

FORMATION OF A 49.9MW SOLAR FARM

Kinnon Park Farm

Namene Solar

First of two Public Consultations

Welcome to the first Public Consultation for the proposal at Kinnon Park Farm, by Methven.

Purpose of this Consultation

This drop in consultation provides an opportunity for you to share your views of the potential benefits and impacts of the Solar Installation. This consultation is also a key part of Perth and Kinross Council's Planning Permission process, and we will share the outcomes with Councillors.

Next Steps

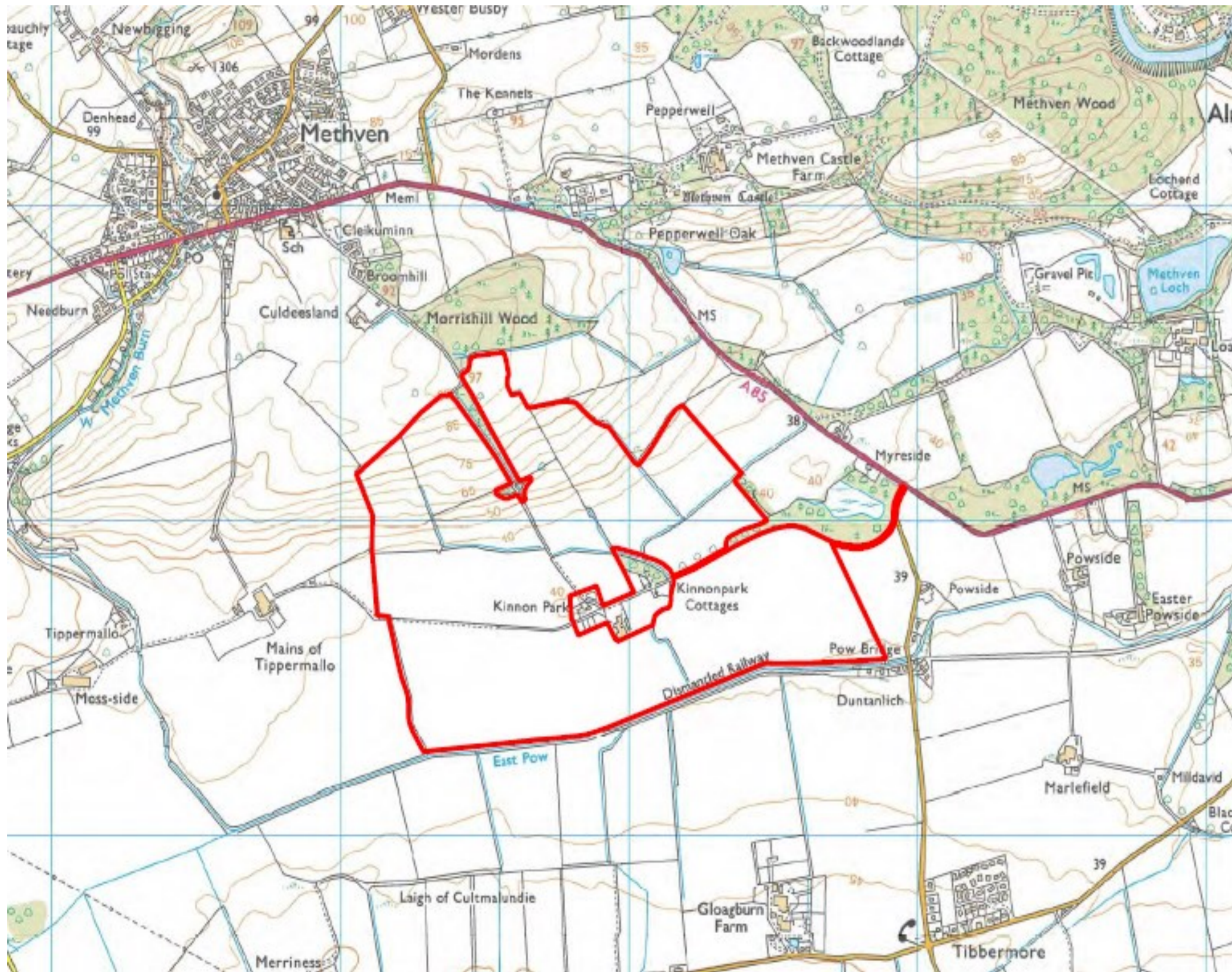
After this consultation with the local community, our next steps will be to:

- Update the development proposals, taking cognisance of community feedback
 - Carry out a second consultation with the community.
- Submit an Application for Planning Permission to The Council by Winter 23/24.
- Further opportunity for the public to provide comments on the proposal directly to The Council.
 - Determination of Application by PKC Spring 24.



NAMENE SOLAR

Namene is a business that believes people and planet should come first. They provide affordable, highly reliable, everyday devices to those who need them the most. They harness clean technology to transform lives and livelihoods. ‘Namene’ means ‘new dawn.’ They chose this name for our business because they know the important role that clean technology has in building a more sustainable and equitable world.



The Proposals

The proposed solar farm at Kinnon Park will feed green energy into the grid and support a local reduction of greenhouse gas emissions. The total land area for the proposals is around 125Ha, which is made up of around 12 fields. An application to PKC will be for; Change of land use from agriculture to renewable energy generation of up to 49.9MW for a period of up to 40 years.

This may comprise:

134,300 ground-mounted solar panels. The mountings up to 3m high, south facing, and fixed. The panels would be located in rows or strings to represent a coherent and relatively simple layout. Inverters to convert the energy into electrical current suitable for the grid will be positioned around the solar farm areas.

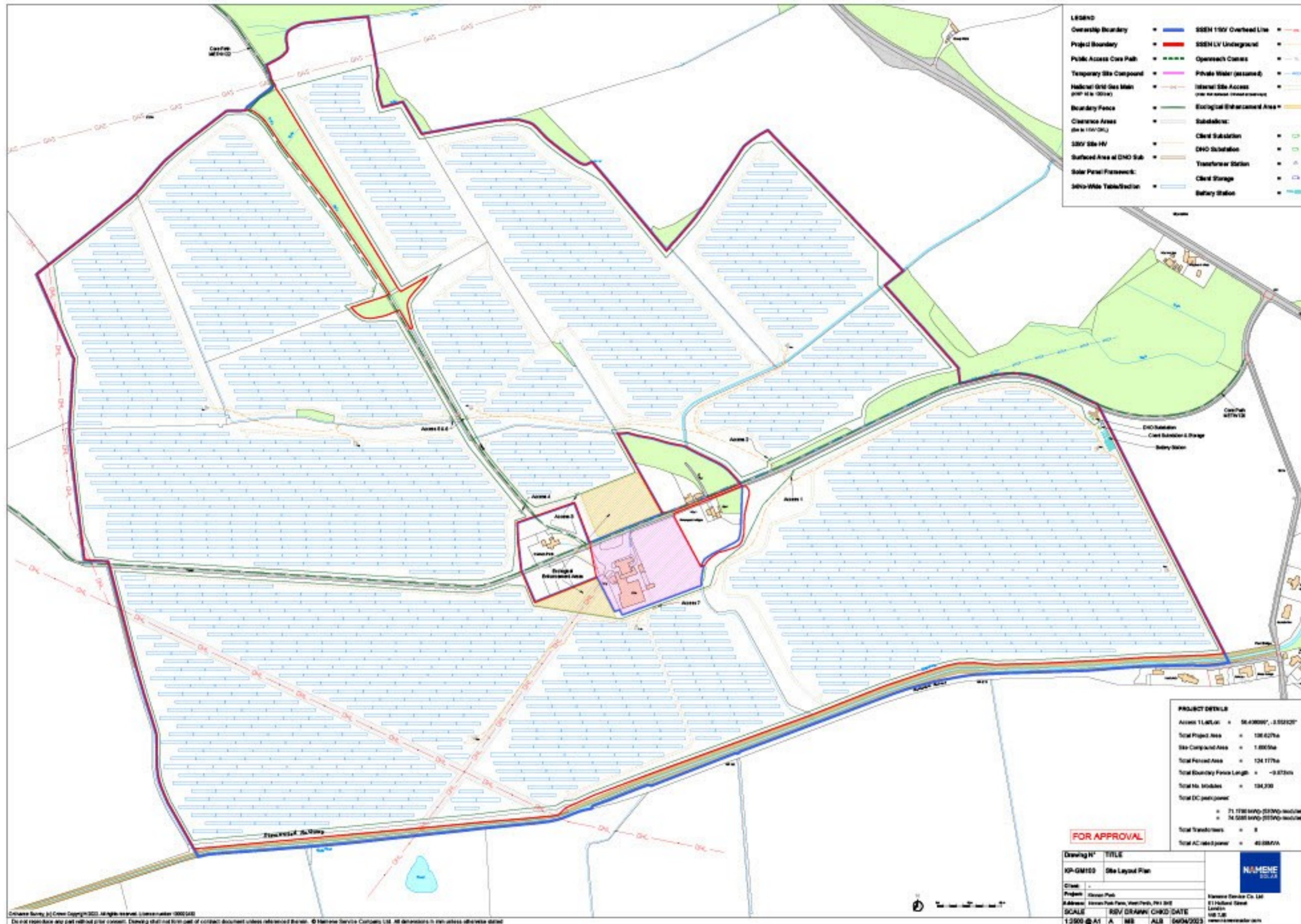
Battery storage units, DNO substation and private substation would be secured in containers approximately 3m high – located in the east of the site nearest the main highway access via A85.

Site would be secured by deer-style fencing of 2.0m in height, supported by wooded posts of approx. 2.0m in height. CCTV cameras would be erected either pole or fence-mounted, located at strategic points.

The proposals would have the potential to meet the requirement of up to 19,000 family homes and would displace over **11,500 tonnes** of carbon dioxide from the electricity supply network each year.



PLANNING POLICY POSITION



National Planning Policy

The National Planning Framework 4, adopted in February 2023, put the climate and nature crisis at the forefront of its long-term vision. Prioritising green energy ensures that the country meets its Net Zero goals (Scotland’s Climate Change Plan, backed by legislation, has set an approach to achieving net zero emissions by 2045). Relevant Policies are;

- 1 Tackling the Climate and Nature Crises
- 2 Climate Mitigation and Adaptation
- 3 Biodiversity
- 5 Soils
- 7 Historic Assets and Places
- 9 Vacant Land
- 11 Energy
- 14 Design, Quality and Place
- 22 Flood Risk

PKC Local Development Plan

- Principle of development/Sustainability (Policy 33A, 35)
- Landscape, Place, Historic Environment (Policy 1A, 1B, 29, 31, 38, 39)
- Public Access (Policy 15)
- Ecology and Biodiversity (Policy 40, 41, 50, 51)
- Transportation and Access (Policy 60)

The draft of Scotland’s Energy Strategy looks to set out action to reduce barriers to enable and encourage greater solar deployment. The Government are keen to see the number of solar installations offering community benefits increase and continue to encourage the sector to consider what packages of community benefit it can offer communities local to development.

Any future planning application will be assessed by Perth and Kinross Council against the National Planning Framework as well as the Local Development Plan. The Council will further examine any relevant Supplementary Guidance.

In addition it is likely The Council will consult with internal service colleagues (such as environmental health, transportation, business and economic development, green space, and access officers) as well as external agencies (for example, Nature Scot , SEPA, and Historic Environment Scotland), who will be asked to comment on the proposed plans from their own perspectives.

CLIMATE AND CONSTRAINTS

Climate Emergency:

In June 2019, Perth and Kinross Council agreed to declare a climate emergency and the COP26 UN Climate Change Conference in Glasgow 2021 emphasised the important of caring for developments impact on climate change. Perth and Kinross within their Vision for Low Carbon Place aim to:

Ensure that development and land uses make a positive contribution to helping to minimise the causes of climate change and adapting to its impacts.

Promote the sustainable development of electricity generation from a diverse range of renewable and low-carbon energy technologies.

Constraints:

To address the planning policy matters outlined above, the applicants have already instructed several land use studies to address and where needed mitigate any impact of the development such as;

Heritage Impact Assessment

Access and Transportation Assessment

Ecology Assessment

Landscape and Visual Impact Assessment

When a planning application is prepared, these studies along with a Planning Statement and other information will be submitted to support the plans and to demonstrate compliance with the planning policies and guidance outlined previously.

The following information boards outlines each constraint and what Namene may propose to reduce any negative impact from the development.

The topics to be covered in order are;

Ecology

Ground Conditions

Heritage

Transport

Landscape and Visual

ECOLOGY

The site has 9 phase 1 habitat types including, arable land, broad-leaved woodland, hedgerows, scattered trees and ruderal vegetation.

The main area is arable land and has limited potential to provide a habitat for protected species.

Brown hares were noted to be present on the site.

Ruderal vegetation is located around the boundaries of the site and can provide a habitat for protected ground nesting birds.

Trees on the site can also provide a habitat for nesting birds, and old nests were noted to be present during a site investigation.

The woodland to the north of the site provides a habitat for red squirrels, however, none were spotted at the time of the survey.



GROUND CONDITIONS

The land has been used as farmland since the earliest available map until present.

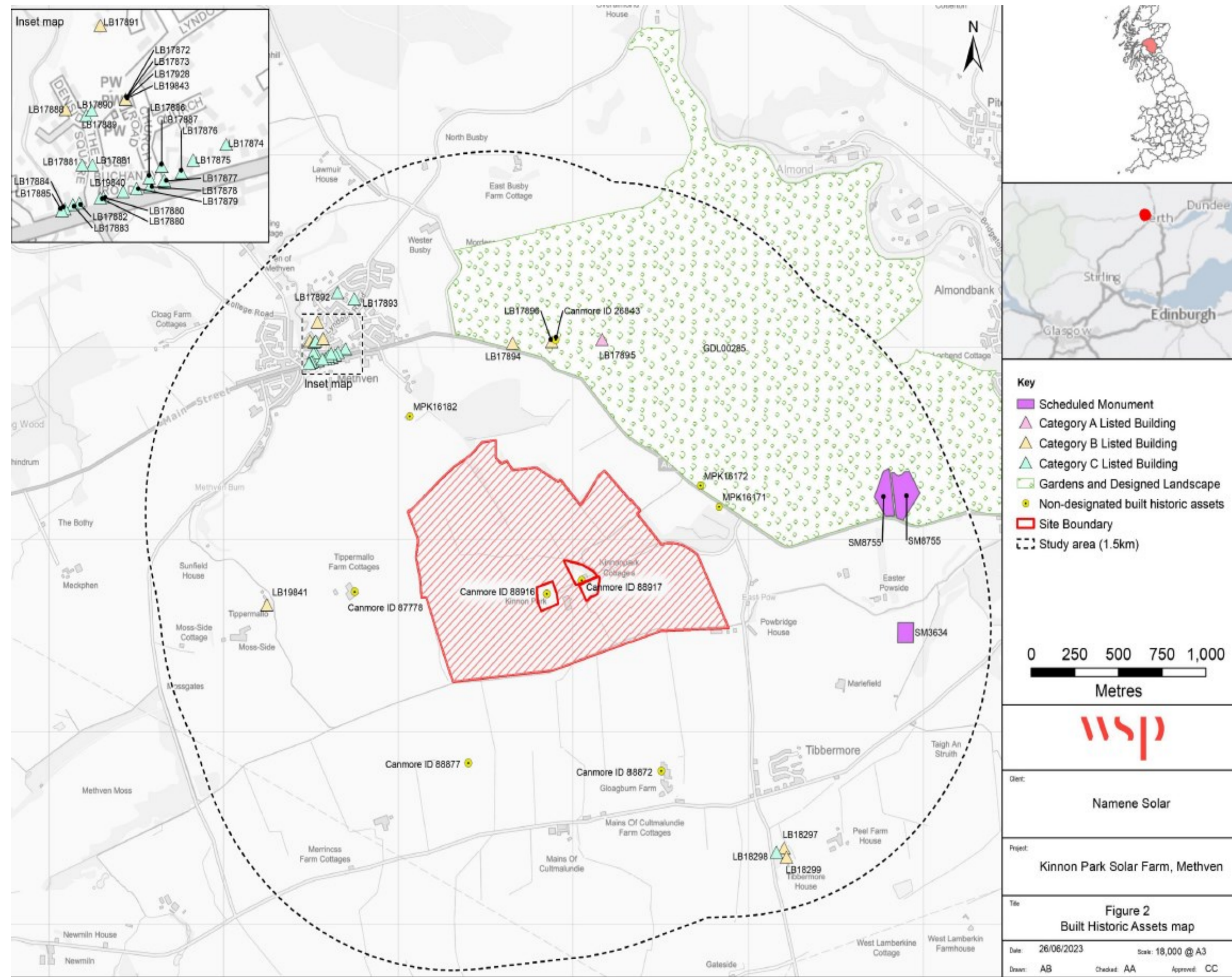
Drains and watercourses are recorded across the site, all of which discharge into the East Pow watercourse.

There have been buildings present on the site since 1866. Historically, a railway line was present along the southern boundary before being dismantled.

The site is at very low risk of instability. There is a high-pressure gas pipeline, overhead electricity cables and Openreach cables within the site.



HERITAGE



Any large-scale solar development will have some impact on historic assets within and in the vicinity of the site. This includes:

Methven Castle (LB17895)

The impact on the setting of Methven Castle is considered to be a minimal negative impact. Natural screening along the boundary will lessen the visual impact. Where the site has a rise in topography, an alternative mitigation strategy could be proposed.

Tippermallo including Walled Garden (LB19841)

The proposal will have a minimal negative impact on the setting of the asset. Again, adequate natural screening will lessen the visual impact of the proposals.

Inventory Garden and Designed Landscape: Methven Castle (GDL00285)

The proposal will have a minimal negative impact on the setting. With adequate natural screening, visual impact will be reduced along the site's southern, eastern and north-eastern boundaries. In the northern area alternative mitigation could be utilised to reduce any visual impact.

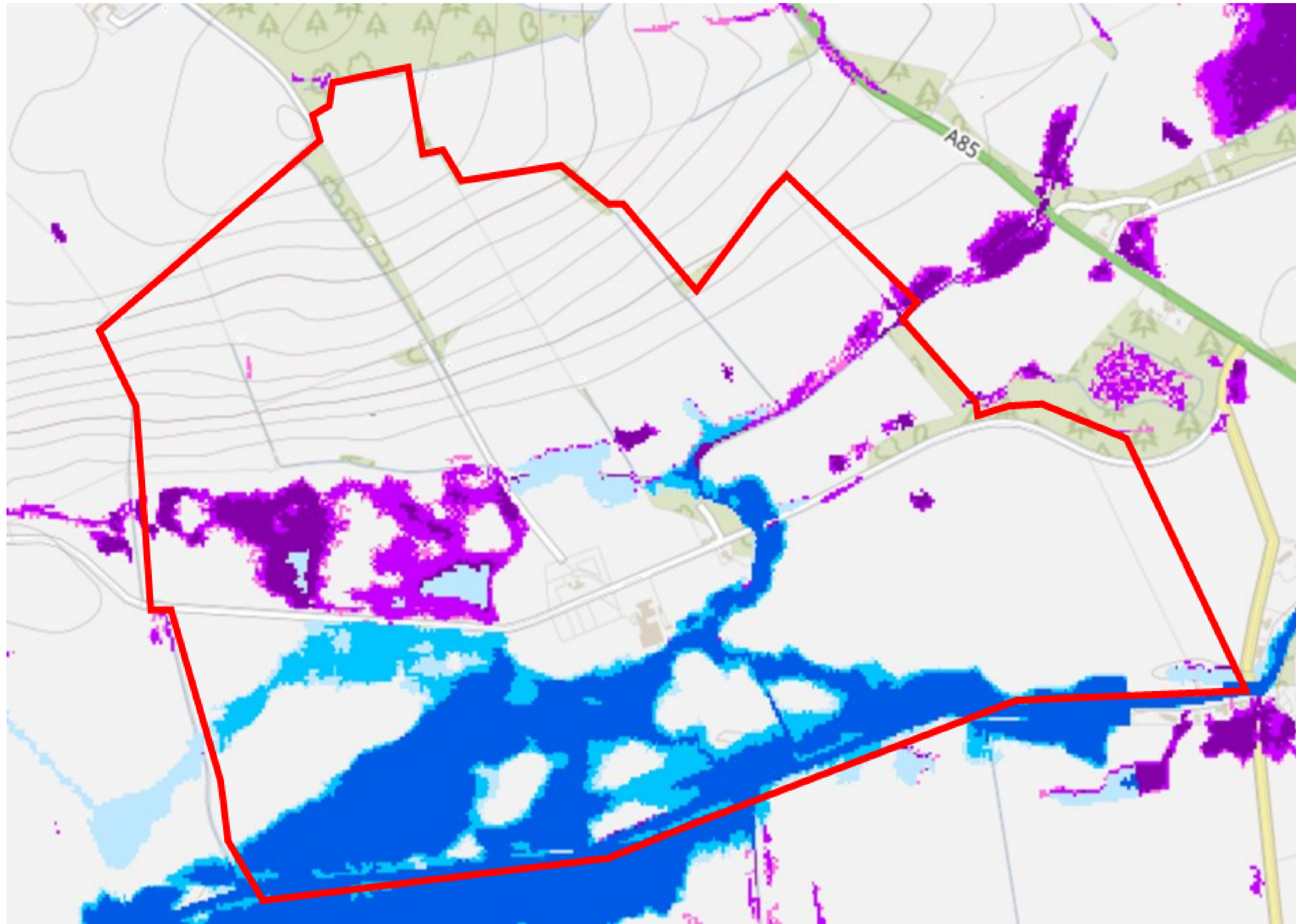
Non-Designated Heritage Assets

The settings of existing non-designated historical buildings may be compromised by the introduction of a solar farm, for example the Kinnon Park farmstead is currently appreciated in a rural landscape, and the settings of Kinnon Park cottages and Mains of Tippermallo and of Myreside Cottages and Merriless Farm. The consultants consider the development impact on these assets may be minimal negative. Further beyond, the farmstead of Gloagburn may also be impacted however this is judged to be neutral.

The potential mitigation and interventions proposed in these contexts include:

- The extent of the solar panel units is reduced in the northern part of the Site
- The use of adequate natural screening along the western and southern boundaries of the Site will assist in lessening the visual impacts
- Adequate natural screening along the southern, eastern and north-eastern boundaries of the Site

FLOOD RISK



Data shows that the ground levels fall relatively steeply through the northern third of the site, with the central area, sloping gently towards the East Pow watercourse. Small elevated sections around the existing buildings are in flat areas on the east of the site.

The site is at high risk of fluvial (river) flooding, as well as pluvial (surface water) flooding.





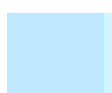

NPF4 defines a framework for flood risk and land use vulnerability. The proposed solar farm would be classed as essential infrastructure, meaning there are certain constraints.

Areas of Medium to High Risk (chance of flooding is greater than 0.5% (1:200 years) development should be designed and constructed to be operation during floods, and not impede water flow.

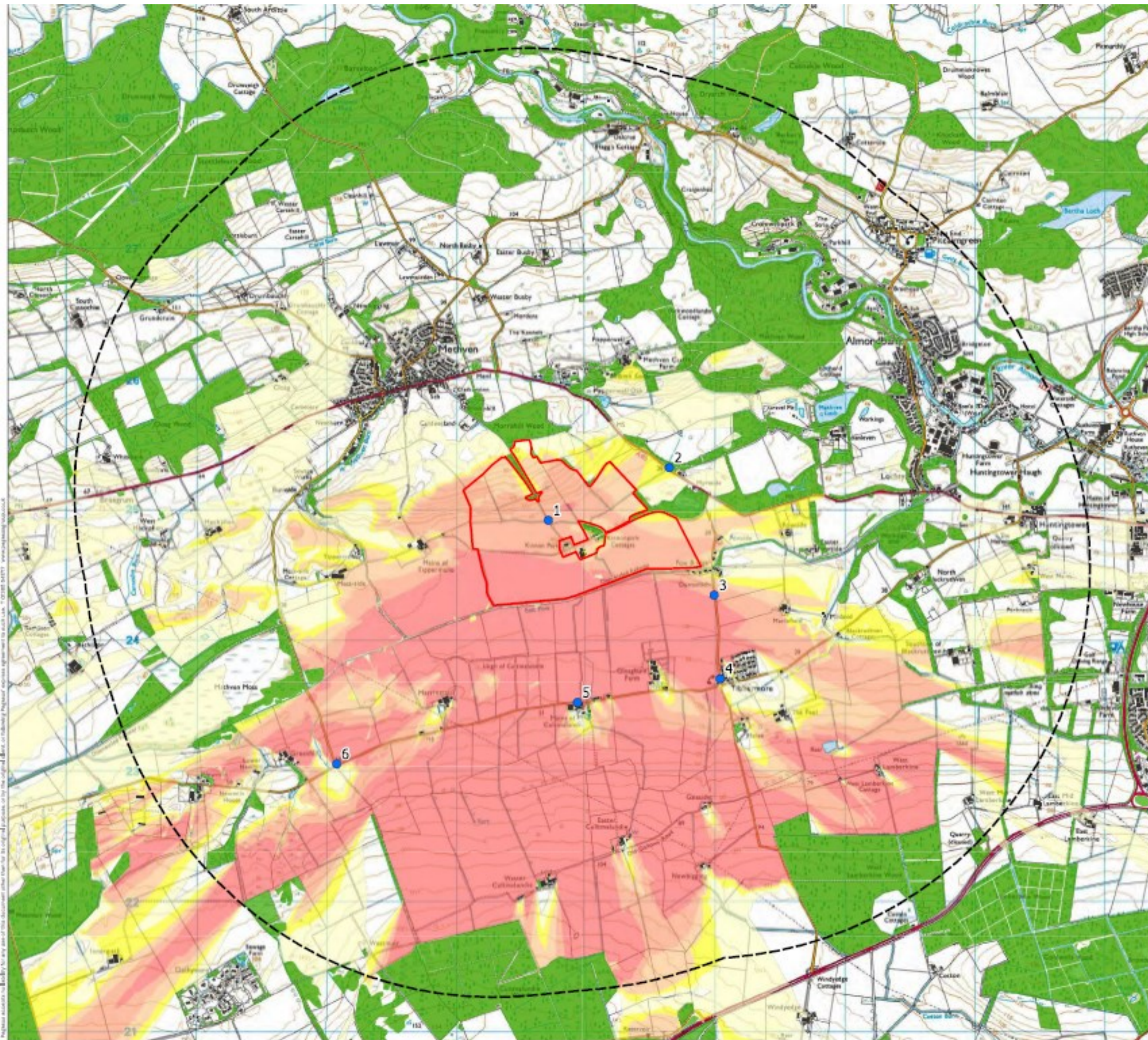
Solar arrays can be flooded by up to 1m without any significant consequences, however further investigation is needed within localized areas that are at risk of flooding beyond 1m of depth.

Flood Risk Management Recommendations:

Management of flooding via earthworks and effective drainage. The siting of proposed inverters and transformers which are at risk of flood damage will be located out of areas at risk of flooding.

River Flooding	Surface Water Flooding
High Likelihood  Each year this area has a 10% chance of flooding.	High Likelihood  Each year this area has a 10% chance of flooding.
Medium Likelihood  Each year this area has a 0.5% chance of flooding.	Medium Likelihood  Each year this area has a 0.5% chance of flooding.
Low Likelihood  Each year this area has a 0.1% chance of flooding.	Low Likelihood  Each year this area has a 0.1% chance of flooding.

LANDSCAPE AND VISUAL



KEY

- Site Boundary
- 3km Radius
- OS Local Buildings
- OS Local Woodland
- Viewpoint Location

Screened Zone of Theoretical Visibility – 3m Development Height – Percentage Visibility

- Less than 20% Visibility
- 20 – 40% Visibility
- 40 – 60% Visibility
- 60 – 80% Visibility
- 80 – 100% Visibility

Screened ZTV Production Information –

- DTM data used in calculations is OS Terrain 5 that has been combined with OS Open Map Local data for woodland and buildings to create a Digital Surface Model (DSM).
- Indicative woodland and building heights are modelled at 15m and 8m respectively.
- Viewer height set at 1.7m (in accordance with para 6.31 of GLVIA Third Edition)
- Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the development may be visible from, assuming 100% atmospheric visibility, and includes the screening effect from vegetation and buildings, based on the assumptions stated above.

NOTES:
REVISIONS:

SCREENED ZONE OF THEORETICAL VISIBILITY AND VIEWPOINT LOCATION PLAN

WEST PERTH

CLIENT
Namene Solar Company Ltd.

DATE
29/06/2023

SCALE
1:30,000@A3

TEAM
NC

APPROVED
GC

SHEET
-

REVISION
-

DRAWING NUMBER
P23-0483_EN_06

PEGASUS GROUP

The site lies within a broad lowland valley, with predominant agricultural land use. The local landscape is generally quite open. Given the south-to-north rise in elevation, the northern fields are more evident than the lower southern fields.

It is accepted that this form of development is going to be visible from various locations due to the existing openness and visibility of the site. However, by excluding the use of certain areas (higher northern fields), and the inclusion of additional mitigation measures the proposed development could be successful without any unacceptable impact on landscape character or visual amenity.

Mitigation measures could include; additional natural planting and management of existing trees/hedges.

LANDSCAPE AND VISUAL



Typical computer generated images of what the development could look like. Actual images of Kinnon Park to be agreed with council in future.

TRANSPORT

Construction traffic & movement of goods to the site

The nature of the proposed development will generate a minimal number of vehicle movements associated with its operation, with construction activities having a potential impact on the operation of the adjacent road network.

Kinnon Park Farm can currently be accessed from the unclassified U47 via a priority junction, the form of which supports larger vehicles accessing and leaving the farm from and to the north.

It is anticipated that the majority, including all HGVs for delivery of goods to the site for construction, will access the site from the north using the A85 and U47, likely having come via the A9.

A framework Construction Traffic Management Plan will be submitted as part of the planning application. This will identify a range of measures to minimise the impact on existing road users. The CTMP will provide an estimate of the level of trips likely to be generated by construction activities in addition to identifying a strategy to minimise the impact of construction activities on users of the core paths which pass through the site.

FEEDBACK

Please fill in a consultation feedback form

The next event will be on the 24th of October from 15.30-19.30.

If you have any further questions or would like to submit comments via email, please contact;

Gray Planning and Development

Neil– neil@grayplanning.co.uk

07871010503

SOLAR FAQs

Will the proposals be located at Kinnon Park forever?

No! The farm is proposed for a period of up to 40 years.

Is it good for the environment ?

Yes! Solar farms provide a range of environmental and biodiversity benefits. Panels are set on posts which = minimal disturbance to the ground. We can also establish wildflower meadows/grassland and support hedgerow growth and promote wet land habitats.

Does land used for solar reduce food security?

No! Solar farms provide valuable income for farmers and the land can still be used for grazing. Installation on farms also allows the ground underneath to recover and can help regenerate soil quality.

Is it sunny enough?

Yes! Solar panels don't need direct sunlight to operate and they produce power year round. Solar is reliable because sunrise and sunset is known for each day, so a forecast "yield" is very accurate.

Key Facts!

Solar farms occupy less than 1% of the UKs overall land mass (0.08%)

Solar farms create very little glint and glare– the panels are designed to absorb light!

Up to 99% of the materials within a solar panel are recyclable.

Solar is the most affordable electricity in history!