



**NOTTINGHAMSHIRE POLICE
DESIGNING OUT CRIME OFFICER
PLANNING CONSULTATION RESPONSE**

Application number	22/00319/FUL
Proposal	Installation of renewable energy generating solar farm comprising ground-mounted photovoltaic solar arrays, together with substation, inverter stations, security measures, site access, internal access tracks and other ancillary infrastructure, including landscaping and biodiversity enhancements
Address	Land To The West Of Wood Lane And Stocking Lane Kingston Estate Gotham Nottinghamshire NG11 0LF

Consultee	
------------------	--

Dear Sir / Madam

Thank you for providing the opportunity to comment on this application.

The responsibility of the Designing Out Crime Officer is to consider the, "built environment" within the planning aspect of any development.

This does not, however, preclude subsequent recommendations from other specialist departments within Nottinghamshire Police if required.

Nottinghamshire Police have **no holding objections** with regard to this application, however, consideration of the areas referred to below is advised and recommended.

I have also considered this application in the context of the legislation at the conclusion of this document.

Nottinghamshire has small, medium, and large solar parks / farms which have over the past 10 years been subject to theft, criminal damage and other crime types, and these have included the theft of solar panels, and removal of cabling and infrastructure which has proved costly to the various developers and management companies that operate such facilities.

The security and safety of the sites should therefore be an important feature of the planning and design of them.

I would make the following comments and recommendations in broad terms in relation to this application.

Solar Farms or Solar Parks have in recent years been subject of some significant thefts of the installed solar panels with replacement costs in excess of £50,000.

This combined with the continuing rise in the costs of metals typically used in the provision of sites such as this, and which is saleable by the criminal as scrap metal, has seen a consistent increase in the number of solar sites being targeted.

I would strongly advise to avoid the use of what is described as 'Deer Fencing', which is referred to in the DAS on this planning submission, as this does not provide any difficulty or deterrent to the criminal.

This combined with the remote and permeable nature of this particular site could increase the vulnerability of the facility to criminal focus.

Fencing and Boundary Treatment

Land selected should aim to avoid affecting the visual aspect of landscapes, maintain the natural beauty and should be predominantly flat, well screened by hedges, tree lines, etc. and not cause undue impact to nearby domestic properties or roads. (BRE. Planning guidance for the large-scale ground mounted solar PV systems)

I would recommend that the boundary fence is to a minimum of LPS 1175 level 3 and to a height of 2.4 metres or to the current UK Government standard, SEAP (Security Equipment Approval Panel) class 1-3.

The use of 2.4 metre welded mesh fencing (in green) would be the most unobtrusive method of providing a secure perimeter border.

All gated entrances should be secured with appropriate access systems.

The NFU Mutual recommends good perimeter security fencing for all solar installations along with CCTV, motion sensors and infrared beams, depending on location.

It also recommends solar panels are secured to frames with unique fastenings, requiring special tools – much like alloy wheel bolts?

Monitored CCTV System

Whilst considering the often isolated locations that Solar Farms are to be established the installation of a remotely monitored, with motion detection, CCTV system is an effective deterrent and is most likely to provide effective evidence should a crime occur.

Installers of remotely monitored detector activated CCTV systems will comply with all the following standards and guidelines:

NPCC Security Systems Policy

BS 8418 Installation and remote monitoring of detector activated CCTV systems – Code of Practice

BS EN 50132-7: CCTV Application guidelines

RVRCs monitoring detector activated CCTV systems will conform to all the following standards:

BS 5979 (Cat II):

BS 8418: Installation and remote monitoring of detector activated CCTV systems – Code of Practice

There will probably be little reward in deploying CCTV or other defence unless it is monitored in some way or can provide an instant alert in some form.

Physical security of panels

It has been identified that individual panels can be easily removed from the aluminium frames which are usually secured by a small bracket which is in turn secured by an alum key. Whilst aluminium can itself be easily forced the use of an additional security bracket may help reduce the ease by which panels can be removed adding to the time that a criminal would need to remove panels increasing the risk to offenders.

Whilst not intending to draw attention to a solar farm the effective use of signage to act as an informative deterrent may also be considered.

I would ask that the applicant considers a perimeter alarm system now we are aware that these sites are attracting criminal interest.

There have been several instances where offenders have been able to access sites quite easily with large vehicles enabling the large-scale removal of panels and equipment.

Due to the poor planning and design (particularly across fields and tracks in dry weather) they spent some considerable time undetected.

There have also seen several incidents where crimes have been committed on power transmission sites with some offenders risking their lives after targeting live cabling.

Use of Defensive Ditches and Berms (Bunds)

Landscaping techniques such as ditches and berms (bunds) may also be appropriate in some instances. To be effective in stopping vehicles these need to be designed carefully.

Use of Natural Features and Vegetation

The development will need to have regard in both its design layout, and future maintenance plans for the retention of growth of vegetation on these important boundaries, including the opportunity for trees within the boundaries to grow on to maturity.

The use of natural vegetation as a feature should not compromise the benefit of clear and unobstructed natural and formal (CCTV System) surveillance.

Existing hedges and established vegetation, including mature trees, should be retained wherever possible.

Crime prevention advice is given free without the intention of creating a contract. Neither the Home Office nor the Police Service takes any legal responsibility for the advice given. However, if the advice is implemented it will reduce the opportunity for crimes to be committed.

Regards,



Neil Bellamy

Designing Out Crime Officer [Redacted]
Nottinghamshire Police

Legislation/Guidance.

Section 17 of the 'Crime and Disorder Act 1998' places a duty on each local authority: 'to exercise its various functions with due regard to the likely effect of the exercise of those functions on, and the need to do all that it reasonably can to prevent crime and disorder in its area to include anti-social behaviour, substance misuse and behaviour which adversely affects the environment'.

Despite the whole raft of other legislation/guidance surrounding the planning process, there is no exemption from the requirement of Section 17 as above as all departments within a Local Authority fall under the umbrella of the 'responsible authority' status.

PINS 953 confirms the requirement of the Planning Officer to consider the requirements of Section 17, and this requirement has again been reinforced by way of letter from the Chief Planning Officer (issued 12th July 2017).

Planning Policy now places safety and security at the heart of the planning process.

Specific areas that are relevant to this application under the National Planning Policy Framework 2 includes;

Section 8 states "Planning policies and decisions should aim to achieve healthy, inclusive and safe places which are safe and accessible, so that crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion..."

Section 8 also declares "Planning policies and decisions should promote public safety and take into account wider security and defence requirements by anticipating and addressing possible malicious threats and natural hazards, especially in locations where large numbers of people are expected to congregate. Policies for relevant areas (such as town centre and regeneration frameworks), and the layout and design of developments, should be informed by the most up-to-date information available from the police and other agencies about the nature of potential threats and their implications. This includes appropriate and proportionate steps that can be taken to reduce vulnerability, increase resilience and ensure public safety and security."

Section 12 reinforces Section 8 content by adding "Planning policies and decisions should ensure that developments create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience."

Additional guidance can be found in the companion guide to the NPPF, the National Planning Practice Guidance document (PPG).

Paragraphs 9, 10 and 11 of the PPG all allude to the requirement of designing out crime. Indeed, paragraph 10 reinforces the need to consider Section 17 of the Crime and Disorder Act as a necessary requirement within the Planning Officers 'everyday businesses.