Little Crow
Solar Park

National significant infrastructure project in the Energy Sector

Little Crow Solar Park, Scunthorpe

PRELIMINARY ENVIRONMENTAL INFORMATION REPORT

NON-TECHNICAL SUMMARY

On behalf of INRG Solar (Little Crow) Ltd

November 2018

LITTLE CROW SOLAR PARK

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NON-TECHNICAL SUMMARY

LAND TO THE EAST OF STEEL WORKS, SCUNTHORPE

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PLANNING | DESIGN | ENVIRONMENT | ECONOMICS

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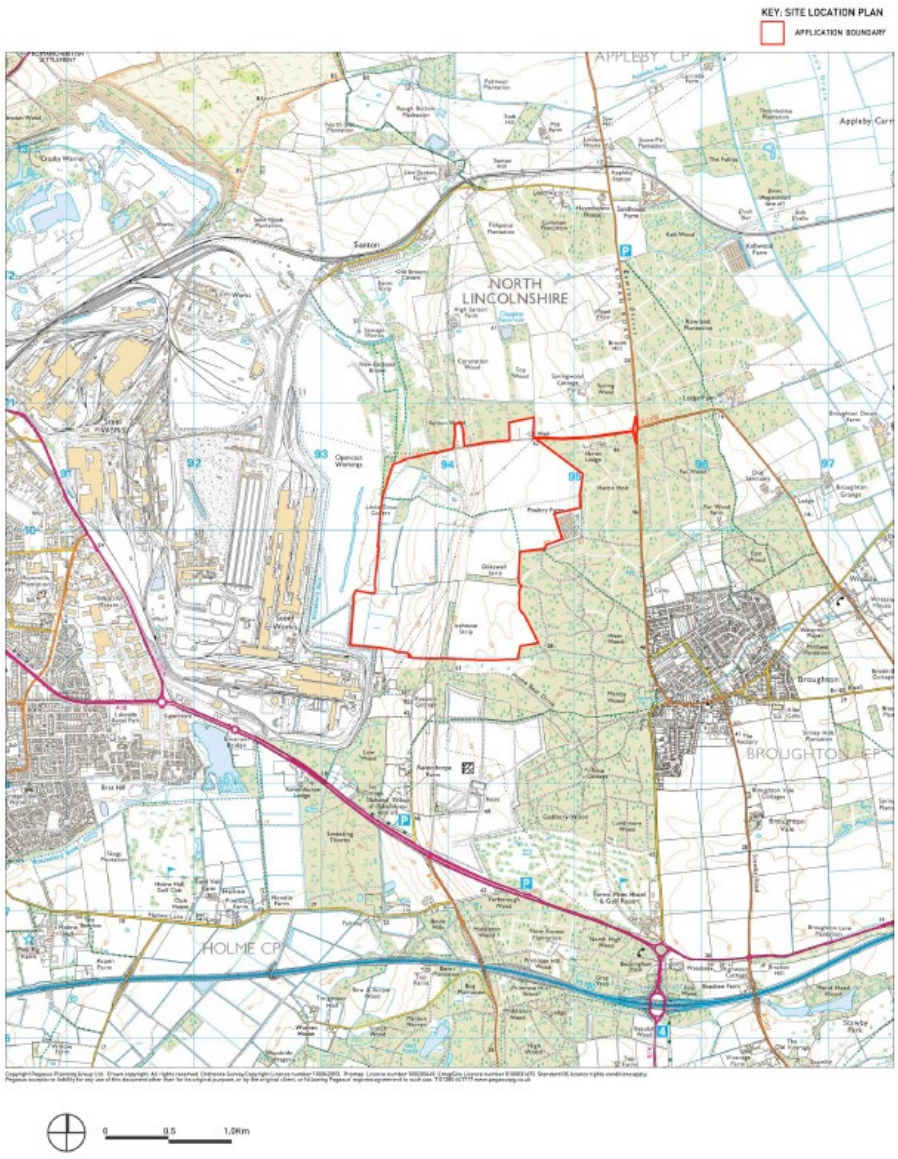
1. INTRODUCTION

1.1 INRG Solar (Little Crow) Ltd ("the applicant") is proposing a renewable energy led development on land to the east of the steel works at Scunthorpe. The site location is shown below: -



1.2 The development relates to the construction, operation, maintenance and decommissioning of Little Crow Solar Park. The main elements of the development is the installation of a ground mounted solar park with a maximum design capacity of 150MWp (megawatts peak) and up to 90MW of battery storage. There will also be electrical connection infrastructure and the point of connection into the local

electricity grid is directly into the 132KV electricity overhead pylon which already runs through the site.

1.3 By virtue of its potential generating capacity, which stands at over 50MW, this development constitutes a Nationally Significant Infrastructure Project (NSIP). Therefore, instead of applying to North Lincolnshire Council for Planning Permission, the applicant must apply to the Secretary of State for a Development Consent Order (DCO). The process for applying for a DCO is set out in the Planning Act 2008.

Requirement for Consultation

1.4 In advance of an application for a DCO being submitted, the Planning Act 2008 requires the applicant to consult widely. This includes consulting the local community; prescribed bodies (including relevant technical consultees and statutory undertakers); relevant local authorities; and people with an interest in the land.

1.5 Consultation is now being undertaken by the applicant and this runs from Monday 3rd December 2018 to Monday 4th March 2019 in accordance with the Little Crow Solar Park Statement of Community Consultation (SoCC).

1.6 This document accompanies the consultation and represents a Non-Technical Summary of the Preliminary Environmental Information Report (PEIR).

What is a PEIR

1.7 The purpose of the PEIR is to provide sufficient preliminary environmental information to enable the local community and consultees to develop an informed view of the development. The applicant is seeking consultation responses to the information presented as this will inform the final design and the final assessment of potential impacts presented within an environmental statement which will accompany the DCO application. The PEIR is structured as a draft environmental statement and split into three documents containing: the main statement, the supporting technical appendices and this Non-Technical Summary.

1.8 This Non-Technical Summary provides a summary of the PEIR's main statement.

Summary of the DCO Application Process

1.9 Below is a summary of the DCO process.

- Pre-application - INRG Solar (Little Crow) Ltd notifies and consults the public, statutory consultees and those with an interest in the affected land on its proposed application.
- Submission - INRG Solar (Little Crow) Ltd will review the feedback received during consultation and finalise the proposals, taking the feedback into account. A DCO application will then be submitted to the Planning Inspectorate.
- Acceptance - after the application is submitted, the Planning Inspectorate will decide whether it is suitable for examination.
- Pre-examination - if accepted for examination, there will be an opportunity for people to register their interest in the application with the Planning Inspectorate. Anyone registered will be kept informed of the progress of the application by the Planning Inspectorate. Planning Inspectorate will invite all those registered to a preliminary meeting that will explain the timetable and format of the examination.
- Examination - the examination lasts around six months. People who have registered their interest will be able to take part in the examination and send their comments to Planning Inspectorate.
- Decision - following the examination, the Planning Inspectorate will make its recommendation on the application to the Secretary of State, and the Secretary of State has the final decision as to whether consent is to be granted.

1.10 Further information on the Planning Inspectorate and the planning process can be found here https://infrastructure.planninginspectorate.gov.uk.

What Happens Next

1.11 At the close of the consultation, all responses received will be carefully considered and taken into account in finalising of the development. If the development changes to such an extent that it is necessary to undertake further consultation, then this further consultation will be undertaken in accordance with the principles set out in

the SoCC. If we are in position to finalise the application, then we aim to move forward and submit by Summer 2019.

1.12 When the application has been accepted by PINS, INRG Solar (Little Crow) Ltd will advertise that the application has been submitted and accepted.

2. DEVELOPMENT SITE

2.1 The development site is located on a localised ridge between the settlements of Scunthorpe to the west and Broughton to the east. The village of Broughton is separated from the site by an extensive area of dense forestry and woodland. Between the main residential and commercial areas of Scunthorpe, directly adjacent to the western boundary of the site, lies the extensive industrial complex of the Scunthorpe Steel Works.

2.2 The site extends to approximately 226 hectares and is comprised largely of arable fields which are bounded and heavily contained by dense woodland to the north, east and south which serve to provide significant screening of the site from the wider landscape. Phased forestry operations take place in the surrounding woodland. A Public Right of Way (Footpath 214 on the Definitive Rights of Way map) crosses the site. An existing farm track links the site to the B1207, north of Broughton.

2.3 The site generally comprises open farmland, which is surrounded by a network of hedgerows and ditches as well as extensive woodland plantations. The most frequently encountered habitat within the site is arable farmland. Field margins are characterised by coarse, semi-improved grassland. This habitat is also encountered alongside farm tracks and in some areas of fields which had been left fallow. Broughton West Wood Local Wildlife Site (LWS) partially borders the east of the site and is designated for its woodland habitat. Broughton Far Wood Site of Special Scientific Interest (SSSI) and Broughton Alder Wood SSSI are located 820m and 920m east of the site boundary respectively.

2.4 The site of the former medieval Gokewell Priory is located within the northern area of the site. This is a non-designated site and survives as above-ground remnant earthworks and potential belowground archaeological remains. The landscape surrounding the site of the former medieval priory has undergone extensive change since the medieval period. The medieval field systems are no longer extant, and the surrounding area is now made up of very large, modern blocks of agricultural land. The agricultural regimes have also changed noticeably since the medieval period, with more intensive ploughing and use of the land.

2.5 The site is located in Flood Zone 1, at low risk of flooding.

3. DEVELOPMENT PROPOSAL

3.1 The main element of the development is the construction, operation, maintenance and decommissioning of a ground mounted solar park with a maximum design capacity of up to 150MWp (megawatts peak) and up to 90MW of battery storage capacity. The proposed layout is provided at **Appendix 1**.

APPENDIX 1: PROPOSED LAYOUT

3.2 The photovoltaic panels would be laid out in straight arrays set at an angle of c. 20 degrees from east to west across the field enclosures. The distance between the arrays would respond to topography but would typically be between 3.5 metres to 6 metres. The top north edges of the panels would be up to 3.5 metres above ground level and the lower edges of the panels would be approximately 0.8 metres above ground level. The arrays would be static.

3.3 Battery storage will allow the development to fully utilise the network connection capacity when the solar park is not exporting at peak capacity. Battery storage will be connected to the distribution terminals in the substation and consists of batteries that can store energy from and release electrical energy to the electricity network. A single main substation compound will serve the whole development, and this will be required for the duration of the development.

3.4 An operational lifespan of 35 years would be sought. The solar and battery elements could either be delivered and connected to the electricity network independently of each other or at the same time. After an operating period of 35 years the development would be decommissioned.

3.5 The development also includes a package of landscape, ecological and biodiversity benefits that could include the installation of barn owl boxes, bird nesting boxes, bee hives, log piles and other hibernacula such as small buried rubble piles suitable for reptile species, amphibians and insect life. Land between and beneath the panels would be used for biodiversity enhancements and seasonal sheep grazing. Tree planting would be introduced along the north east perimeter to bolster screening.

3.6 A development exclusion zone will be provided for the site of the former Gokewell Priory, no infrastructure will be placed within this zone and it is being promoted for biodiversity, planting and hedgerow enhancement.

3.7 The solar park would generate clean renewable energy for the equivalent of approximately 40,000 homes a year. The anticipated CO2 displacement is around 50,000 tonnes per annum.

3.8 The proposal would provide a clean, renewable and sustainable form of electricity. It would make a valuable contribution to the generation of electricity at a local level. The development would add to the Council's progress in meeting its renewable energy target. It would also assist in meeting national targets.

3.9 Construction is anticipated to take circa 11 months. It is proposed that construction traffic will arrive from the M180 junction 4, the A15, the A18, the B1208 and B1207 to the site access. No construction vehicles associated with the development proposal would travel through Broughton.

3.10 Temporary diversion of a section of the Public Right of Way traversing the site will be required during the construction and decommissioning periods in order to separate and keep apart members of the public from the construction / decommissioning vehicles and machinery.

3.11 One of the biggest constraints which must be considered with renewable led energy developments is gaining a viable point of access to the utilities network. The applicant has accepted the grid offer from Northern Power Grid and secured the 99.9MW export capacity required for a project of this size. The grid offer accepted can only be used for the Little Crow Solar Farm and cannot under be transferred to any other site. The only viable connection voltage for a development of this size is 132kV and it requires the construction of a new 132kV sub-station on-site. The 99.9MW capacity which has been secured by the applicant, has taken the electricity network to its maximum fault level.

4. LEGISLATION, CLIMATE CHANGE, ENERGY PLANNING POLICY & GUIDANCE

4.1 The Planning Act 2008 introduced a new system for consulting on, examining and determining whether consent should be granted for NSIPs.

4.2 National Policy Statements are the overarching policy documents for the Examining Authority to take into account when determining an application for nationally significant energy infrastructure and form the basis for determination of decisions.

Overarching National Policy Statement for Energy (EN-1) dated July 2011

4.3 The National Policy Statement for Energy (EN-1) sets out the national policy for energy infrastructure, which encompasses renewable energy schemes generating more than 50MW. Salient points of the document are: -

- The energy NPSs should speed up the transition to a low carbon economy and thus help realise UK climate change commitments sooner than continuation under the current planning system;
- The energy NPSs are likely to contribute positively towards improving the vitality and competitiveness of the UK energy market by providing greater clarity for developers which should improve the UK's security of supply thus helping to secure affordable supplies of energy and minimizing fuel poverty;
- The Government's wider objective for energy infrastructure includes contributing to sustainable development and ensuring that energy infrastructure is safe; and
- The determining authority should start with the presumption in favour of granting consent to applications for energy NSIPs. That presumption applies unless any more specific and relevant polices set out in the relevant NPSs clearly indicate that consent should be refused.

Renewable and Low Carbon Energy (last updated 18 June 2015)

4.4 This guidance reaffirms the Government's commitment towards increasing the amount of renewable energy and low carbon technologies within the UK. Paragraph 1 states: *"Increasing the amount of energy from renewable and low carbon technologies will help to make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment*

in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable".

4.5 The background to the current drive to increase the use of renewable sources of energy has its roots in the recognition that the burning of fossil fuels has an adverse effect on the climate of the world as a whole and that global measures are required to deal with it. The extensive use of fossil fuels that accompanied the industrialisation of the world's economy has released large volumes of carbon dioxide back into the atmosphere. The accumulation of greenhouse gases in the upper atmosphere reduces the planet's ability to reflect solar radiation back into space, resulting in a gradual increase in mean global air temperature.

5. LANDSCAPE AND VISUAL

5.1 The likely effects of the development on landscape character, landscape feature and elements within and in the immediate vicinity of the development have been assessed. The salient points are discussed below.

General Views and Screening Elements

5.2 In general, the position of the site on a localised ridge ought to make it notable in the landscape but the woodland surrounding the site limits the potential for views to the north, east and south. Furthermore, the large built form of the Steelworks to the west of the site, particularly the long rolling mills, limits the majority of potential views from the town.

5.3 The most notable views of the site are therefore limited to the public footpath running through and across the site. There would be very limited visibility in the wider landscape, often limited to possible glimpsed views through very limited breaks in the forestry.

Landscape Character

5.4 The introduction of the solar panels and batteries would represent a direct and notable change to the land use of the site, and notwithstanding that the ground beneath the panels would be managed as grassland, it is acknowledged that for the lifetime of the development there would be a significant effect on landscape character within the site and its immediate surroundings.

5.5 It is considered that the potential for effects on landscape character would be extremely limited and localised. Effects would be restricted to a major effect that would not extend beyond the site and its immediate surroundings within the Heathy Woodland and Wooded Scarp Slope character areas. There would be no more than a negligible effect on landscape character on any of the published character areas in the surrounding landscape.

5.6 In addition, the nature of the site, being located within a landscape which is surrounded by woodland on three sides and a large industrial complex on the other, is such that notwithstanding the scale of the development, the primary characteristics of the local and wider landscape, including the character areas in which the site is located, would not be diminished.

Visual Amenity

5.7 The number of residential properties which offer the potential for residents to experience views towards the site in close proximity to the site are very limited. Footpath 214 runs through the site area from the woodland to the east of the site to Santon and the edge of the of the Steel Works to the north west. The potential effects on walkers using this route as it passes through the site area itself are judged to be significant. The route would be defined on both sides by fencing associated with the solar park, albeit that the effects of the fencing will be softened slightly by new native hedgerows planted adjacent to the path offset to allow wide grassy verges on both sides of the path.

5.8 Aside from this footpath route, there would be no other significant effects on visual receptors arising from the development during its construction, operation and subsequent decommissioning.

Mitigation and Enhancement

5.9 In order to reduce the likelihood of significant adverse landscape and visual effects, mitigation has been included within the design of the proposals, these include the planting of new hedgerows along the Public Right of Way through the site and the sowing of wildflower seed in the margins between the path and the hedges.

6. ECOLOGY AND NATURE CONSERVATION

6.1 The likely effects of the development on ecology have been assessed. Ecological impacts cannot be confirmed for decommissioning as the ecological constraints at the point of decommissioning are extremely difficult to predict at this stage. The salient points are identified below.

6.2 The suite of ecological surveys undertaken to date identified a range of habitats on/immediately adjacent to the site; however, the majority of habitat within the construction zone (arable and semi-improved grassland) were of low ecological value. The habitats within and adjacent to the site were assessed as being suitable for a variety of notable and protected species. A number of designated sites were present immediately adjacent to the site and/or within the zone of influence of the development.

6.3 A total of 20 "Important Ecological Features" were identified: Broughton Far Wood Site of Special Scientific Interest, Heron Holt Local Wildlife Site, Broughton West Wood Local Wildlife Site , Manby Wood Local Wildlife Site, Broughton Far Wood Local Wildlife Site, Rowland Plantation Local Wildlife Site, Broughton West Wood Site of Nature Conservation Interest, Santon Wood Site of Nature Conservation Interest, arable field margins, semi-natural broadleaved woodland, plantation broadleaved woodland, hedgerows, ponds, ditches, bats, brown hare, breeding birds of open habitats, breeding birds of boundary habitats, wintering birds of open habitats and invertebrates. Mitigation for badgers has also been included due to a requirement for legal compliance.

Likely Impacts

6.4 Key sources of impacts during construction were identified to be habitat loss, fragmentation, disturbance of species through noise and vibration, degradation of habitats by pollution or dust deposition and the incidental mortality of species during construction. Fewer operational phase effects were noted as post construction activity at the site would be minimal. However, the loss or modification of the habitat during operation, which will occur during the construction phase, will persist for certain species throughout the operational phase, potentially having long-term adverse effects. Conversely for other species and habitats the long-term operation of the site is anticipated to be beneficial, even within the implementation of mitigation and enhancement measures.

6.5 The key effects likely to result in significant adverse effects are mainly associated with habitat loss (as a result of construction activities), incidental damage to habitats and mortality of animals during construction, degradation of habitats resulting from dust/runoff/collision and disturbance of species utilising adjacent habitats.

6.6 Operational phase effects are considered to be generally neutral, with beneficial effects identified through cessation of intensive arable farming practices, as well as the creation of native, species-rich hedgerows on site which will improve connectivity as well as foraging and nesting/ sheltering habitat for a range of species although weighted against the uncertainty in respect to ground nesting birds.

Mitigation and Enhancement

6.7 A number of mitigation measures have been identified that are considered essential to reduce or eliminate potential adverse effects from both the construction and operational phases. The cessation of intensive arable activities within the array and reversion to grassland and under a sheep-grazing regime is likely to benefit those species which will utilise the solar array for winter foraging as the invertebrate and seed load is likely to increase. Approximately 20 hectares of retained, open land within the array will be provided within the middle of the site, which will remain free of panels. The majority of this is at least 80m in width, and sited away from tall woodland. This area is also proposed to be managed as grassland under a sheep-grazed grazing regime.

6.8 The retention of circa 20 hectares of open land is expected to offer sufficient habitat within the site for the wintering bird species which currently use the site, particular the moderate to large flocks of lapwing and skylark recorded using the site.

6.9 During the operation of the solar farm, the change of land use from the existing arable habitat underneath the arrays to grasslands subject to minimal disturbance and managed under a Landscape and Ecological Management Plan will lead to an increase in the quality of the habitats across the site for invertebrates, particularly due to the cessation in spraying of crops.

6.10 The development will deliver a range of ecological enhancements intended to benefit a variety of features important for nature conservation. These

enhancements will be designed to deliver additional ecological benefits beyond those expected to occur as a result of the mitigation measures.

6.11 Acid grassland seed mixes sown at easements between panels spread around the site will contain larval food plants and nectar sources for adults of a variety of target pollinating invertebrate species which are listed as Species of Principle Importance, including grayling *Hipparchia semele*, wall *Lasiommata megera* and small heath *Coenonympha pamphilus* which are known to be present at Yarborough Quarry to the north west of the site.

6.12 In addition, bat boxes are to be installed as mitigation for any loss of trees at the site. These will be maintained for at least the duration of the development.

6.13 Bird boxes designed to attract a range of bird species of conservation concern will be installed on suitably mature trees within and adjacent to the site. This will enhance the site value for breeding birds which occupy boxes and holes in trees. These will be maintained for at least the duration of the development.

Conclusions

6.14 With the successful implementation of the mitigation measures, any adverse impacts upon the ecological features identified can largely be reduced to a non-significant level.

6.15 The creation of new habitats of greater biodiversity value than the current habitats within the site present the opportunity to enhance the biodiversity value of the area. As such it is anticipated that during the operational phase the development will result in a minor beneficial enhancement of hedgerows through appropriate management and new planting, as well as minor beneficial impacts on woodland habitats, invertebrates, and non-ground nesting birds.

7. CULTURAL HERITAGE

7.1 We have undertaken an assessment of the likely effects of the development upon archaeological remains within the site and the designated assets within its surroundings. The salient points are set out below.

7.2 There are no designated assets within the site boundary. The site of the former medieval Gokewell Priory is located within the northern area of the site, this asset and the buffer area that surrounds it are not proposed for development. The remains of the priory comprise above-ground remnant earthworks and potential below-ground archaeological remains, and this asset principally derives its significance from the archaeological interest and evidential value of said remains.

7.3 A number of potential archaeological features have been identified in the results of a geophysical survey undertaken at the site. Additional potential archaeological features identified include linear ditches, former field boundaries (some of which are shown on historic maps), and plough marks. The significance of these potential features is yet to be confirmed, but based on their form in the preliminary survey results, they are not anticipated to be of the highest significance.

Likely significant effects

7.4 It has been established that the development has the potential to affect known archaeological remains associated with possible prehistoric and medieval archaeological remains as well as potential previously unrecorded archaeological remains. The excavation of cable trenches and building foundations, the insertion of new roads, and inserting/removing the mounting system structures (and any associated landscaping or services) have the potential to truncate or totally remove the archaeological remains within their footprint. Such effects would result in harm to or total loss of significance of these buried archaeological features.

Mitigation and Enhancement

7.5 It has been established that the development would not lead to harm to any heritage assets located in the vicinity of the development site, including the Scheduled Raventhorpe deserted medieval village, and no further mitigation with regard to these assets is required. Likewise, there are not anticipated to be any significant effects to Gokewell Priory given development is excluded from this area.

7.6 The development has the potential to affect potential archaeological remains associated with prehistoric activity, the remains of a military feature and potential previously unrecorded archaeological remains. The results of a forthcoming field evaluation will provide further information on the presence and significance of heritage assets within the development site. Based on present knowledge, it is not anticipated that any remains would be of the highest heritage significance, such that preservation in situ would be required. It is expected that any potential harm to the non-designated heritage assets present could be satisfactorily mitigated by preservation by record.

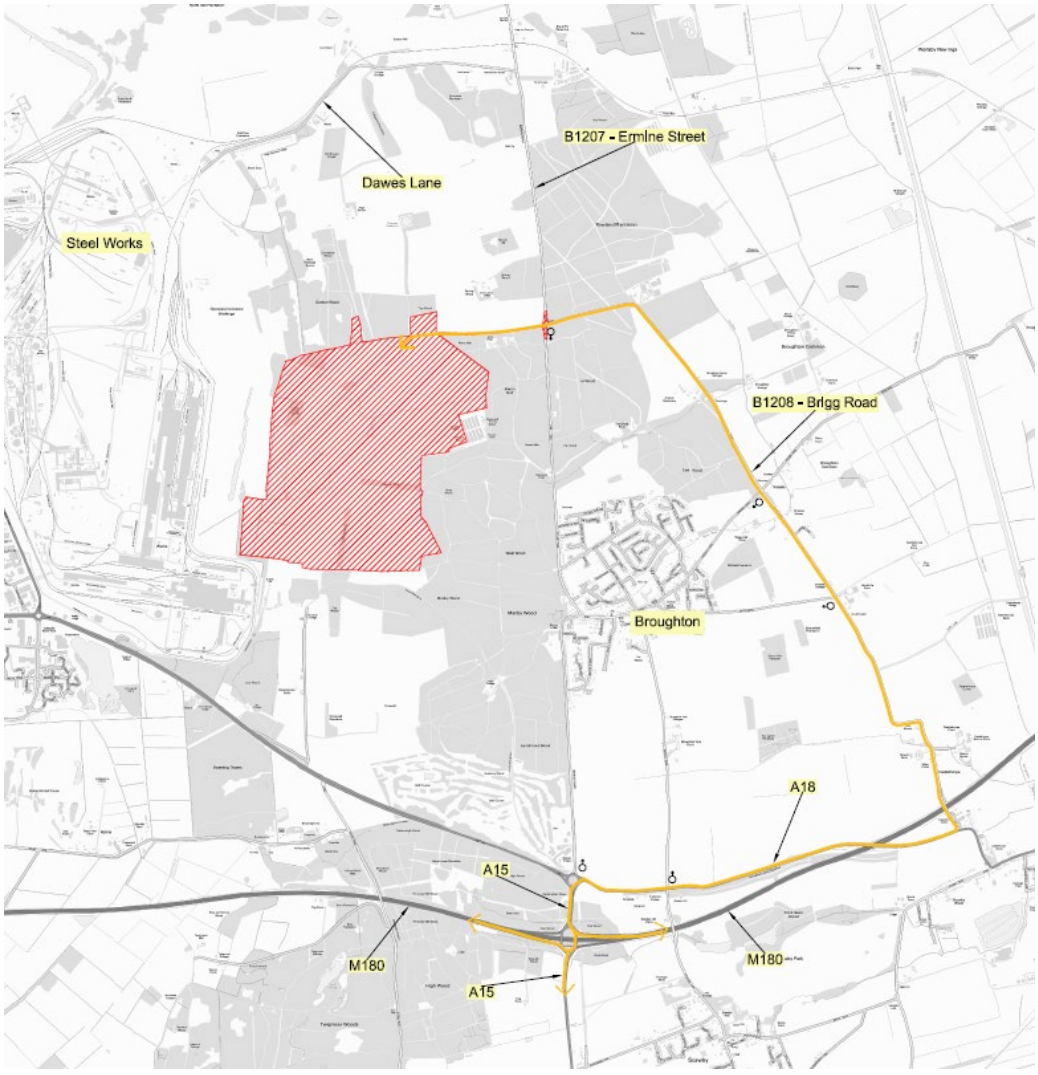
7.7 The development is considered acceptable provided appropriate mitigation measures are implemented and followed during the construction, operation and decommissioning phases.

7.8 The results of a forthcoming archaeological trench evaluation within the application site are expected to further support this conclusion.

8. TRAFFIC AND ACCESS

8.1 The likely effects of the development in terms of transport and access have been assessed.

8.2 The B1207 is situated to the east of the site, operating in a north to south alignment. The B1207 to the south of the site, towards the village of Broughton, is subject to a 7.5 tonne weight restriction, except for loading. The B1208 operates eastwards from the site before turning to the south where it connects to the A18 and M180 at Junction 4. It is also a single carriageway road where national speed limits apply. The B1208 does not have any weight restrictions in place and is used by HGVs associated with the Steel Works, which is accessible from Dawes Lane to the north of the site. This will also provide the construction route for this development, as shown below: -



8.3 The construction period will take approximately 11 months. Construction activities will be carried out Monday to Friday 0800-1800 and between 0800 and 1330 on Saturdays.

8.4 The total heavy goods vehicle movements associated with construction is set out below (assuming deliveries take place over a 47 week period): -

Activity	Type of Vehicle	Total Number of Deliveries over Construction Period
Solar Farm		
Solar Modules & Mounting Structures	16.5m Articulated	1,903 (3,806 two-way movements)
Inverters	12m Rigid	48 (96 two-way movements)
DNO Substation	10m Rigid	1 (2 two-way movements)
Customer Switchgear Cabinet	10m Rigid	1 (2 two-way movements)
Control Room Cabinet	10m Rigid	1 (2 two-way movements)
Access Tracks	15.4m Articulated	104 (208 two-way movements)
General	Front End JCB by low loader	4 (8 two-way movements)
Battery Storage		
Battery Modules	16.5m Articulated	18 (36 two-way movements)
General Deliveries (cables, fencing etc.)	16.5m Articulated	65 (130 two-way movements)
Onsite Construction Equipment	16.5m Articulated	10 (20 two-way movements)
Total		2,155 (4,310 two way movements)*
Total HGV Movements per day		**16 (32 two way movements)**
Total LGV Movements per day		10-14

8.5 A Construction Traffic Management Plan (CTMP) will be implemented during the construction phase of the development. The aim of the CTMP is to minimise the effect of the construction phase on the highway network. It will contain a package of agreed mitigation measures which could include the following:

- The setup of a booking system to ensure that vehicle arrivals/departures are scheduled to avoid peak traffic periods on the local highway network, and to ensure only one vehicle arrives at a time;

- Installation of signs to direct construction vehicles associated with the development along the route. Delivery drivers, contractors and visitors will be provided with a route plan in advance of delivering to site to ensure that vehicles follow the identified route;

- Advisory signs informing contractors and visitors that parking is not permitted on-street on the B1207 or on the site access track;

- All signage and barriers on the agreed haulage route will be inspected twice daily by the site manager (once in the morning and once at lunchtime), to ensure they are kept in a well maintained condition and located in safe and appropriate locations;

- A compound area for contractors will be set up on-site including appropriate parking spaces. Contractors and visitors will be advised that parking facilities will be provided on-site in advance of visiting the site and that they should not park on-street;

- A wheel wash will be provided which hoses down vehicles so that no construction vehicles exiting the site compound will take mud or debris onto the local highway network;

- A road sweeper will be provided for surrounding local roads along the construction traffic route to alleviate any residual debris generated during the construction phase;

- Banksmen will be provided at the site access to indicate to construction traffic when it is safe for them to enter and exit the site;

- All residents of Brigg Road, along the construction traffic route, will be provided with contact details of the Site Manager, which will also be provided on a site-board at the entrance to the site.

8.6 After commissioning, general maintenance of the site will be carried out by the existing farm tenant. However, there are anticipated to be around four visits to the site a year (one per quarter) for additional equipment maintenance. These would typically be made by light van or 4x4 type vehicles. Whilst the contractor's compound will have been removed, space will remain within the site on the access

tracks for such a vehicle to turn around to ensure that reversing will not occur onto the highway.

8.7 As there will only be one vehicle visit for maintenance every three months, it is considered that the effects of the operational phase in terms of transportation will be negligible. The cumulative effect is therefore also considered to be negligible.

8.8 The effects of decommissioning would be similar to the construction effects. A decommissioning plan will be implemented during the decommissioning phase of the development. The aim of the decommissioning plan is to, amongst other things, minimise the effect of the removal phase on the highway network.

9. AGRICULTURAL CIRCUMSTANCES

9.1 The assessment of the likely effects on agricultural land and farm businesses have been undertaken.

9.2 The site is shown on the "provisional" ALC map (MAFF 1983)[1] as undifferentiated Grade 3 land. Provisional ALC maps are not sufficiently accurate to allow a full assessment of the site and should not be used for anything other than general guidance at a strategic level. Accordingly, the ALC grading has been undertaken and the results will form part of the final application submission.

9.3 Two farm businesses are located within the development site. The majority of the site, some 192 hectares, is owned by the Brocklesby Estate. The Estate has owned the land since the 1970s. The agricultural land in the Santon area extends to about 280 hectares and is all in arable production, set aside or fallow. The wider Estate farms over 10,000 hectares. Consequently, the land at Santon forms a small percentage of the Estate only. It has been mostly used for arable farming. It is known that woodchip has been added to the soil, and outdoor pigs have been reared, in an endeavour to increase the moisture retentivity of the soil by increasing organic matter levels.

9.4 One field on the north-eastern part of the site, north of the poultry farm, is in arable use and is owned by a neighbouring arable farmer. This is a large mostly arable farming business based nearby on the edge of Broughton and farming land north of the site and to the east. They hold two fields within the development site.

Likely Effects

9.5 The reduction in the utility of the agricultural land will commence at the start of the construction phase. The changes to land use at construction phase would continue throughout to the operational phase until completion of the decommissioning phase.

9.6 The soils are generally light and sandy and able to be trafficked and disturbed over a wide period of the year. Any damage to soil structure during construction will generally rectify naturally over the period of a few years, but by taking care not to construct when or if the ground is particularly wet will mitigate potential impacts. The development will benefit land use in terms of the health and structure of the

[1] MAFF (1983) Provisional ALC Northern Region, 1:250,000

soil which will improve through the re-establishment of organic matter, which will have suffered due to years of intensive agriculture. The long-term impact of the development on land use, in terms of soil quality after decommissioning, will be positive.

9.7 The land will, in part, be farmed by sheep, and so will continue in agricultural use. The land resource would not be damaged significantly by the installation of the panels, and so would be available long-term for agricultural use. In its local context, the development site may comprise some of the poorer quality land available. The effects on the two farm businesses are expected to be beneficial.

10. SOCIO ECONOMIC ISSUES

10.1 The likely socio-economic effects of the development have also been considered. This deals with examining the potential effects on the population anticipated as a result of the development and, in turn, assessing the effect that this could have on relevant services and facilities and the economy. It identifies the socio-economic baseline in relation to key issues, specifically the economy and labour force, and the potential effects that could occur, both direct and indirect, arising from the development.

10.2 In respect of the construction phase, the assessment indicates that the development will have the following temporary effects:

- 233 direct and indirect/induced construction jobs and indirect/induced supply chain jobs over the construction programme;
- £6.3 million of gross value added over the construction programme; and
- £160 million of direct capital investment during the construction programme.

10.3 In respect of the operational phase, the assessment suggests that the development will have the following permanent effects:

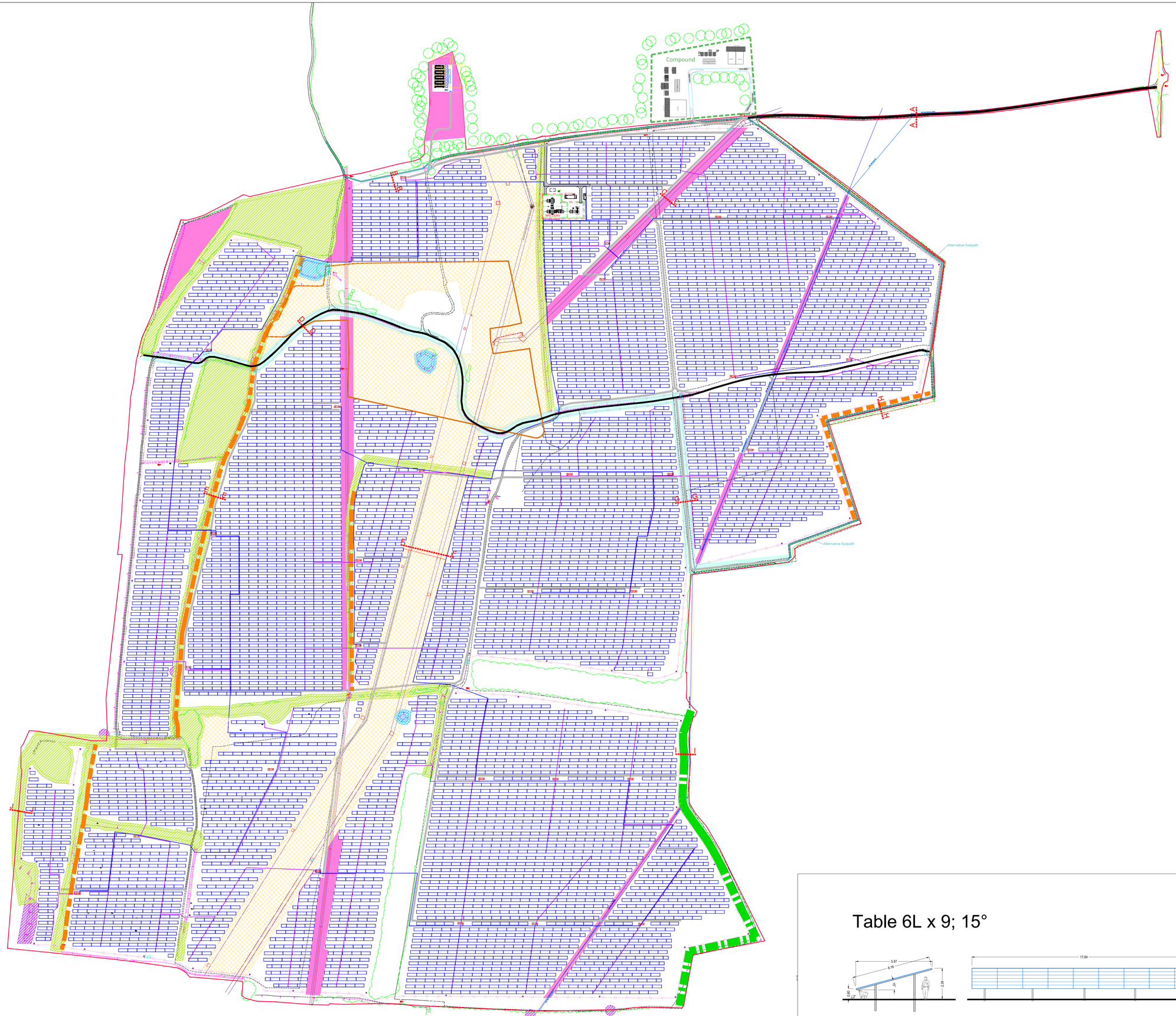
- 13 net additional jobs in the North Lincolnshire economy; and
- £660,000 of gross value added per annum in the North Lincolnshire economy.

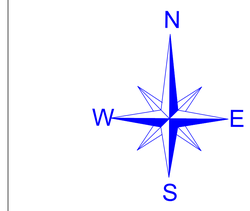
10.4 The effects of decommissioning would be similar to, or often of a lesser magnitude than construction effects.

10.5 Overall, the development is considered to provide significant positive effects.

APPENDIX 1

PROPOSED LAYOUT

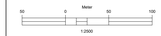




Electrical design

Station A

Inverter:
AC-Combiner:
Strings:
Panels:



Key

- Table
- Existing Access Track
- New Access Track
- Public Footpath (gap = 15,00m)
- Buffer Woodland (15,0m)
- Swales (Buffer 8,00m)
- Pond (Buffer 5,00m)
- Hedges (Buffer 5,00m)
- Badger Zone (Buffer 20,00m)
- Zone for Winter Birds : 22,5ha
- Zone for Arable Weeds / Species Rich Grasslands : 5,4ha
- Transformer Station
- Construction Area
- Exclusion Zone Archeological
- Fence
- Gate / Entrance
- Trench AC
- Trench MV
- CCTV
- Alternative Footpath

Table 6L x 9; 15°

Section Scale
1:100

Regulations 2009 Document Paragraph Reference Number

Regulation 5(2)(o)

PROJECT NAME

Little Crow Solar Park

DRAWING	DRAWING N°
Table layout	A10B0C0

GEOGRAPHICAL SITE:

COORDINATES	53.5773° N	0.5786° W
NN/MSL	60.0m	
SUNANGLE	13.42°	
DATE	21.12.2017 / 12:00	

SITE SYSTEM:

SYSTEMLAYOUT	6L x 9	6L x 5
NUMBER OF TABLES	6.449 pc	345 pc
PANEL ORIENTATION	Landscape	
NUMBER OF PANELS	357.561	

CHANGE

DATE	CHANGE
10.07.2018	Addet 50MW Battery
16.07.2018	moved Fence and roads
02.08.2018	divers. changes
08.08.2018	divers. changes

SITE TECHNOLOGY:

MODULE NAME	
MODULE SIZE	
MODULE POWER	380 W
TYPE OF PANELS	POLY
ANGLE OF PANELS	15°
TABLESHADOW	1.0 m
ROWDISTANCES	

DRAW

	DATE	NAME
DRAW	01.06.2018	M. Riedel
DRAW	10.07.2018	M. Riedel
DRAW	16.07.2018	M. Riedel
DRAW	02.08.2018	M. Riedel
DRAW	08.08.2018	
DRAW		
CHECK		
CHECK		

SITE TOTAL POWER

DC POWER	135.87 MWp
AC-POWER nom.	
AC-POWER max.	

Signature:

Scale	1:2500
Paper size	A0

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