

Design and Access Statement



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Site Address: Miller & Carter Greenmount,
Brandlesholme Road, Greenmount
Bury, BL8 4DS

Date: 10/06/2025

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Site: Miller & Carter Greenmount, Brandlesholme Road, Greenmount, Bury, BL8 4DS

Proposal: 30.94kW roof mounted solar PV array

The applicant approached Geo Green Power to ask for advice on how they could best utilise renewable energy generation opportunities on their land to reduce the environmental impact of the business. Geo Green Power advised the installation of a 30.94kW roof mounted solar PV system.

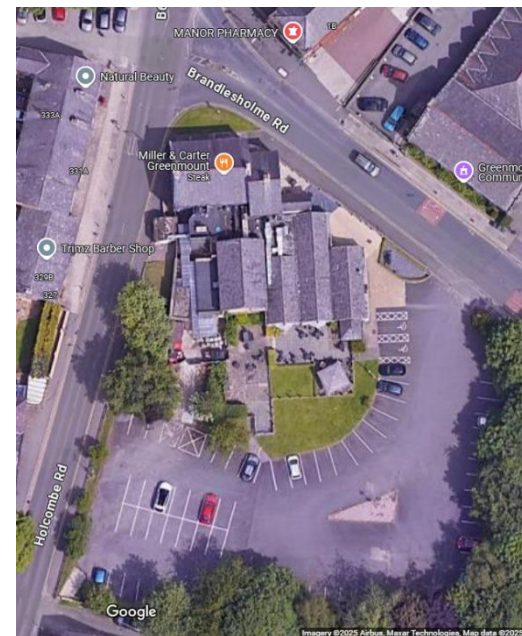
1. Site

The proposed site is Miller and Carter Greenmount, a public house located in Bury.

Figure 1: Ariel View of site (reference: 'Google Maps')



Figure 1b: Ariel View of proposed site (reference: 'Google Maps')



The property is not Listed, a Scheduled Monument or World Heritage Site nor does it fall within an Area of Outstanding Natural Beauty, Green Belt, National Park or Conservation Area.

2. Character

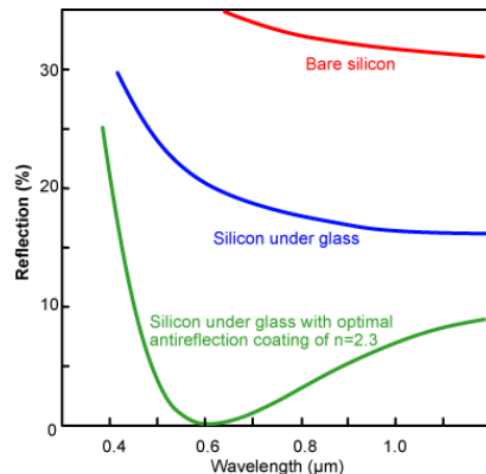
Geo Green Power designs and installs solar PV systems with high regard for the aesthetics and impact on surrounding areas.

In order to meet the local requirements, Geo Green Power will be careful to ensure that this solar PV system is a non-permanent installation by using a pitched roof mounting system, therefore eliminating the need to fix the mounting system into concrete.

The site is a Public House located at a key junction, in the setting of a traditional brick and slate terraces. As such an integrated 'in roof' solar installation was previously considered. However due to the age and structure of the existing roof, an integrated solar solution is not a physically viable option. Therefore, the model of solar panel has been specifically chosen to reduce the visual impact on the surrounding area. The modules are only 30mm thick and would protrude only 74mm off the roof slope when combined with the pitched roof mounting system, meaning the side elevation of the solar panels will have minimal visual impact. Additionally, 'all black' panels shall be utilised in order to reduce the visual impact of the solar panels on the surrounding area.

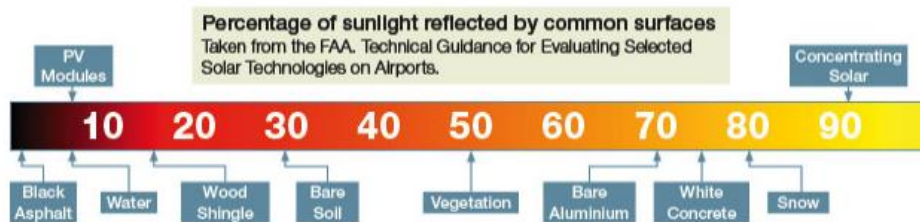
The solar PV modules to be utilised are 95 x Canadian Solar 455w ALL BLACK panels (the datasheet has been included separately). These modules have a 2mm heat strengthened glass front cover with anti-reflective coating to ensure that there are no undesirable side effects related to light reflecting glare. Canadian Solar uses "high-transmission low-iron" glass in their solar modules and narrow down the accepted range of glass surface roughness. This type of glass transmits more light, producing less glare and reflectance than normal glass. This high-transmission glass meets the military's reflectance requirement, where this value has to be less than 10%. CSI Solar declares that Modules produced using antireflection coated solar glass have a reflectance value below 4% when with up to 60° angle of incidence.

Figure 2: Comparison of surface reflection from a silicon solar cell, with and without a typical anti-reflection coating



It is interesting to note that the FAA (Federal Aviation Authority) guidance acknowledges that "solar PV is more compatible with airport land use because it is designed to absorb sunlight (rather than reflect it), minimizing potential impacts of glare". The guidance continues that "solar PV employs glass panels that are designed to maximize absorption and minimize reflection to increase electricity production efficiency. To limit reflection, solar PV panels are constructed of dark, light-absorbing materials and covered with an anti-reflective coating. Today's panels reflect as little as 2% of the incoming sunlight." Evidence produced in the guidance shows that this is slightly more than black asphalt, about level with bodies of water, and much below bare soil, vegetation, rooftops, glass, snow or metal.

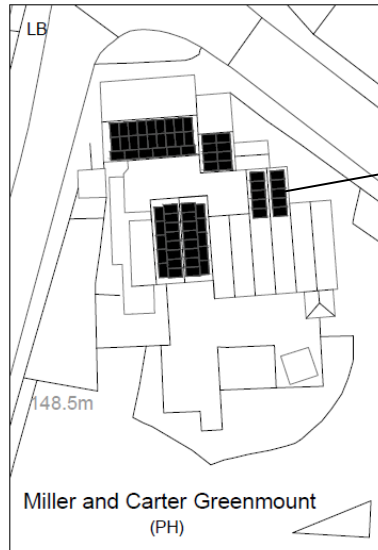
Figure 3: Sunlight reflection comparison



Due to the above it is considered that the proposed solar panels would provide minimal glare on the surrounding area. The anti-reflective properties, combined with the 'all black' colouring of the panel, will reduce the contrast between the existing rooflines and proposed solar panels, enabling a more visually pleasing result.

The solar panels would be installed on several pitched roofs of the property as can be seen in Figure 4.

Figure 4: Proposed solar PV layout



Proposed solar panels in both landscape and portrait orientation

Figure 4b: Proposed solar PV layout (utilising SolarEdge software)



The inverters will be mounted within the property, hidden from view, and therefore can be disregarded as part of this planning application. The cabling will run directly from the solar PV array to the existing supply. Scaled drawings have been included within the application showing the layout of the proposed panels.

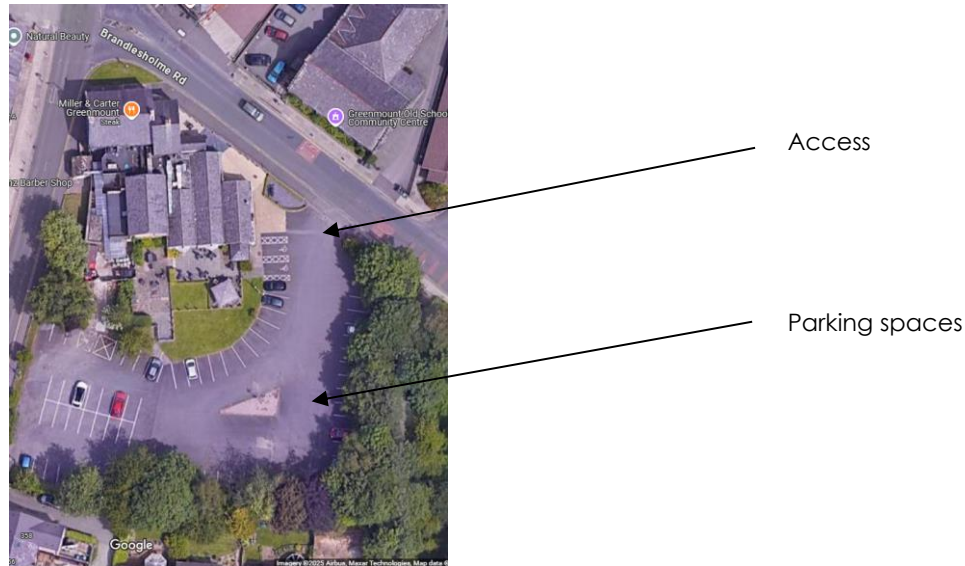
Once the PV system is no longer in operation the system will be removed immediately. Solar PV systems have no moving parts and therefore maintenance to the arrays is minimal. There should be no need for the array to be accessed on foot any more than 4 or 5 times over the duration of the guaranteed period of twenty years.

Pictures of the level of visibility of the site can be found in Appendix A Viewpoints

3. Access

The specific location for the proposed solar PV array is on top of the existing pitched roofs of commercial property, Miller & Carter Greenmount. As such, this would not impact accessibility needs to public highways, cycle paths or foot paths nor access needed for emergency vehicles, or connections that these may require. The site has designated off-road parking, as can be seen in Figure 5, meaning no vehicles will need to use the public highway for manoeuvring or parking.

Figure 5: Vehicle access (reference: 'Google Maps')



The delivery schedule of installing this solar PV array will not greatly increase the level of traffic to the business. Over the course of this 5-day solar PV installation, contractor vans (such as Vauxhall Vivaros) will be making daily trips to site, including to deliver the solar panels, mounting kit and inverter. These will not cause any over-run whilst accessing the site. These vans will access the site from 'Brandlesholme Road'. Existing access is to be used for the proposed installation. The size of the entrance allows for clear views of oncoming traffic. Due to the short timeframe of the project and limited number of vehicles required, this proposal would have minimal access impact. Visuals of the site entrance and access route can be found below in Appendix A 'Viewpoints'.

4. Community Safety

Geo Green Power will make the PV array as safe and secure as possible. This includes meeting specific health & safety requirements during installation and for the lifetime of the system. All inverters will be located above ground level and are type tested and IP rated. The proposed array will not have any moving parts that could impact the safety of the system. All work and materials used in the system will meet the relevant electrical and mechanical standards including, but not limited to, BS7671 compliance for any A/C components, and MCS compliance regulations for D/C components, G99 IET wiring regulations. Geo Green Power is NICEIC and CHAS accredited.

The solar PV system will be installed on the rooftop of a private property so would not be accessible to the general public and thus not impact the safety of the general public

5. Environmental Sustainability

The applicant wishes to reduce the environmental impact of property and a 30.94kWpk solar PV array will reduce the carbon footprint by approximately 5 tonnes of CO₂ per annum. This will reduce the environmental impact of the property on the surrounding area immediately.

The solar PV system would provide a public benefit. A portion the electricity that the solar PV system generates, but is not utilised, will be exported back to the grid and can be utilised by the public. This means that the public can also utilise electricity which has been generated by renewable energy, further reducing the reliance on fossil fuels and power stations. Additionally, as fossil fuels are responsible the majority of pollution, the solar PV system would reduce air pollution and subsequently improve the health of the surrounding area. The installation of the solar PV system would thus not solely serve the applicant but would also benefit other households

The solar PV system would have a limited impact on the appearance and openness of the surrounding area. A pitched roof mounting system will be utilised meaning that no concrete base or excavation is needed, and the land would remain unaffected. Additionally, the solar PV array will not be widely visible from the surrounding highways and properties and its location has been specifically selected because of this (see Appendix A 'Viewpoints'). We would draw attention to the fact that the site is already well contained by physical barriers within the landscape.

Furthermore, this location has not only been chosen for the minimal visual impact but also to assist in the development having minimal amenity impact. The site has been chosen because of the proximity to the private electricity supply to which it will be connected in to, and therefore the reduction in the amount of ancillary infrastructure needed to support the scheme.

The Climate Change Act commits the UK government by law to reducing greenhouse gas emissions by at least 100% of 1990 levels (net zero) by 2050. Solar energy is therefore capable of providing a source of energy at a time when there is an overall climate crisis in terms of energy supply and security within the UK. This solar PV array would allow this property to cut its CO₂ production by 5 tonnes a year and result in 20,000kWh of electricity being generated from renewable resources per annum. One of the core principle planning policies of the NPPF is a move towards a low carbon economy and the Framework is clear in its support of renewable energy projects. The generation of renewable electricity at the site is a positive factor in favour of the proposal and it would make a valuable contribution in the context of wider environmental benefits.

It is important to note that paragraph 158 of the NPPF states:

158. When determining planning applications for renewable and low carbon development, local planning authorities should:

(a) not require applicants to demonstrate the overall need for renewable or low carbon energy, and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions

In the future, should the PV array need to be moved or taken down, it is a non-permanent fixture and so can be done with minimal impact on the surrounding areas. Water sources and waste management will not be affected.

6. Cumulative Impact

Unlike large scale solar grid generation systems, this application is a proposal for a system that will directly feed the applicant's own business, allowing the applicant to lower their carbon footprint by around 5tonnes of CO2 per annum. The proposed system would produce energy similar to the applicant's private usage so this proposal is very specific to this particular set of circumstances and will not set a precedent for future large 'grid only' solar PV arrays. This project is one of the few practical alternatives there is to help the business to transition to a lower carbon energy use footprint. As it has been tailor made to fit the applicant's needs, there should not be a large surplus being exported to the grid and therefore any other surrounding installs should be considered separately rather than cumulatively.

7. Wildlife and Trees

When designing the current proposal, thought was given to section 11 of the NPPF. There shall be no security lighting installed so this solar PV system will not contribute to the light pollution of the surrounding area. Additionally, the system will not contribute to noise pollution as there are no moving parts in a solar PV system and therefore wildlife that may be situated in the surrounding trees and hedgerow shall not be adversely affected. Attention will be paid to bird breeding season. There will be no building demolition and there are no ponds in the vicinity.

Specific attention has also been paid to BS5837-2012 "Trees in relation to design, demolition and constructions". All existing hedgerows, trees and shrubbery that are currently at the applicant's site have been considered. It is well understood that these are all 'material considerations' in the planning process, and to this end, no demolition will need to occur in order to accommodate the proposal (section 5.4).

Section 5.3 of the BS5837-2012 outlines that the Root Protection Area of any on site tree should not be affected by the proposed development. The construction of this proposed development is purposefully roof mounted, minimizing disruption to the surrounding land and shrubbery. Furthermore, the development shall be situated far enough away from the trees so that direct damage to the development shall not occur, e.g. from falling branches, or seasonal nuisances, meaning that there will be no pressure in the future to remove these trees. Instead, the trees and hedgerow which provide character and visual amenity to the surrounding area shall be retained and not adversely affected.

8. Heritage Statement

The proposed site is not a Listed Property, a Scheduled Monument or fall within a World Heritage Site. There are no heritage assets in the immediate vicinity of the development. However, the closest heritage asset is 'CONGREGATIONAL CHAPEL, List Entry Number: 1163452' which is a Grade: II Listed

property, located 40m away from the site. As such, special attention has been given to ensuring that nearby heritage assets are preserved and are not affected by the proposed development as well as the effect the panels would have on the setting of the Listed Building and the two street scenes.

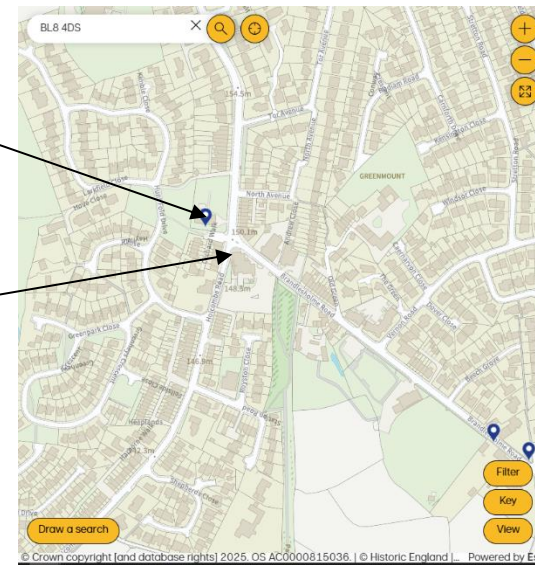
Figure 6: Heritage Map (reference: Historic England website)



Listed properties indicated by blue markers

Proposed solar installation location

Figure 6b: Heritage Map (reference: Historic England website)



Initially, a 56.425kW solar PV system was considered which would be installed across all roof pitches of the property. However, an alternative 43.23kW solar PV system was proposed instead so as to minimise the visual impact on the surrounding area, as far as practicable. Due to the location of the key junction, the solar panels have not been sited on the northern roofs of the property to reduce the visual impact from the Grade II Listed Congregational Chapel and roads (Holcombe Road and Brandlesholme Road). The solar installation would not be visible to the Listed Congregational Chapel. Substantial screening lies between the proposed development site and surrounding properties, including shrubbery, trees and other properties. This means that the proposal will not be highly visible to surrounding Listed properties either during installation or once completed.

Figure 7a: Proposed Holcombe Road junction (reference: SolarEdge design)



Figure 7b: Existing Holcombe Road junction (reference: 'Google Maps')



After discussions with the Council, the proposed solar PV system has been reduced to 30.94kW to further reduce the visual impact on the Grade II Congregational Chapel, its setting and the street scene.

The proposal seeks to install a 30.94kW roof mounted solar PV array which will not affect the heritage assets from a material point of view. The array would not be installed on any Listed properties, and no physical demolition works or material works would be required on any Listed properties to facilitate the solar PV installation.

The proposal would have a visual impact on the setting of the listed Church and the nearby roads. The solar panels would be largely screened by existing trees and shrubbery on the approach towards the pub along Brandlesholme Road, maintaining the existing view of the visually pleasing collection of buildings, including the Chapel and the Church.

Figure 7c: Proposed Brandlesholme Road (reference: SolarEdge Design)



Figure 7d: Existing Brandlesholme Road (reference: 'Google Maps')



As the approach along Brandlesholme road continues, the solar panels located on the south facing and eastern facing roof would become more visible to the road. The side of the solar panels located on the southern roof would be visible to Bradnlesholme Road. As the modules are only 30mm thick, visual impact of these panels would be minimal. The face of 3 of the solar panels located on the eastern roof would be partially visible to Brandlesholme Road. However, as outlined above, 'all black' panels would be utilised to reduce the contrast between the panels and the existing roof tiles and create a more visually pleasing result. Additionally, the solar panels have a 2mm heat strengthened glass front cover with anti-reflective coating to ensure that there are no undesirable side effects related to light reflecting glare. Solar panels are specifically designed to absorb, not reflect, light so glare is kept to a minimum.

Figure 7e: Proposed Brandlesholme Road (reference: SolarEdge Design)

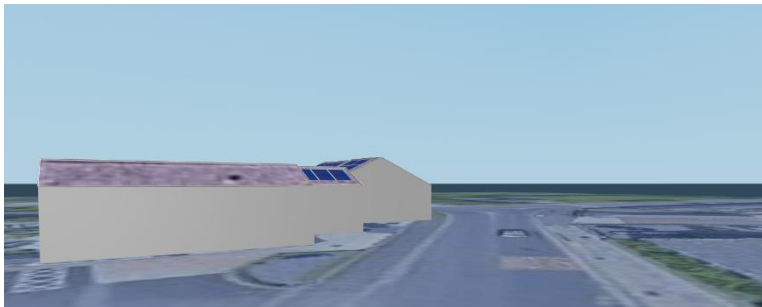


Figure 7f: Existing Brandlesholme Road (reference: 'Google Maps')



The solar panels located on the southern facing roof would be visible from Holcombe Road. The panels would be largely screened on the approach up Holcombe Road due to existing trees and shrubbery but would become more visible on the approach towards the Public House.

Figure 7g: Proposed Holcombe Road (reference: SolarEdge Design)



Figure 7h: Existing Holcombe Road (reference: 'Google Maps')



The visual impact would be mitigated by the 'all black' panel module meaning the panels, frame and fixtures would be black and would reduce the visual impact on the area.

Due to the Climate Emergency, solar panel installations are increasingly common in street scenes, particularly on shops and restaurants. As fossil fuels are responsible for the majority of pollution, the solar PV system would reduce air pollution and subsequently improve the health of the surrounding area. The installation of the solar PV system would thus not solely serve the applicant but would also benefit other households and the surrounding area. The proposed solar panel installation would allow the business to reduce its carbon footprint. The benefits of the system would outweigh the minimum visual harm caused by the panels.

Additionally, the proposal does not contribute to the noise or light pollution of the surrounding area and therefore this will have no negative impact on the heritage assets either. Rather the proposal would generate clean renewable energy, reducing pollution of the surrounding area, meaning that there would only be positive effects on the heritage assets and the surrounding area.

Based on the above, the proposed solar panel installation would not physically harm the heritage assets and, although it would have some visual impact on the surrounding area, the visual impact would be minimal and can be mitigated.

9. Conclusion

Overall, the enclosed application presents a scheme that is appropriate to the setting of the site, with the intention to provide a proposal with a sympathetic scale, form and the use of appropriate materials.

The proposal would not affect the existing access and the surrounding heritage assets would continue to be conserved. The proposal would present no harm to the public but rather is a viable solution to transition the business into utilising renewable technology in order to lower the applicant's carbon footprint.

Appendix A: Viewpoints (reference: 'Google Maps')



Viewpoint A: Holcombe Road



Viewpoint B: Holcombe Road



Viewpoint C: Holcombe Road



Viewpoint D: B6215



Viewpoint E: Brandlesholme Road



Viewpoint F: Brandlesholme Road



Viewpoint G: Brandlesholme Road



Viewpoint H: Existing Site

