its own right. The date of the listing was November 1987 when the main Hall, and the two stone barns were first registered. Subsequently a planning application was approved to convert the stone barns into separate and self-contained residential dwellings. We do not have access to the actual planning permission, and the planning conditions imposed upon the conversion. The description of the barn on the English Heritage listing, suggests that the conversion has been carried out sympathetically and the features have been retained.

Barn. Mid-C19 with remains of earlier work. Coursed stone; blue machine tile roof; verge parapets. 2 levels of hay loft over byre. Long frontage to south with 2 widely-spaced top-hung casements to ground floor, and 2 rows of 7 slit vents to upper level.

An explanation of the proposed development

The proposal is simply to install 10no. solar PV panels to the south facing roof with each panel being around 30mm high, therefore having little impact on the overall appearance of the building and not causing unacceptable harm to the building. With the panels having an anticipated lifetime in excess of 10 years, using a demountable fixing system, the process is reversible. In the event a different solution is available to generate sustainable electricity in years to come, the panels can be removed to expose the tiles below and the current appearance shall be reinstated.

The impact on the Heritage Asset

The precedence for converting the barns has already been set and carried out, they are clearly no longer required for agricultural purpose originally intended. It is suspected that the barn(s) were listed originally due to the close proximity of Overton Hall. The proposed location of the proposed roof cannot be seen from the Hall, being on the opposite side of the building, therefore the proposal does not impact at all on Overton Hall.

We consider that the proposed solar PV panels on the roof will have very little impact upon the character of the building. The most significant impact has already been carried out by virtue of the conversion from a farm building to a dwelling, but this has been carried out with respect to the building and the original features have been preserved and retained.