

Agenda Item	A7
Application Number	21/01247/FUL
Proposal	Construction of a solar farm with associated access and infrastructure to include substation, inverter stations, cabling, landscaping, CCTV and boundary treatments.
Application site	Land East of Hazelrigg Lane, Hazelrigg Lane, Scotforth, Lancashire
Applicant	Mr Paul Morris
Agent	Helen Clarkson
Case Officer	Mr Andrew Cotton
Departure	No
Summary of Recommendation	Approve

1.0 Application Site and Setting

- 1.1 This proposal relates to a 21.44-hectare piece of agricultural land located to the east of Hazelrigg Lane. The north of the site is predominantly agricultural land, the east is bordered by Proctor Moss Road and the River Conder. The River Conder curves westwards and runs along the southern boundary of the site. The topography of the site is varied and uneven but roughly runs down at a gradient between its highest point in the north-west to its lowest point in the south on the bank of the River Conder. The site is within the ownership of Lancaster University and is in close proximity to its main campus.
- 1.2 The site, which is identified as open countryside, currently comprises a number of separate fields marked out with hedgerows, a barn and a former hole previously belonging to the Forrest Hills Golf Club. The site which is predominantly utilised for grazing comprises mainly semi-improved grass land, with some areas of scrub and scattered trees. Additionally, there is a substantial woodland area within the centre of the site and wooded areas to the perimeter. The land is classified as Grade 3b which is not considered best and most versatile.
- 1.3 The site itself is not covered by any statutory heritage, ecological or landscape designations. However, there are five listed properties within 1km of the site, the site falls within the Impact Risk Zone of both the Lune Estuary Site of Special Scientific Interest (SSSII) to the west and the Bowland Fells SSSI to the east. The site is within 1km of the Forest of Bowland Area of Outstanding Natural Beauty (AONB) which lies to the east of the application site.
- 1.4 Most of the site falls within Flood Zone 1 and as such is at the lowest risk of flooding, a small section of land along the southern boundary of the site adjacent to the River Conder is within Flood Zones 2 and 3. The site also contains two national pipelines (Essar oil and Cadent gas) which run parallel to each other north to south roughly through the centre of the site, a third national pipeline (National grid) runs to the east of the site beyond the site boundary. An overhead powerline is located beyond the north-eastern boundary of the site.
- 1.5 Access is taken from an existing field access from Hazelrigg Lane. There are no Public Rights of Way (PRoW) which cross the site and the site is not open for public access.

1.6 Detail of alternative sites considered by the applicant are included in the planning statement, with it demonstrated that all alternative sites were unsuitable or unviable for the proposed use.

2.0 Proposal

2.1 The proposal is to install a solar farm consisting of dual facing photovoltaic (PV) panels arranged in rows fixed to the ground that will not move to track the sun. The solar farm will be capable of generating 16.5MW of power which is equivalent to powering 3,125 4 bed homes and would save approximately 2,654 tonnes of CO2 emission annually (equivalent to 600 average cars being taken off the road). The panels will connect to inverter stations and then to a substation on the site through underground cabling. The electricity produced will feed into the University campus through a dedicated private connection (this connection does not form part of this application). The panels will be arranged in rows 8.75m in length with 3m gaps between each row. The remainder of the site, as well as between and beneath each of the rows of panels will be retained as grassland.

2.2 The panels have a maximum height of 1.75m from the ground level with the lower edge of the panel being 0.6m from ground level. A total of 7 inverter stations will be positioned throughout the site. The inverter stations will be green containers approximately measuring 2.5m (w) x 6m (l) x 2.5m (h). A substation is also proposed which consists of a stone-faced building with a pitched slate roof. The substation would approximately measure 3m (w) x 8m (l) x 2.5m (h) and is in the western part of the site.

2.3 Access will be gained through the existing field access from Hazelrigg Lane to the west of the site. The field entrance will be widened to 5.5m with a double gated arrangement set back 20m to allow HGVs to enter and exit the site safely. The 20m setback will be constructed of a concrete material to prevent debris entering the highway. The site will be enclosed by an agricultural timber and wire fence for security purposes and to stop livestock entering the site. Pole mounted CCTV will also be installed to monitor the site access and perimeter. A total of 16 cameras will be positioned on poles of a maximum height reaching 2.412m from ground level. No external lighting is proposed as part of the planning application. The applicant does not intend to light the site.

2.4 A robust site wide landscaping scheme is proposed which would seek to enhance the existing site landscaping as well as mitigate for any removals, help screen views of the development, and enhance the biodiversity value of the site significantly.

2.5 At the end of the solar farm's operational life all equipment and associated paraphernalia will be removed from the site and the land returned to agricultural use.

3.0 Site History

3.1 A single relevant application for the site is listed below:

Application Number	Proposal	Decision
21/00957/EIR	Screening opinion for Construction of a 16MW solar farm with associated access and infrastructure to include substation, inverter stations, cabling, landscaping, CCTV and boundary treatments.	Environmental Statement not required

4.0 Consultation Responses

4.1 The following responses have been received from statutory and internal consultees:

Consultee	Response
Parish Council – Scotforth	No objection.
Parish Council - Ellel	The parish support this proposal.

Parish Council Quernmore	Objection – given the impact on the AONB and associated glint and glare
Lead Local Flood Authority	No objection subject to conditions including development in accordance with submitted FRA, submission of final sustainable drainage strategy, construction phase surface water management plan and operation and maintenance plan for SUDS scheme
Environment Agency	No objection subject to conditions including updated flood risk mitigation scheme
Cadent Gas (Previously National Grid)	No objection.
County Highways Dept.	No objection subject to conditions including a survey of the adopted highway, surfacing of access into the site, the provision of visibility splays, the implementation of the construction traffic management plan, offsite highways works, the provision of wheel washing facilities
National Highways	No objection..
Chief Environmental Health Officer	No objection.
Natural England	No objection.
Electricity North West Limited	No comments received to date.
United Utilities Water Plc	No comments received to date.
Tree Protection Officer	No objection.
Planning Policy Team	No objection.
RSPB	No comments received to date.
Public Rights of Way Lancashire County Council	No comments received to date.
Ramblers Association	No comments received to date.
Canal And River Trust (North West _ North Wales)	No comments to make.
Policy Group Lancashire CC - Mineral Safeguarding	No comments received to date.
Engineering Team	No comments received to date.
SHELL UK	No comments received to date.
Galgate Flood Action Group	No comments received to date.
South Lancaster Flood Action Group	No comments received to date.
Greater Manchester Ecology Unit	No objection.
Forest of Bowland AONB	No comments received to date.
County Landscape Officer	No comments received to date.
Historic Environment Team	No objection subject to conditions to secure WSI and trail trenching.

4.2 Two responses have been received from members of the public neither objecting nor supporting the proposal making the following observations:

- Proximity of panels to dwellings/farm house;
- Loss of outlook/view;
- Impact from glint and glare on Eastrigg and Valley View;
- Visual intrusion into the AONB;
- Length of time it will take mitigation planting to establish;

- Would like to see greater mitigation include removal of panels closets to Eastrigg.

4.3 Three responses have been received from members of the public objecting to the proposal making the following observations:

- Visual impact on Forest of Bowland AONB;
- Impact on rural; character of the area;
- Loss of residential amenity;
- Removal of panels and increase in screening;
- Glint and glare impact upon M6;
- Impact on built heritage/listed buildings;
- Detrimental impact upon property values;
- Loss of habitat, feeding and nesting sites/detrimental impacts upon ecology;
- Loss of grade 3 agricultural land;
- Concern over construction noise/disruption/working hours/traffic;
- What will happen when panels are broken reach the end of their life;
- Where will materials be sourced from;
- How will the site be operated/maintained;
- Noise arising from the operation of the development;
- Will the solar farm be restricted in case of future expansion;
- Will subsidised energy be offered to students and local residents;
- Can more efficient panels be used to reduce the size of the site;
- Will local companies be used to ensure benefits to the local community;
- Will the site be sold by the university/how will residents be notified/how will you guarantee no multiple sales over the lifetime of the project;
- What is the evidence about flooding/surface water run off;
- How will fire hazards be managed on site;
- What ecological impact assessments have taken place/will pesticides or herbicides be used;
- Will the site become brownfield land post development;
- What are the fencing materials;
- Will the cabling be above ground;

5.0 Analysis

5.1 The key considerations in the assessment of this application are:

- Principle of development
- Landscape and Visual Impacts
- Highways
- Residential amenity
- Heritage
- Ecology and biodiversity
- Flood risk and drainage
- Other Matters.

5.2 **Principle of development (including impact on agricultural land)**

(SPLA policies SP1: Presumption in Favour of Sustainable Development; EN5: Local Landscape Designations; DMDPD Policies: DM29: Key Design Principles; DM30: Sustainable Design; DM46: Development Affecting Protected Landscapes; DM53: Renewable and Low Carbon Energy; NPPF.)

5.2.1 There is a raft of policy support at international, national, and local level which aims to combat climate change and to provide energy security. The UK Solar PV Strategy identifies a need for large-scale solar farms on greenfield sites and it is acknowledged that the delivery of a solar farm, amongst other renewable technologies, will have a positive role in tackling climate change and contributing towards a diverse energy mix.

- 5.2.2 Lancaster University declared a climate change emergency and announced its aim to become carbon neutral by 2035 through the delivery of a range of renewable energy projects. The Council itself also declared a climate change emergency on 19th January 2019, which sets out the Council's ambitions for their activities to be net-zero carbon by 2030.
- 5.2.3 The Council recognises the important role it can play through the planning system, in the delivery of appropriate renewable energy projects. The Council are also undertaking an immediate Local Plan review in order to incorporate some of the actions and directions of the council's climate emergency declaration, which will lend support to appropriate large scale solar projects. Consistent with national guidance, Development Plan policy DM53 provides in principle support for renewable energy development, where the direct, indirect, individual and cumulative impacts of the develop satisfying criteria (i) to (iv) of the policy. In essence the principle of providing renewable energy development is supported by national and local development plan policies, providing the proposed development can be made acceptable (for example by using conditions), and all other material planning considerations are satisfied.
- 5.2.4 The application site identified is greenfield land, and forms part of the open countryside, as defined in Policy EN3. Although advice contained within the NPPG encourages the effective use of land by focussing large scale solar farms on previously developed and non-agricultural land, development of agricultural land is not precluded. The site is agricultural in nature, and in order to be able to assess if the proposal will result in loss of best and most versatile (BMV) land an Agricultural Land Classification (ALC) survey has been carried out and submitted in support of the planning application.
- 5.2.5 Through appropriate site investigation the land is identified as being subgrade 3b. Grade 3a and above are considered to be BMV, therefore the use of the site as a solar farm would not result in the loss of BMV land. Nonetheless the use of the site as a solar farm will reduce the amount of land available for agricultural use during the lifetime of the permission, however the landscaping plan (which is assessed in greater detail in the sections below) shows that the scheme will retain and enhance existing hedgerows across the site and provide significant amounts of additional planting which will lead to biodiversity improvements in-line with the NPPF and NPPG.
- 5.2.7 It is understood that development of this type will be temporary in nature and fully reversible, and as such the expectation is that there would be no adverse effects following decommissioning on the land's capability for agriculture
- 5.2.8 Part of the site lies within a Mineral Safeguarding Area. A Minerals Resource Assessment (MRA) has been submitted in support of the application. The MRA identifies that while minerals existing beneath the site, due to their limited thickness, the presence of 'waste' fines and the safety aspect of extraction of granular soils in an area with shallow ground water, the minerals present are neither of strategic importance nor economic value. Thus, it is considered that the need for them to be safeguarded or worked in advance of the proposed site development is not warranted.
- 5.2.9 There is a presumption in favour of sustainable development in development plan policies and the NPPF. DM DPD policy DM53 actively supports proposals for renewable and low carbon energy schemes and therefore the proposal is acceptable in principle, subject to site specific issues relating to landscape and visual impact, amenity, ecology, and flood risk and drainage which are assessed below
- 5.3 **Landscape and Visual Impact (SPLA policies SP1: Presumption in Favour of Sustainable Development; EN5: Local Landscape Designations; DMDPD Policies: DM29: Key Design Principles; DM30: Sustainable Design; DM46: Development Affecting Protected Landscapes**
- 5.3.1 A Landscape and Visual Assessment (LVA) has been carried out by TEP and submitted in support of the proposal. The LVA has been produced in accordance with the Guidelines for Visual and Impact Assessment Third Edition (GLVIA3). The LVA assesses the potential effects of the proposed development on landscape character and landscape features and effects on visual amenity. The LVA considers the baseline conditions on the site and the surrounding area; the existing visual amenity and views towards the site; a description of the proposed development including embedded mitigation measures; and an assessment of the effects on both the landscape and visual amenity. The LVA notes that the assessment of landscape effects has been carried out using published

Landscape Character Assessments from national to county level in conjunction with field work to identify sensitive landscape receptors within the study area.

- 5.3.2 The site sits on the south eastern slope of the Langthwaite Ridge separated from the higher ground of the Forest of Bowland to the east by the Conder Valley. The topography of the site is such it runs down on a gradient from north west 73m AOD to south where it meets the River Conder at 40m AOD. The landscape of which the site forms a part consists of the following statutory and non-statutory designations: The Forest of Bowland AONB, Listed Buildings, Scheduled Monument, Ancient Woodland, Ramsar Sites, Sites of Special Scientific Interest, Special Areas of Conservation, Special Protection Areas and Registered Parks and Gardens.
- 5.3.3 The site is generally pastoral landscape defined by existing hedgerows with scattered trees surrounding improved grassland. Two small areas of woodland partially lower parts of the site with trees and vegetation running along the River Conder. While the study area contains some ecological designations, these do not relate to the landscape and are not visually dissimilar to areas of the same character that do not have ecological designation. Pylons and the wind turbine at the Lancaster University Environment Centre are visible features within the wider landscape.
- 5.3.4 The character of the site and surrounding landscape is typical of that described in of Landscape Character Area (LCA) 7c: Langthwaite Ridge, which is typical of a farmed ridge with a rich mosaic of pasture, woodland and parkland, and Forest of Bowland LCA N1: Quernmore, which is characterised by a distinctive landscape pattern of mixed woodland and pastoral farmland, predominantly delineated by stone walls; and minor road corridors, which often are lined with trimmed hedgerows as detailed in the LVA.
- 5.3.5 The LVA notes that based on the published information on landscape character there is no reason to conclude that the site and its environs are of a particular character or contain features or elements which are considered particularly important examples. There is a strong human influence as an enclosed agricultural landscape, but general absence of detracting built features other than the pylons and wind turbine.
- 5.3.6 The site does not have public access and serves no practical leisure or recreational function. Due to the nature of the development, the installation is and can be removed and the land re-instated to its former agricultural use. In other words, the impact is visual only, is non-permanent, and there is no loss of publicly accessible open space.
- 5.3.7 The LVA notes that the design process has been iterative with the potential effects being reviewed and assessed, to reduce or avoid landscape and visual effects. This process has brought about a reduction in the extent of solar panels initially proposed across the site and avoiding the highest areas of ground to the north west of the site and adjacent to the closest residential properties. Open fields will be retained in these areas and will be managed through grazing or will be hay cropped. In built mitigation seeks to minimise direct effects on landscape features such as trees and hedgerows utilising the existing field access and cladding of the proposed substation in stone to reflect the stone barns which form a common feature in this part of Lancashire. Additional mitigation would be provided through proposed planting and management guidelines for the existing vegetation within the site as shown on the Landscape Proposals Plan and Landscape Management Plan.
- 5.3.8 The LVA identifies that the overall effect of construction activity on the landscape character of the site and in its immediate surroundings, would be moderate adverse in close proximity and reduce with distance. However, these effects would be over a relatively short period of time (approximately 18 weeks) and be temporary. The construction phase would not result in the alteration or removal of any landscape elements or features of particular importance to landscape character.
- 5.3.9 The proposed development will result in a temporary change in land cover across the site from agricultural land to a solar development. Land cover across the site would change from a series of pasture fields that form part of a wider agricultural landscape, to a solar farm including solar panel arrays, inverter cabins, access tracks and a small substation. The proposed development would cover up to approximately 80% of the site and would result in a noticeable change to land use in views from the local landscape. Due to their low profile and pattern of rows the proposed solar panels would follow the changes in the contours thus reflecting the topography of the site, although partially masking the underlying landform.

- 5.3.10 The retained boundary vegetation will provide a mature landscape setting to the new development and will be supplemented by areas of new hedgerow planting. The proposal constitutes a major development within the setting of the AONB however the proposed development would only comprise a small part of the view from the AONB, would not break the skyline and introduces new infrastructure elements into a setting which currently comprises existing infrastructure elements at present. The LVA concludes that during the operational phase the development would result in negligible to moderate adverse effects to both the landscape and views including a minor adverse effect of low negative magnitude on the Forest of Bowland AONB, given it will be viewed in the context of the existing infrastructure.
- 5.3.11 Lastly the LVA considered the visual effects of the decommissioning process. It is concluded that these would be similar to the construction phase effects in that they would be carried out over a short period of time and be temporary with the site being reinstated to its former use and state.
- 5.3.12 Given the above it is clear the solar farm will undoubtedly change the character and appearance of the site and this in turn will have up to a moderate adverse effect upon parts of the landscape character and visual amenity. However, it must be considered that significant mitigation is proposed, in the form of robust additional planting; the landform of the site and surrounding area are such that the entire site is not visible at any one viewpoint; and the presence of existing infrastructure elements forms part of the existing context of the site. Weighing this in the balance the negative visual effects will be offset by the overall climate change benefits arising from the proposal.
- 5.4 **Highways (DMDP Policy DM29: Key Design Principles)**
- 5.4.1 As mentioned above the site will be accessed through the existing field access from Hazelrigg Lane to the west of the site. The field entrance will be widened to 5.5m with a double gated arrangement set back 20m to allow HGVs to enter and exit the site safely. The 20m setback will be constructed of a concrete material to prevent debris entering the highway. During construction, materials will be brought by HGVs which will enter the site through the improved field access off Hazelrigg Lane.
- 5.6.1 A Transport Assessment (TA) containing a Construction Traffic Management Plan (CMP) prepared by Hydrock has been submitted in support of the proposal. A Glint and Glare Study which amongst other things considers the potential impacts from glint and glare on road users has been prepared by Pager Power and submitted in support of the application.
- 5.6.2 Once installed the solar farm will require minimal maintenance. Only periodic on-site checks and maintenance will be required. Once construction is complete, operation of the site should not give rise to any highway issues. The County highways department has considered the proposal and reviewed the TA and CMP submitted with the proposal and raises no objection stating that the level of traffic generated from the construction phase and the development once operational at this location would not have an unacceptable impact on the surrounding highway network. A number of conditions have been recommended which include conducting a survey of the adopted highway to ensure its condition is not detrimentally effected by the proposed development; surfacing of access into the site, to ensure adequate access is available from the outset; the provision of visibility splays the implementation of the construction traffic management plan and offsite highways works, to ensure highway safety is maintained for all road users; and the provision of wheel washing facilities to ensure the site does not harm the amenity of the area or effect highways safety.
- 5.6.3 The Glint and Glare Assessment has looked at the potential effects on drivers and cyclists on surrounding roads and cycle paths, including potential impact upon the M6 motorway. For road users, the key considerations are whether a reflection is predicted in practice, the type of road (and associated speeds and levels of traffic) and location of the panels relative to direction of travel.
- 5.6.4 The Glint and Glare Assessment concludes that while reflections towards M6 (to the west) are geometrically possible, road users would not in practice experience solar reflections due to the topography of the land and intervening vegetation. National Highways did raise concern with this assessment stating the applicant should not rely on land or vegetation outside of their control. However, this land is in fact in the ownership of the University. National Highways also raised concern about the impacts on a potential new motorway junction onto the M6 in the vicinity. Pager Power submitted an addendum report which considers the potential future development of the M6

motorway and provides greater analysis of the intervening landform between the site the M6 motorway. The addendum report demonstrates that substantial changes to the landscape would have to occur for many of the receptor viewpoints in order for an impact to be experienced at these receptors, as such the existing landform and vegetation are considered to be significant. In addition to this the screening proposed within the application site would further eliminate views of the site. Lastly it is noted that the proposed junction link to the M6 is shown as located within land owned by the University who would need to make substation changes to the existing topography and vegetation above and beyond that necessary for the junction works in order for the solar farm to be visible to road users on the M6.

5.6.5 Considering the above it is concluded that there would be no impacts upon road users along the M6 or the proposed junction link and as such no additional mitigation would be required. National Highways have concurred with the findings of the updated glint and glare assessment including a visible terrain analysis from Lane 1 of the M6 northbound. National Highways are satisfied with the submitted information and subsequently have raised no objection to the proposal nor recommended any conditions.

5.6.6 The majority of roads within the 1km assessment area are considered local roads. Best practice guidance recommends that technical modelling is not required for these roads, where traffic densities are relatively low. Any solar reflection experience by a road user along a local road would be considered low impact in the worst-case scenario as such no further mitigation is required.

5.4 **Neighbour Amenity (DMDP Policy DM29: Key Design Principles)**

5.4.1 A Glint and Glare Assessment has been carried out and submitted by a specialist consultant. The assessment is based on the consultant's own published guidance document which is in its third edition and published following engagement and consultation with and review by solar developers. The assessment considers both glint and glare effects which are geometrically possible and those which would be possible in practice, taking into account distance from the site, the intervening topography and existing vegetation. Quantification of impact is based on whether significant reflection is predicted in practice and the duration of the predicted effects. Where effects occur for less than 3 months per year and less than 60 minutes per day the significance is low and no mitigation is required. Where effects last for more than 3 months and less than 60 minutes per day the impact is moderate and assessment of mitigating factors is required, such as screening, separation distance and location of the receptor. Impacts amounting to over 3 months per year and 60 minutes per day are high and mitigation is needed.

5.4.2 A total of 50 residential properties which are within 1km of the site were assessed. There are 32 of the 50 residential properties surrounding the site where modelling reveals solar reflections are geometrically possible. Of these 32 properties there are only 14 residential properties where views of the reflecting panels are possible considering distance from the site, the intervening topography and existing vegetation. The conclusion finds that for 12 of these properties the impact will be low, and mitigation is not required. For 2 properties (Eastrigg and the residential property at Valley View Pets Hotel) the worst-case impact will be moderate due to the effects lasting more than 3 months per year but for less than 60 minutes on any one day. This requires mitigation which is provided in the form of separation distance of over 30m to Eastrigg and 115 metres Valley View and reflecting area of panels; screening in the form of proposed landscaping; intensity of reflection from the panels which would be similar to that of still water rather than the typical reflections from glass or steel which are more intense. Overall, the assessment concludes no further mitigation than the additional planting proposed on the southern and eastern boundaries of the site is required. The university has also commented to state that should permission be granted they would plant the screening closest to these residential properties during the construction phase in order to allow a greater amount of time for it to establish and grow prior to the operation phase. A condition will be included to secure these works within a specified timeframe.

5.4.3 The loss of a view from a private property or an impact to property prices are not material planning considerations, however the impact on residential amenity and outlook is taken into consideration above. Although some panels will be visible from 14 properties, the distance, intervening landform, existing and proposed screening and overall public benefit is considered to outweigh the negative effects.

- 5.4.4 At a local level during the construction phase there is likely to be some temporary noise and disturbance. The CMP sets out how the construction phase will be managed to ensure that traffic, noise, dust and disturbance is kept to a minimum. During the operation phase some noise would be generated from inverters and substations, however given the distance to the nearest dwelling this is unlikely to have a significant impact upon amenity. On top of this Environmental Health have reviewed the scheme and raised no concerns.
- 5.5 **Heritage and Archaeology:** (SPLA Policy SP7: Maintaining Lancaster District's Unique Heritage; DMDPD Policy DM37: Development affecting listed buildings Policy DM39: The Setting of Designated Heritage Assets; Policy DM41: Development affecting Non-Designated Heritage or their settings; Policy DM42: Archaeology)
- 5.5.1 A Heritage Assessment (HA) has been carried out and submitted in support of the proposal. The HA correctly identifies that there are 5 grade II listed properties and 73 non-designated heritage assets (NDHA) with a 1km radius of the site. One NDHA, a bronze age socketed axe, is identified within the site boundary.
- 5.5.2 Of the 5 grade II listed buildings identified, the site is only within the wider setting of Dam Head. Given the proposed layout and landscaping scheme the heritage assets agricultural setting adjacent to the River Conder is considered to be preserved. Given the relationship between the site and the distance involved, it is considered that the site only makes a limited contribution to the significance of this asset. The proposed layout also ensures that the site is set back from the immediate setting of Hazelrigg Barn and Banton House both of which are NDHAs.
- 5.5.3 Considering the above the proposed scheme is not considered to result in harm to the designated and non-designated built heritage assets and as such no further mitigation is required in relation to heritage assets.
- 5.5.4 The site has been assessed for Archaeological potential and a desk-based assessment (DBA) submitted in support of the proposal. The DBA identifies that the site is considered to have moderate potential for unknown heritage assets to survive as below-ground remains from the prehistoric, Roman and post-medieval period and a low to negligible potential for all other periods. Based on the information available the remains, if any, are considered likely to be of low to moderate significance and as such of local or regional significance. If remains are present these would likely be adversely impact upon by construction. The DBA has been assessed by the Country Archaeologist who concurs with the findings and recommends the submission of a written scheme of investigation, and that trial trenching is carried out prior to commencement of development. These requirements would be secure through an appropriately worded planning condition.
- 5.5.5 The HA concludes that, following the proposed mitigation, the identified heritage and archaeological assets would be at most subjected to low impact from the proposed scheme which would result in less than substantial harm. Public benefits of the scheme as a result of production of renewable energy will contribute to both the university and the council's pledge to reduce emissions to tackle the climate emergency. Therefore, on balance the public benefits arising from the scheme outweigh the less than substantial harm to the historic environment in accordance with local and national planning policy.
- 5.6 **Ecology and Biodiversity:** (SPLA Policy SP8: Protecting the Natural Environment; DMDPD Policy DM44: Protection and Enhancement of Biodiversity; Policy DM45: Protection of Trees, Hedgerows and Woodland)
- 5.6.1 Biodiversity is in decline across the UK and is interconnected with the climate emergency. An Ecological Assessment has been carried out by a qualified ecologist and submitted in support of the application. Under best practice, solar farms have the potential to contribute to increased biodiversity and improved wildlife habitats. The current site consists of poor semi-improved grassland which is heavily grazed and as such the site is not botanically diverse nor does it provide habitat for protected species.
- 5.6.2 The majority of hedgerows, trees and woodland on the site will be retained, along with the two ponds. Some newly planted young trees will be removed to facilitate development. The councils

arboricultural officer has reviewed the proposal and raised no objections to the removal of the trees proposed, commenting that the landscape mitigation is extensive, consisting of 14,000 new trees, and shrubs across the site. The Arboricultural officer also welcomes the 'forest of the future' zone identified on the landscape plan although notes that this does not form part of this application.

- 5.6.3 The Great Crested Newt (GCN) survey concluded that neither of the onsite ponds has the potential for GCN, therefore no GCN mitigation is required. The site has limited habitats for toads and other amphibians, and these will not be impacted by the proposed development. Very limited areas were identified as having potential for badger sett creation. Although there was no evidence of badger activity at the site and as such the development is unlikely to impact upon badgers. In terms of bats the site has good opportunities for both foraging and commuting, with some of the woodland areas having up to a moderate potential to support bat roosting. The proposed development is located away from these areas and as such any impact would be limited and would not require mitigation.
- 5.6.4 Winter bird surveys revealed that habitats within the site are sub-optimal. Additionally, fields within 500m of the site were found to be utilised for winter bird feeding at low levels and infrequently, as such impacts are unlikely upon Morecombe Bay & Duddon Estuary SPA and the Morecombe Bay Ramsar site.
- 5.6.5 In terms of riparian wildlife, the river conder has the potential to support both otter and water vole, however no evidence of either species or habitats were found within the site.
- 5.6.6 The proposed panels are to be in rows with spaces between allowing for habitat growth and biodiversity enhancement. In addition to this the exclusion zone which would contain meadow grassland and margins of the site where the tussock grass is proposed would offer the opportunity of biodiversity enhancement for a wide range of invertebrates and other wildlife. This can be secured through conditions
- 5.6.7 A habitat regulations assessment (HRA) has been submitted in support of the application which considers the impact of the proposed development on the Morecombe Bay and Duddon Estuary SPA and Morcombe Bay Ramsar site and whether there is a functional link between these sites and the application site. The HRA concludes that, without mitigation, there would be no effects upon these designated sites and as such there is no need to progress to the Appropriate Assessment stage.
- 5.6.8 Invasive species were found on the site include Himalayan balsam, giant hogweed, rhododendron and floating pennywort. It is an offence to cause the spread of these species intentionally or unintentionally in the wild under the terms of Wildlife & Countryside Act 1981 (as amended) as such it is appropriate in the interest of biosecurity to secure a method statement through appropriately worded planning condition.
- 5.6.9 Local policy DM44 and national planning legislation and the recently adopted Environment Act 2021 requires sites to achieve biodiversity net gain (BNG) A BNG Assessment has been carried out and submitted in support of the application. Using the Department for Environment, Food and Rural Affairs (DEFRA) biodiversity metric, there is a predicted BNG of 9.55 habitat units, which equates to a BNG of 331.07%. Greater Manchester Ecological Unit (GMEU) agrees with this figure although points out a loss of openness of the site may deter some bird species from using the site which is not taken into account in the DEFRA metric. Nonetheless, even taking this into account, the BNG would still be significant, far in excess of the DEFRA recommended 10% BNG. The biodiversity enhancement of the site will be secured in the long term through the biodiversity management plan.
- 5.6.10 GMEU has reviewed the proposal including all the ecological supporting information and concurs with the findings. GMEU raise no objections or concern with the proposal. Overall, the scheme has no detrimental impacts upon ecology and would result in a significant biodiversity enhancement of the site. The proposed biodiversity enhancements, mitigation and management plans will be secured via planning condition.
- 5.7 **Flood Risk and Drainage** (DMDPD Policy DM 34: Surface Water Run-off and Sustainable Drainage)

- 5.7.1 The Environment Agency (EA) Flood Maps indicates that the majority of the site falls within Flood Zone 1 and as such is at the lowest risk from flooding. The River Conder runs just south of the site and a small section of the site (at its south-eastern edge) is located within Flood Zones 2 and 3. The applicant engaged with the EA at an early stage and under EA advice has carried out hydrological and hydraulic modelling of the site and adjacent watercourse (River Conder). The modelling has confirmed that majority of the site is correctly identified as Flood zone 1, with a slight increase (<20m) in the flood extent when compared to EA mapping.
- 5.7.2 A flood risk assessment (FRA) and drainage strategy have been prepared and submitted in support of the application. The amount of impermeable surface across the site would be very slightly reduced however this has been taken into account in the DRA and drainage strategy. An internally sequential approach to development has been applied and all essential infrastructure is located outside of Flood Zone 3, as such an exception test is not required.
- 5.7.3 Some parts of the site are at risk of increased surface water flooding due to the presence of land drainage channels running through the site. A Ground Investigation report concludes that infiltration is not a suitable means of dealing with surface water, and as such given the sites proximity to the River Conder discharging surface water into the watercourse is appropriate in this case.
- 5.7.4 The EA has reviewed the FRA including the hydrological and hydraulic modelling and have raised no objection but note some further clarification is required before the model can be fully accepted. However, the EA are content for this information to be secured through an appropriately worded condition. Further information has been received which seeks to remove the need for this condition. The EA are in the process of reviewing this. An update will be provided to committee.
- 5.7.5 The Lead Local Flood Authority (LLFA) have reviewed the submission and raised no objection subject to a number of conditions.

5.8 Other Matters

- 5.8.1 The applicant has engaged with the council's pre-application service as well as key stakeholders and member of the public. The applicant has engaged with member of the public through an online consultation process and taken into consideration the views expressed in the development of the scheme.
- 5.8.2 The majority of concerns raised in both the parish council and public comments (both neutral and objections) have been addressed in the analysis section of the above report. In addition to this the applicant has provided a response to all parish and public comments which has been added to the planning file and is publicly available. However, for clarity, the following comments address those outstanding concerns not covered by the above report.
- 5.8.3 The Applicant will consider as part of their procurement process the opportunities for adding social value by locally sourcing products and labour where this is possible, as well as recycling the panels where possible. The life of a solar farm is expected to be around 25 years notwithstanding any unforeseen circumstances. Following decommissioning the site will return to its former use. The substation will be fitted with a fire alarm which will be monitored by the University's security team 24/7, additionally the site will be monitored through the CCTV cameras proposed in this application. No external lighting is proposed as part of this application. While the university has stated that it does not have plans to sell the site, the future ownership of the site is not a material planning consideration. The university does not plan to offer subsidised energy to local residents as the electricity will be used by the university throughout its estate.
- 5.8.4 The loss of a view from private property and impact upon property value are not material planning considerations. Any future expansion of the site would be subject to a planning application and would be considered at such time based on its own merits.

6.0 Conclusion and Planning Balance

- 6.1 The proposed development would result in some negative effects from adverse landscape and visual impacts to the character of the site and a limited number of viewpoints; adverse glint and glare to two residential properties; and less than substantial harm to the historic environment. However,

these negative effects would be ameliorated through appropriate mitigation including retention of existing vegetation, a robust landscaping scheme and a programme of archaeological investigation and evaluation.

- 6.2 These adverse effects are more than sufficiently offset by the significant contribution the development will make towards the Council's initiative to tackle climate change. Once in operation the site would be capable of generating 16.5MWp of renewable energy which is equivalent to powering 3,125 4 bed homes and would save approximately 2,654 tonnes of CO₂ emission annually (equivalent to 600 average cars being taken off the road). Additionally, as well as the site being capable of being developed without causing harm to the internationally designated Morecambe Bay and Duddon Estuary SPA and Morcombe Bay Ramsar site. the development will contribute significantly to local flora and fauna through a range of biodiversity enhancements. If decommissioned, the site can revert to its former use.
- 6.3 On balance the considerable environmental and public benefits of the scheme are considered to far outweigh the adverse impacts. As such in accordance with local and national policy the scheme is recommended for approval.

Recommendation

That Planning Permission **BE GRANTED** subject to the following conditions:

Condition no.	Description	Type
1	Standard 3 year timescale	Standard
2	Approved plans	Standard
3	Landscaping scheme implementation	Standard
4	Development carried in accordance with the submitted Flood Risk Assessment	Standard
5	Work outside bird nesting season	Standard
6	Implementation of Construction Traffic Management Plan	Standard
7	Decommissioning after 25 years of use	Standard
8	All cabling to be underground	Standard
9	Final Sustainable Drainage Strategy to be submitted	Prior to commencement
10	Survey of the adopted highway	Prior to commencement
11	Surfacing of access	Prior to commencement
12	Provision of visibility splays	Prior to commencement
13	Implementation of a programme of archaeological works	Prior to commencement
14	Invasive species method statements	Prior to commencement
15	Offsite highways work	Prior to commencement
16	Flood risk mitigation scheme	Prior to commencement
17	Details of colours/materials (including boundary treatments)	Prior to use on site
18	Operation and Maintenance Plan & Verification Report of Sustainable Drainage System	Prior to first use
19	Implementation of BNG measures	Prior to first use
20	Construction Phase Surface Water Management Plan	Specific time
21	Implementation of landscape and biodiversity management plan	Specific time
22	Provision of wheel washing facilities	Specific time
23	Implementation of planting surrounding residential properties	Specific time

Article 35, Town and Country Planning (Development Management Procedure) (England) Order 2015

In accordance with the above legislation, Lancaster City Council has made the recommendation in a positive and proactive way to foster the delivery of sustainable development, working proactively with the applicant to secure development that improves the economic, social and environmental conditions of the area. The recommendation has been made having had regard to the impact of development, and in particular to the relevant policies contained in the Development Plan, as presented in full in the officer report, and to all relevant material planning considerations, including the National Planning Policy Framework, National Planning Practice Guidance and relevant Supplementary Planning Documents/ Guidance.

Background Papers
None