Light Valley Solar

Site Selection Report

Light Valley Solar Limited

June 2025

Delivering a better world

Quality information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
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Executive Summary

1.1.1 This Site Selection Report (SSR) has been prepared on behalf of Light Valley Solar Limited (the Applicant), a subsidiary of Island Green Power (IGP) UK Limited for the Light Valley Solar project (the Proposed Development). The SSR sets out the approach taken by the Applicant to identify the location for the Proposed Development and explains the reasonable alternatives considered, in order to establish that the proposed Scheme is in a suitable location for a 500 MW solar development. The SSR accompanies the Preliminary Environmental Information Report (PEIR) that is being consulted upon as part of the Statutory Consultation of the Proposed Development, in accordance with the Planning Act 2008 (as amended).

1.1.2 This report explains the methodology that has been applied when identifying and evaluating potential sites for the Proposed Development. It concludes that there are no obviously more suitable locations within the search area than the location for the Proposed Development. The location of the Proposed Development is therefore considered to be suitable for the scale of solar development proposed, and the basis on which the Applicant has selected the Solar PV Sites accords with relevant planning policy relating to site selection and alternatives set out in National Policy Statement (NPS) EN-1 and NPS EN-3.

1. Introduction

1.1 Background

1.1.1 This Site Selection Report (SSR) has been prepared on behalf of Light Valley Solar Limited (the Applicant) for the Light Valley Solar project (the Proposed Development). The SSR sets out the approach taken by the Applicant to identify the location for the Proposed Development and explains the reasonable alternatives considered, in order to establish that the proposed Scheme is in a suitable location for a 500 MW solar development.

1.1.2 The SSR accompanies the Preliminary Environmental Information Report (PEIR) that is being consulted upon as part of the statutory consultation of the Proposed Development, in accordance with the Planning Act 2008 (as amended). This Site Selection Report will also form part of the suite of application documentation for the Proposed Development.

1.1.3 When submitted, the Development Consent Order (DCO) application will seek consent for the construction, operation and maintenance, and decommissioning of the Proposed Development. The Proposed Development comprises a solar photovoltaic (PV) electricity generating station with a total capacity exceeding 50 megawatts (MW) and 'associated development' including Battery Energy Storage System (BESS), grid connection infrastructure and other infrastructure integral to the construction, operation and maintenance, and decommissioning phases.

1.1.4 The Proposed Development is classified as a Nationally Significant Infrastructure Project (NSIP) for the purposes of the Planning Act 2008 and requires an application for a DCO. The application will be submitted to the Planning Inspectorate and the decision whether to grant a DCO will be made by the Secretary of State for Energy Security and Net Zero (the Secretary of State).

1.1.5 The Proposed Development comprises 7 Solar PV Sites located between Monk Fryston, Hambleton, Eggborough and Escrick. These sites will connect to the Monk Fryston substation by a 275 kV cable. The boundary of the Proposed Development at the PEIR stage is 1,982 hectares (ha) which includes all land required to deliver the Proposed Development. The Solar PV Sites minus the cable connections is 1,022 ha. The Proposed Development is located entirely within the administrative area of North Yorkshire Council, to the north and west of Selby.

1.2 Purpose and Structure of this Report

1.2.1 The purpose of the SSR is to set out the approach taken by the Applicant to identify the location for the Proposed Development and explains the reasonable alternatives considered in order to establish that the Proposed Development is in a suitable location for a 500 MW solar development.

1.2.2 The remainder of this report sets out the following:

- Section 2 describes the site selection methodology;
- Section 3 sets out the site selection results; and,
- Section 4 provides conclusions on the site selection process.

1.2.3 Supporting annexes include:

- Appendix A: Site Selection Mapping Results

1.2.4 A list of Figures is set out in **Table 1** below:

Table 1: List of Figures

Figure	Title
1	Search Area
2 and 2a	Planning and Environmental Constraints
3	Unconstrained Land
4	Brownfield Sites

2. Site Selection Methodology

2.1 Planning Policy on Site Selection

2.1.1 There is no prescribed methodology in national planning policy or guidance for site selection in relation to solar development. Paragraph 4.3.9 of National Policy Statement (NPS) EN-1 (Ref 1) states that "*This NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective"* and Paragraph 2.3.5 of NPS EN-3 (Ref 2Ref 2) is clear that in general, the Government does not seek to direct applicants for renewable energy infrastructure to specific sites. Instead, NPS EN-3 Paragraph 2.3.9 recognises that *'most renewable energy resources can only be developed where the resource exists and where economically feasible, and because there are no limits on the need established in Part 3 of EN-1, the Secretary of State should not use a consecutive approach in the consideration of renewable energy projects (for example, by giving priority to the re-use of previously developed land for renewable technology developments)*".

2.1.2 Paragraph 3.3.62 of NPS EN-1 recognises that there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure to meet urgent provision for energy security and legally binding net zero targets. Section 4.2 of NPS EN-1 defines solar as a low carbon energy generating technology and affords all solar NSIPs critical national priority infrastructure status. In accordance with National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 3), the electricity transmission infrastructure associated with the Proposed Development also benefits from CNP infrastructure status.

2.1.3 Notably, NPS EN-1 paragraph 4.2.21 states that the fact that there may be other potential plans or projects deliverable in different locations to meet the need for CNP Infrastructure is unlikely to be treated as an alternative solution.

2.1.4 Within Paragraphs 4.3.22 to 4.3.24 of NPS EN-1 the approach for the consideration of alternatives is set out, noting that given the level and urgency of need for new energy infrastructure, it should be proportionate and only alternatives that meet the objectives of the proposed development need to be considered. This means that alternatives must have a realistic prospect of delivering the same infrastructure capacity (including energy security, climate change, and other environmental benefits) in the same timescale as the proposed development. It notes that it would not be correct to refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site, given the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals.

2.1.5 Paragraphs 2.10.18 to 2.10.48 of NPS EN-3 sets out the factors influencing site selection for solar development including irradiance, site topography, network connection, proximity to dwellings and agricultural land classification.

2.1.6 It is noted that Government published a new Draft NPS EN-1, EN-3 and EN-5 on 24th April 2025. The statements referenced above, from the 2023 version of these NPS's, remain unchanged in the published drafts (although paragraph numbers may differ).

2.1.7 The site selection process has been carried out proportionately by considering potential alternatives that meet the objective of the Proposed Development (being the ability to deliver a 500MW Solar development connected to the Monk Fryson Substation by the connection date of 2029) and with consideration of the factors influencing site selection and design set out in the NPS alongside key planning issues in light of the constraints identified through the site selection process.

2.2 Stage 1: Identification of an Area of Search

2.2.1 The first stage of assessment requires the identification of an area of search, based on an available point of connection, and the general irradiance levels and topography of the area.

2.2.2 There is a consensus between Government and industry that the single biggest obstacle to the deployment of renewable energy is the capacity of the electricity grid and long delays for grid connections. Like most solar energy development, site selection for the Proposed Development therefore began with the Applicant exploring National Grid's mapping system to identify available points of connection (POC) into the national electricity transmission system (NETS) or the distribution system with available capacity.

2.2.3 The area of search for a POC was not primarily focused on North Yorkshire, but the Applicant understood that North Yorkshire had suitable levels of irradiance to gain a viable yield from current solar panel technology. Furthermore, North Yorkshire has a significant history of power generation with existing infrastructure and capacity making it a suitable location for the Proposed Development. North Yorkshire Council aims to achieve net carbon neutrality by 2030 with the Council's Climate Change Strategy seeking to install an additional 2,500 MW of solar, onshore wind and hydropower by 2038.

2.2.4 Following discussions with National Grid, a POC was identified at the National Grid Monk Fryston substation which had available capacity for a utility scale energy project. The existing National Grid Monk Fryston substation is a key connection point in the national 275 kV network in the Humber and North East region and is being upgraded as part of National Grid's Yorkshire Green project.

2.2.5 Once a suitable POC was identified, the Applicant considered the general compatibility of the surrounding land with Solar PV and BESS technology. As noted in Paragraph 2.10.19 of NPS EN-3, irradiance is a key consideration in identifying a potential site as the amount of electricity generated on site is directly affected by irradiance levels. Irradiance levels are in turn affected by surrounding topography, with an uncovered or exposed site of good elevation and favourable south facing aspect more likely to increase year-round irradiance levels.

2.2.6 The Applicant then proceeded to consider, at a high level, sites that could potentially accommodate a solar project to utilise the grid capacity available at Monk Fryston, which was confirmed by NGET to be 500MW with a 500MW import for BESS. A land area of approximately 75 ha of solar panels (100 ha including landscaping and ecology mitigation land) is required to provide an NSIP solar scheme of 50 MW. For a grid connection of 500 MW, a site size of approximately 1,000 ha (excluding cable route) is needed. At this stage in the process, the Applicant generally seeks to find a site, or combination of sites, which is around 20% larger than is needed to provide flexibility for additional mitigation measures and other constraints that may become known through the design development process. It was recognised that it may not be possible to identify a single site of this size. Therefore, the Applicant considered both contiguous land parcels and land parcels near one another.

2.2.7 A 25km radius is considered by the Applicant to be a viable cable connection distance for a solar project of this scale, albeit as the distance from the POC increases, larger contiguous solar development areas are generally required to maintain viability as the higher transmission costs must be balanced by a larger more efficient solar array. The POC and 25km search area are shown on **Figure 1, Annex A**.

2.3 Stage 2: Exclusion of Planning, Environmental and Spatial Constraints and Consideration of Previously Developed Land

2.3.1 Stage 2 of the site selection process involved a high-level assessment of the area of search, using publicly available data and a high-level application of local and national planning policy, to identify any planning, environmental and spatial constraints which would affect the acceptability of sites to be brought forward within the area of search. **Table 2** below provides details of the constraints considered at Stage 2.

Table 2: Environmental Constraints and Considerations

Constraint	Discussion
Agricultural Land Classification and Land type	Where practicable utilise suitable previously developed land, brownfield land, contaminated land or industrial land. Where the use of agricultural land is necessary, planning policy seeks to minimise impacts on the best and most versatile agricultural land (defined as grades 1, 2 and 3a), preferably use land that is not classified as best and most versatile (grades 3b, 4 and 5). For the purposes of Stage 2, all ALC grade 1, 2 and 3 land was excluded from the area of search based on Natural England mapping.
Nationally designated landscapes	The presence of, or proximity to, any National Landscapes or National Parks were considered.

Constraint	Discussion
	No such designations were present or close to the 25km search area.
Designated international and national ecological and geological sites	The following designations were identified and any land covered by these designations was excluded: National Nature Reserves (NNR), Sites of Special Scientific Importance (SSSI), Special Areas of Conservation (SAC), Special Protection Areas (SPA), SPA protection buffer, and Ramsar sites. In addition, National Forest Inventory and ancient woodland were excluded.
Designated national and local archaeological designations and built heritage assets	The presence of any Scheduled Monuments, World Heritage Sites, Registered Battlefields, and Registered Parks and Gardens; dense concentrations of listed buildings; and Conservation Areas were excluded from the area of search.
Proximity to sensitive human receptors	Consideration was given to minimising the proximity of nearby sensitive human receptors which include residential dwellings, populated areas/ villages.
Green Belt	The South and West Yorkshire Green Belt, and York Green Belt were excluded from the area of search.
Flood Zones	Land within Flood Zone 2 or 3 was excluded from the area of search.

2.3.2 The above categories are mapped on **Figure 2 and 2a, Annex A**.

2.3.3 The following sections set out how the above categories informed the search for a suitable site.

Agricultural Land Classification

2.3.4 Paragraph 2.10.31 of NPS EN-3 recognises that "*at this scale, it is likely that applicant's developments will use some agricultural land. Applicants should explain their choice of site, noting the preference for development to be on suitable brownfield, industrial and low and medium grade agricultural land".*

2.3.5 Best and most versatile (BMV) agricultural land is defined as land in grades 1, 2 and 3a of the Agricultural Land Classification. Land that is not classified as best and most versatile constitutes medium and low grade agricultural land (grades 3b, 4 and 5).

2.3.6 Solar farms are temporary structures and unlike most built development and other renewable energy proposals (such as energy from waste plants) they do not constitute significant permanent development resulting in the loss of agricultural land. However, in accordance with planning policy, the site selection process initially sought to exclude land that the available data identified as being within an agricultural land classification category that is, or includes, best and most versatile land.

2.3.7 The Applicant considered agricultural land classification in its site selection process by reviewing Natural England's 1970s Provisional Agricultural Land Classification and Agricultural Land Classification - Post 1988 Survey datasets when considering suitable sites. Those datasets do not distinguish between grade 3a (BMV) and grade 3b (non-BMV) land. Therefore, for the purposes of stage 2 of the site selection process, the Applicant excluded all grade 1, 2 and 3 land (including both 3a and 3b land), so that its initial search was focussed on suitable and available non-BMV land.

2.3.8 **Figure 2, Annex A,** shows that a large proportion of land within the search area is categorised as grade 2 or 3. A small swathe of grade 1 land is located to the east of the POC whilst swathes of unclassified land (i.e. not grade 1, 2 or 3) are to the west and southwest.

Nationally Designated Landscapes

2.3.9 As set out in Paragraphs 5.10.7 to 5.10.8 of NPS EN-1, National Landscapes and National Parks have the highest status of protection in relation to landscape and natural beauty.

2.3.10 No National Landscapes or National Parks were present within the search area.

Designated International and National Ecological and Geological Sites

2.3.11 Internationally and nationally designated biodiversity sites are afforded high protection in national and local planning policy, NPS EN-1 and NPS EN-3. Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar Sites, Sites of Specific Scientific Importance (SSSI) and National Nature Reserves (NNR) were therefore identified and avoided. This notably includes the Skipwith Common SAC, SSSI, NNR and Lower Derwent Valley SPA, SAC, SSSI, NNR in the northeast of the defined search area, together with a number of SSSIs within the search area.

Designated National and Local Archaeological Designations and Built Heritage Assets

2.3.12 Paragraph 5.9.27 of NPS EN-1 places great weight on the conservation of designated heritage assets, and the more important the asset, the greater the weight should be.

2.3.13 In its initial high-level review of the 25 km search area, the Applicant identified and avoided designated heritage assets, namely scheduled monuments, world heritage sites, registered battlefields, dense concentrations of listed buildings, and registered parks and gardens and conservation areas.

Proximity to Sensitive Human Receptors

2.3.14 Paragraph 2.10.27 on NPS EN-3 recognises that *"Utility-scale solar farms are large sites that may have a significant zone of visual influence"*. Given the potential for visual amenity, and glint and glare impacts on densely populated areas, the Applicant excluded larger urban areas such as Selby, Tadcaster, Wetherby, Castleford and Greater Leeds and Wakefield from consideration, other than when considering the potential for use of previously developed land.

Green Belt

2.3.15 Paragraph 5.11.20 of NPS EN-1 states that there is a general presumption against inappropriate development within Green Belts, and that "*Such development should* not *be approved except in very special circumstances"*. Given the above, the Applicant sought to avoid the South and West Yorkshire Green Belt surrounding the POC, as well as the York Green Belt to the northeast of the POC.

Flood Zones 2 and 3

2.3.16 As set out in Section 5.8 of NPS EN-1, the aims of planning policy on development and flood risk are to ensure that flood risk from all sources of flooding is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to steer new development to areas with the lowest risk of flooding.

2.3.17 It is noted that NPS EN-1 also sets out that new energy infrastructure can be, exceptionally, necessary in flood risk areas, for example where there are no reasonably available sites in areas at lower risk. This would be subject to satisfying the Sequential Test and the Exception Test.

2.3.18 Accordingly, the Applicant sought to avoid land with Flood Zones 2 and 3.

Conclusion

2.3.19 **Figure 3, Annex A** sets out the application of these constraints within the area of search.

2.4 Stage 3: Identifying Potential Development Areas

2.4.1 Having considered these constraints, Stage 3 of the site selection process identified Potential Development Areas (PDAs) for the location of the Proposed Development by applying the key operational criteria for large scale solar development – site assembly, and topography in the context of these constraints.

2.4.2 In undertaking this analysis, the Applicant's starting point was that the minimum area for large scale solar to be economically viable identified a threshold of at least 40 ha of contiguous land for any individual site to form part of a network of sites in close proximity covering a total area of approximately 1,000 ha as identified at Stage 1. This is the minimum site size threshold considered by the Applicant to be viable based upon the balance of costs of connecting infrastructure between individual sites and electricity losses from the transmission over multiple cable routes. This is also consistent with the NPS which is clear that when

considering alternatives only those that meet the objectives of the proposed development need to be considered.

2.4.3 The minimum individual site size is based upon the Applicant's economic analysis of the MW output per ha to be achieved taking into consideration infrastructure costs including the grid connection and the need for a percentage of the land to provide appropriate environmental mitigation, if required. A smaller development area results in higher unit costs and an assessment was made as to the maximum cost and therefore minimum site area threshold that would be viable for the Proposed Development. The same is true of irregular shaped sites where providing an efficient layout of PVs is challenging and can result in unviable development.

2.4.4 Before applying the operational criteria, however, and in light of EN-1 paragraph 2.10.29 stating that "*While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land*", the Applicant considered if any previously developed (brownfield) land could be utilised for the Proposed Development as part of any PDA.

Previously Developed Land

2.4.5 Opportunities to locate solar PV panels on previously developed land (PDL)/ brownfield land, contaminated land, industrial land and commercial rooftops were explored including within the built up areas excluded at Stage 2 and noted above at paragraph 2.3.14.

2.4.6 An assessment of PDL/ brownfield land within the search area identified no land of an adequate area to facilitate a 500MW solar project, with its c.1000ha requirements, either individually or in combination with other sites. In 2017, the Town and Country Planning (Brownfield Land Register) Regulations 2017 required each Local Planning Authority to keep a register of PDL suitable for residential development. The latest data for the area of search is located in the brownfield register prepared by North Yorkshire Council, Leeds City Council, City of York Council, East Riding of Yorkshire Council, City of Doncaster Council, Barnsley Metropolitan Borough Council and Wakefield Council located on the UK Government website.

2.4.7 Within the brownfield search, smaller sites were discounted due to their inability to provide a viable land parcel of 40 ha in combination with other land due to inefficiencies in both layout and the length and complexity of the required connection between sites.

2.4.8 Of the larger sites, they were either deemed unsuitable to facilitate a large NSIP scale solar project of over 50 MW largely due to their proximity to residential receptors with potential glint and glare impacts or were not considered available due to extant planning permissions and / or allocations for other development.

2.4.9 Consideration was given to commercial rooftops within the search area. However, initial considerations showed that it was unlikely that there would be rooftops or combined premises of an adequate area to facilitate a large-scale solar project or provide a viable network of sites in close proximity covering an area of approximately 1,000 ha.

2.4.10 Individual commercial rooftops do not meet the minimum 40 ha site threshold as described above.

2.4.11 The number of commercial rooftops required would mean multiple land ownerships and the legal complexities and costs involved in combining multiple sites of this nature is not viable to deliver a project at transmission scale.

2.4.12 The Government has promoted financial incentives to encourage homeowners to install solar PV systems, so rooftop solar is clearly desirable both on residential and commercial premises. However, this is not considered as an alternative to the Proposed Development. Commercial premises and houses are both consumers and generators of electricity and therefore do not help provide low carbon and renewable alternatives to conventional sources of electricity production at grid scale. In essence, roof-mounted solar panels should be deployed in addition to large scale solar farms, rather than instead of them. This is reinforced by the Government's Clean Power 2030 Action Plan: A new era of clean electricity published in December 2024 sets out the scale of renewable generation required to meet net zero noting that the move away from traditional energy sources and electrification mean there is expected to be a doubling of electricity consumption that will require strong growth in power generation from a diverse range of clean sources on a sustained basis through the 2030s and 2040s. This will require the utilisation of all opportunities for solar generation.

2.4.13 These matters need to be seen in the context that there is a clear and urgent need for further renewable energy capacity, and this will likely include more distributed generation across the electricity distribution network, however the Proposed Development presents a single, large-scale generating asset which addresses the aims of delivering clean, cheap electricity to the consumer by 2030 whilst making a significant contribution to the fulfilment of the UK's legally binding climate change commitments. Whilst smaller-scale solar PV developments are also required to meet net zero, they do not represent an alternative to the Proposed Development. Larger scale solar projects provide increased decarbonisation benefits and commercial benefits to consumers.

Topography

2.4.14 The development of large-scale solar development requires land that is as flat as possible as this is ideal for construction and helps reduce visual intrusion. Flat land also limits the shading between Solar PV Panels and enables the Solar PV Panels to be optimally configured for best production levels.

2.4.15 Topographical constraints have also been identified and mapped (as shown on **Figure 5, Annex A**). All land with a 3% or less gradient which is considered to be very flat and optimal for solar generation has been considered potentially suitable to meet the Proposed Development's requirements of maximising energy generation and avoiding visual intrusion. This land was included when identifying PDAs.

Site Assembly

2.4.16 Large areas of open land are required for large scale solar development as they have less vegetation to be removed for easy installation of the solar infrastructure. This also reduces the amount of buffering required for tree root protection, avoidance of shading compared to small fields and can reduce the solar development's impact on vegetation such as hedgerows and trees.

2.4.17 Areas of open land of at least 40 ha were therefore considered when identifying PDAs and the areas are shown on **Figure 8, Annex A**.

2.5 Stage 4: Evaluation of Potential Development Areas

2.5.1 Stage 4 considers the suitability of the PDAs which have been identified in Stage 3 (as shown on **Figure 8, Annex A**).

2.5.2 Ultimately, as explained in Section 3 below, following the Stage 4 evaluation, none of the PDAs were considered to be both appropriate and available to accommodate the Proposed Development whilst being entirely unconstrained.

3. Site Selection Results

3.1 Stages 1 and 2: Identification of the Area of Search and Unconstrained Land

3.1.1 The area of search identified for the Proposed Development is shown in **Figure 1, Annex A**. This shows the POC at Monk Fryston substation together with the radii of 5km, 10km, 15km, 20km and 25km to show the search area.

3.1.2 **Figure 2, Annex A** shows the planning and environmental constraints identified and excluded at Stage 2 in order to identify the constraints affecting the area of search.

3.1.3 **Figure 3, Annex A** shows the output from this mapping, identifying areas of unconstrained land which have not been excluded from the Stage 1 and 2 sifting exercise.

3.2 Stages 3 and 4: Identifying Potential Development Areas and Further Evaluation

3.2.1 **Figures 4-8, Annex A** show the output following the application of the stage 3 criteria, i.e. site size, land assembly, consideration of previously developed land and topography for unconstrained land.

3.2.2 **Figure 4, Annex A** shows the brownfield land over 1 ha within the search area which has been identified using the Brownfield Register prepared by North Yorkshire Council, Leeds City Council, City of York Council, East Riding of Yorkshire Council, City of Doncaster Council, Barnsley Metropolitan Borough Council and Wakefield Council located on the UK Government website. As set out in Section 2 above, none of the sites identified are suitable (either alone or in combination) or were not available due to committed development on them and/ or allocations. Therefore, brownfield sites were not considered further.

3.2.3 **Figures 5 and 6, Annex A** illustrate the sifting exercise completed for topography. **Figure 5, Annex A** shows the unconstrained Grade 4, 5 or unclassified land identified from the mapping at Stage 2, overlaid with a slope gradient of 3% or less. **Figure 6, Annex A** shows the residual unconstrained land after removal of any land with a slope gradient above 3%.

3.2.4 **Figure 7, Annex A** shows the areas of land which were identified through the Stage 2 sift but did not meet the Stage 3 criteria and have therefore been discounted (see purple shaded areas). These areas were not suitable due to proximity to other available sites, irregularity of shape and/or size (i.e. areas that were irregular in shape and/or would not meet to 40 ha threshold and/or could not easily be joined to other sites).

3.2.5 **Figure 8, Annex A** shows 4 PDAs (yellow unconstrained areas) consisting of 1 to the north west of the site and a 3 contiguous to the south east which were identified at Stage 4 following application of the above criteria.

3.2.6 The PDA to the northwest of the POC was discontinued from the assessment as this area is largely taken up by Wetherby Racecourse and is therefore not available for solar development.

3.2.7 The 3 PDAs clustered together in Fenwick (to the southeast of the POC) were also discounted as they form part of the Fenwick Solar Farm NSIP project[1]. These PDAs have therefore not been considered any further within this report.

Stage 5: Consideration of Constrained Land

3.2.8 As set out above, the NPS EN-3 requires a proportionate approach to the consideration of alternatives noting the level and urgency of need for new energy infrastructure. It does not provide guidance on how to prioritise multiple constraints and does not rule out development on constrained land. It notes that it would not be correct to refuse an application for development on one site simply because fewer adverse impacts would result from developing similar infrastructure on another suitable site, given the possibility that all suitable sites for energy infrastructure of the type proposed may be needed for future proposals.

[1] A Development Consent Order (DCO) for Fenwick Solar Farm was submitted for consideration in October 2024 and accepted by the Planning Inspectorate in November 2024.

3.2.9 Given that the NPS sets out that alternatives must have a realistic prospect of delivering the same infrastructure capacity (including energy security, climate change, and other environmental benefits) in the same timescale as the proposed development landowner willingness is a key matter in site selection.

3.2.10 As such. following the outcome of Stages 1-4 and the identification of no unconstrained available land, land agents were engaged to liaise with willing landowners within the constrained areas of the area of search. However, when identifying potential sites land agents were briefed to take into consideration the following factors:

- Proximity and route to the POC
- Planning, environmental and spatial constraints, including those outlined in Section 2.3 above (e.g. Flood Zones, ALC and Green Belt)
- Rights of way
- Visual impact and proximity to sensitive receptors
- Vehicle accessibility
- Meeting the objectives of the scheme as set out in paragraph 2.1.7 above.

3.2.11 Landowner willingness was a key matter to ensure that the development could be delivered to meet the connection date and align with the expectations of the Government's Clean Power 2030 Action Plan. It was preferable to compile a site with as few landholdings as possible to minimise legal complexities, project costs and the number of landowners affected by the Proposed Development.

3.2.12 The Applicant then balanced the above factors, accounting for wider sustainable development objectives consistent with NPS EN-1 and EN-3, to identify the land to be taken forward. While some of these factors would clearly preclude solar development (e.g. national designations), other factors (e.g. flood risk and agricultural land classification) are more nuanced, particularly in terms of planning policy application, and professional judgement was therefore applied as part of this balancing process.

3.2.13 This exercise led to the identification of Sites 1-5. As described in Chapter 3 of the Preliminary Environmental Information Report, following further consideration of constraints, particularly flood risk, Site 5 was removed from the scheme, and Sites 6-8 were added, having been brought forward by a willing landowner, and in locations where the above factors were taken into account to determine that these were also suitable sites. Although these sites are located within constrained land, they are of appropriate size to deliver a project of this scale and are within an appropriate distance to provide a viable grid connection.

4. Conclusion

4.1.1 A methodical and robust site selection process has been undertaken to define the location of the Proposed Development in line with the proportionate approach set out in NPS EN-1 seeking sites that could deliver the same infrastructure capacity and the Proposed Development.

4.1.2 Once a Point of Connection (POC) at the existing Monk Fryston Substation was established, the approach considered Potential Development Areas (PDAs) within a maximum 25 km area of search, with 25 km considered to the maximum economically viable distance from the POC.

4.1.3 Stage 2 of the approach involved GIS mapping to exclude environmental and planning constraints. Stage 3 of the approach involved review of the unconstrained land against operational considerations such as site size and land assembly, the availability of previously developed land (brownfield sites), and topography.

4.1.4 This resulted in identification of 4 PDAs on unconstrained land. Stage 4 of the assessment involved consideration of the suitability and availability of the PDAs for solar development. It was concluded that none of the PDAs were both suitable and available.

4.1.5 Following the Stages 1-4 assessment, it was evident that there was no unconstrained, suitable and available land within the search area. Therefore, land agents were engaged to identify areas of land which might be suitable for the Proposed Development, having due regard to planning, environmental and spatial constraints among other technical, operational and practical considerations. Their focus was on large land holdings and areas where landowners may be more amenable to development on their land. This exercise resulted in the identification of the land parcels which comprise the Proposed Development.

4.1.6 This Site Selection Report demonstrates that there is no unconstrained land which is suitable and available to accommodate the Proposed Development, and that constrained land needs to be used. Within that constrained land, a range of factors were considered and carefully balanced, using professional judgement and accounting for wider sustainable development objectives consistent with NPS EN-1 and EN-3, to identify the land to be taken forward.

4.1.7 In accordance with NPS EN-1, the site selection process has been carried out proportionately by considering potential alternatives that meet the objectives of the Proposed Development with a realistic prospect of delivering the same infrastructure capacity (including energy security, climate change, and other environmental benefits) with consideration of the factors influencing site selection and design set out in the NPS alongside key planning issues in light of the constraints on the site.

4.1.8 Noting the absence of any suitable and available unconstrained land, it is considered that there are no obviously more suitable locations within the area of search than the location for the Proposed Development. The Proposed Development's location is therefore assessed to be suitable and appropriate for the scale of solar development proposed.

5. References

Ref 1 Department for Energy Security and Net Zero (2023) Overarching National Policy Statement for energy (EN-1). Available at: https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarching-nps-for-energy-en1.pdf

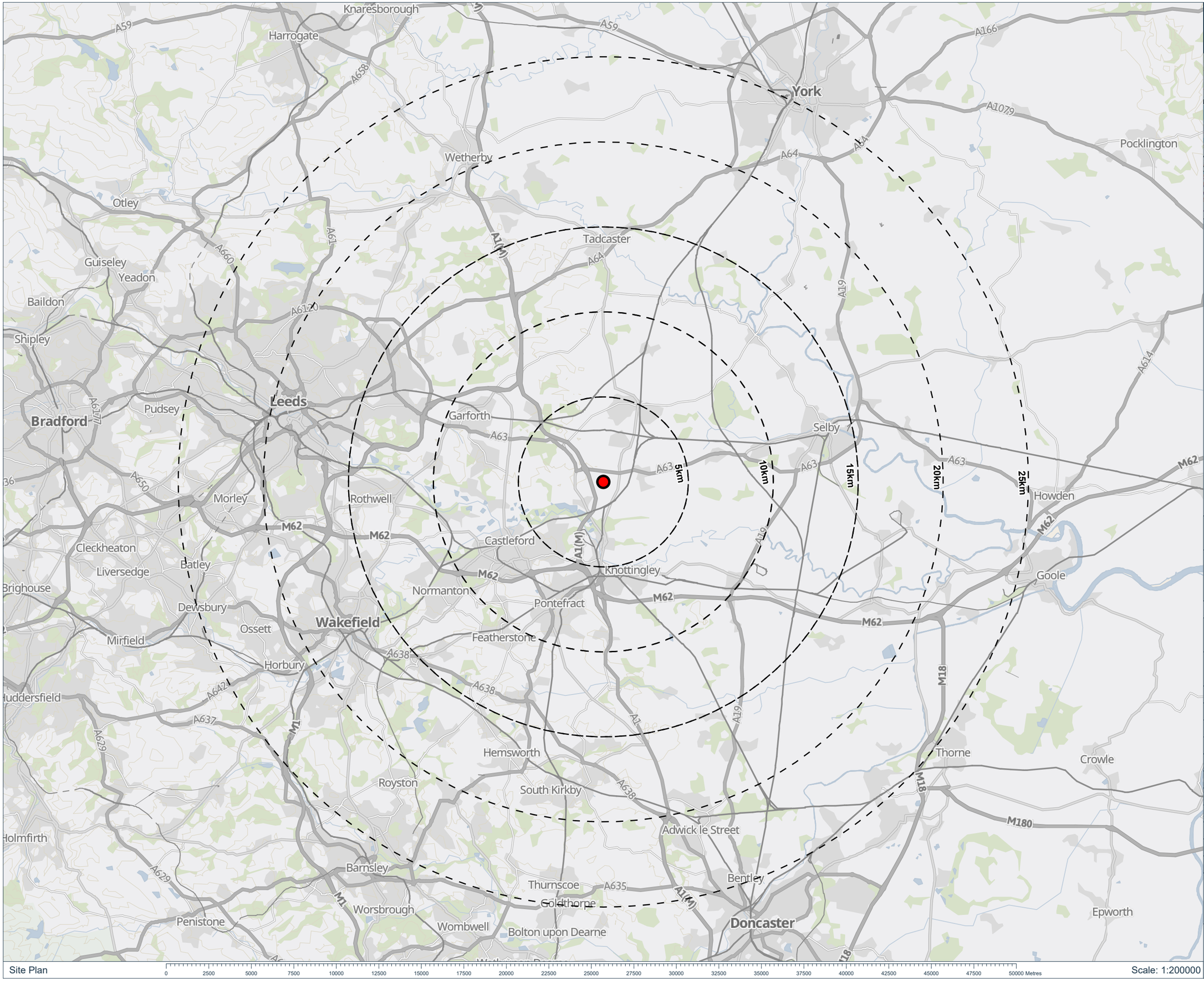
Ref 2 Department for Energy Security and Net Zero (2023) Overarching National Policy Statement for energy (EN-3). Available at: https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/nps-renewable-energy-infrastructure-en3.pdf

Ref 3 Department for Energy Security and Net Zero (2023) Overarching National Policy Statement for energy (EN-5). Available at: https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networks-infrastructure-en5.pdf

Ref 4 UK Government Brownfield Register (April 2025) Available at: https://www.planning.data.gov.uk/dataset/brownfield-land [Accessed 01/05/2025]

Ref 5 UK Government's Clean Power 2030 Action Plan. Available at: Clean Power 2030 Action Plan - GOV.UK [Accessed 26/05/2025]

Appendix A Assessment Mapping Results



Site Plan

0 2500 5000 7500 10000 12500 15000 17500 20000 22500 25000 27500 30000 32500 35000 37500 40000 42500 45000 47500 50000 Metres

Scale: 1:200000

DALCOUR MACLAREN

Key:

- Existing National Grid Monk Fryston Substation
- Area of Search

Title: Figure 1 - Search Area

Location: Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 448453, 429122

Scheme Name: Light Valley Solar

Drawing Name: Information Plan

Drawing No: 24003651_PLN_INFO_1245.1

Rev	Date	Description
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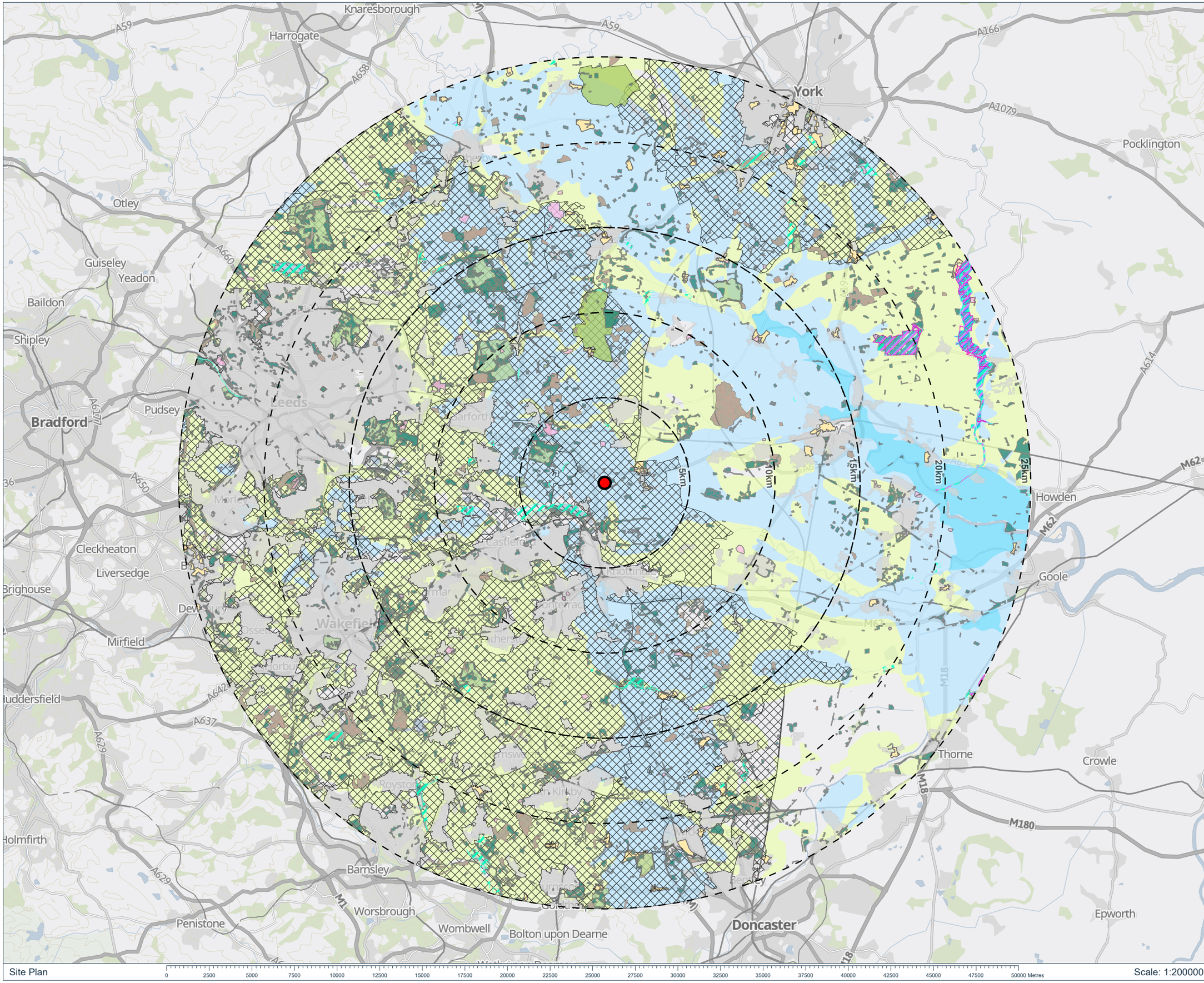
Drawing Location: C:\Users\martin.russ\Dalcour Maclaren\Light Valley Solar 24003651 - Geomatics\01 DM Plans\20250424_24003651_PLN_INFO_1245.1\20250424_24003651_PLN_INFO_1245.aprx



Site Plan

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Scale: 1:200000

DALCOUR MACLAREN

Key:

- Existing National Grid Monk Fryston Substation
- Area of Search
- Green Belt
- Historic England Conservation Areas
- NNR
- SSSI
- SAC
- SPA
- Scheduled Monuments
- National Forest Inventory
- Ancient Woodland
- Built-Up Area
- Registered Parks and Gardens
- Registered Battlefields

Provisional ALC Grade

- Grade 1
- Grade 2
- Grade 3

Title:
Figure 2 - Planning and Environmental Constraints

Location:
Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 448459, 429122

Scheme Name:
Light Valley Solar

Drawing Name:
Information Plan

Drawing No: 24003651_PLN_INFO_1246.1

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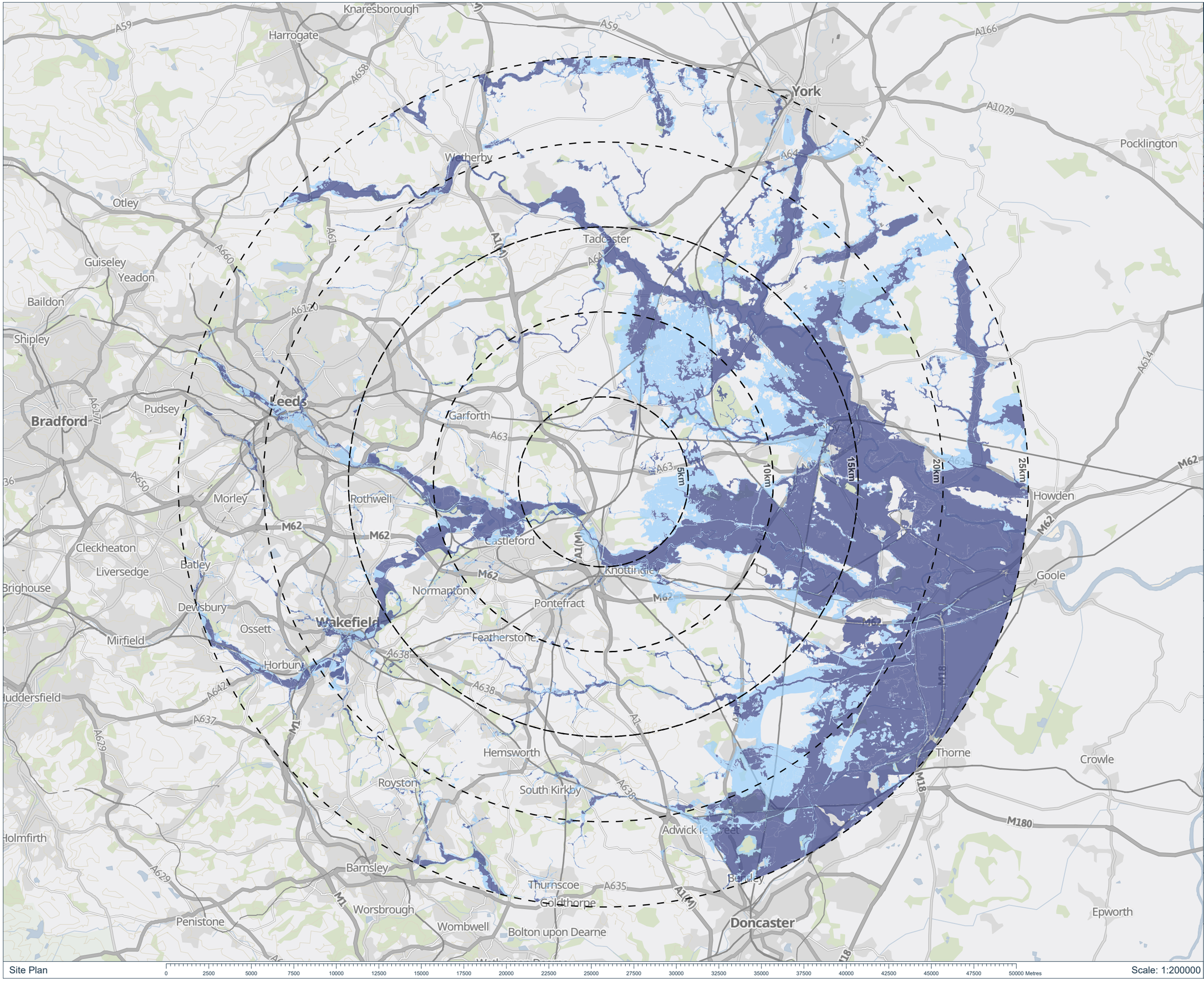

Key:

- Area of Search
- Flood Zone 2
- Flood Zone 3

Title: Figure 2a - Flood Zones 2 and 3 Constraints

Location: Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 448456, 429120

Scheme Name: Light Valley Solar

Drawing Name: Information Plan

Drawing No: 24003651_PLN_INFO_1436.1

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Site Plan

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Scale: 1:200000

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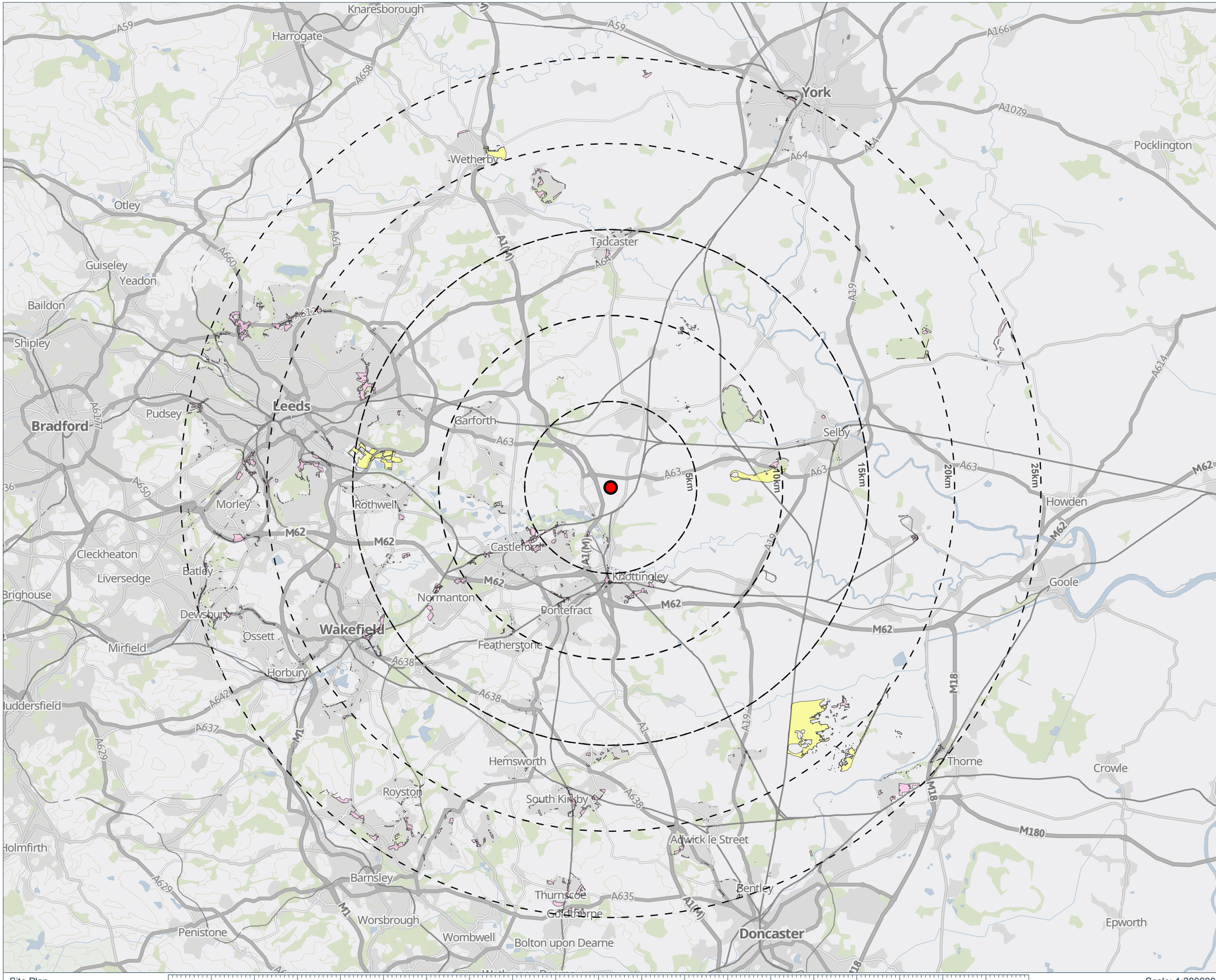

Site Plan

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Scale: 1:200000

DALCOUR MACLAREN

Key:

- Existing National Grid Monk Fryston Substation
- Area of Search

Unconstrained Land

- 0 - 40.00 ha
- 40.01 - 4224 ha

Title:
Figure 3 - Unconstrained Land

Location:
Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 448459, 429122

Scheme Name:
Light Valley Solar

Drawing Name:
Information Plan

Drawing No: 24003651_PLN_INFO_1247.1

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-	28.04.2025	First Issue

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Approved:	ER
Sheet No:	1 of 1
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Light Valley Solar

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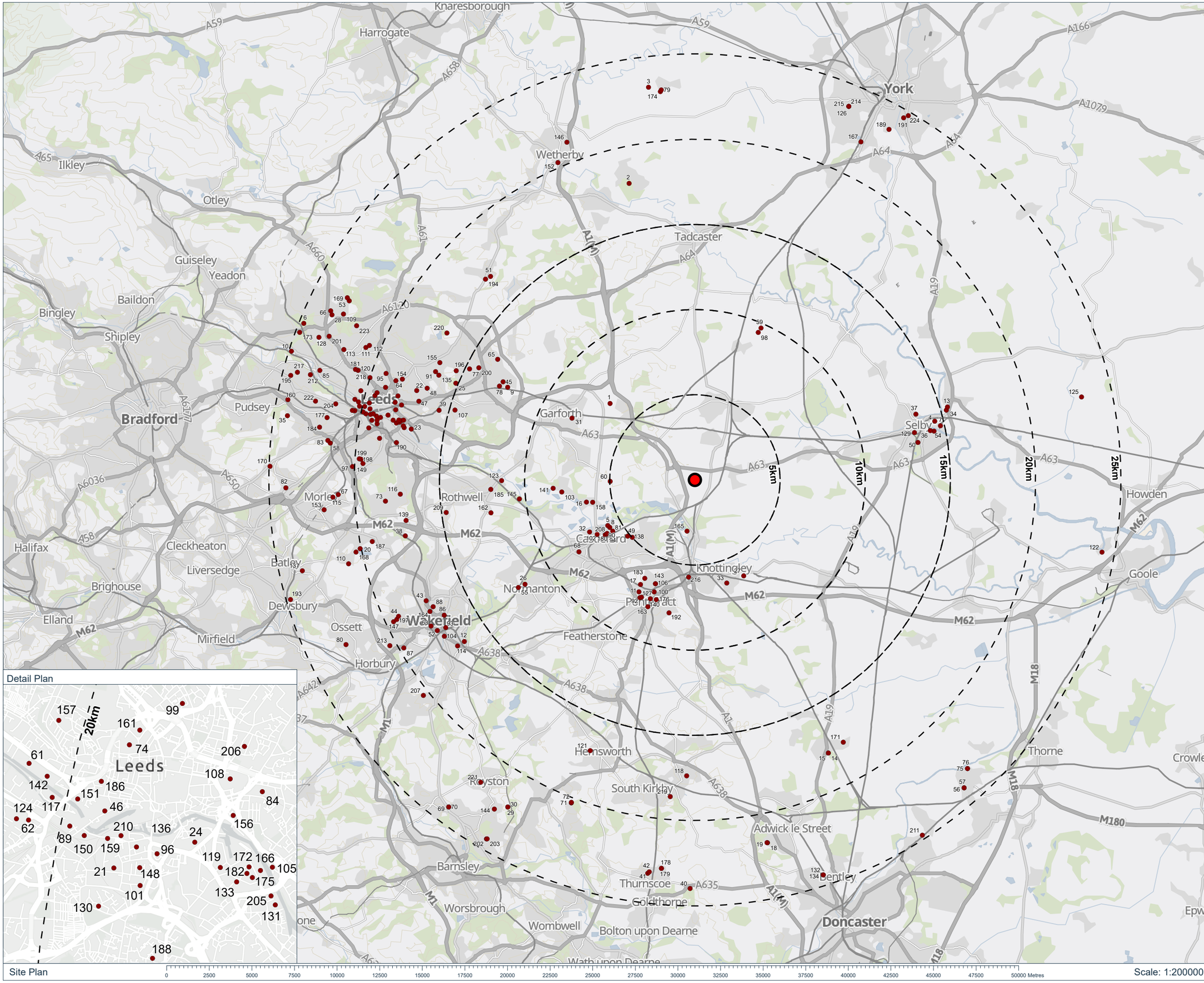

Site Plan

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Scale: 1:200000

Key:

- Existing National Grid Monk Fryston Substation
- Area of Search
- Brownfield Site
- 100 Site reference ID

Title:
Figure 4 - Brownfield Sites

Location:
Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 443163, 428947

Scheme Name:
Light Valley Solar

Drawing Name:
Information Plan

Drawing No: 24003651_PLN_INFO_1248.1

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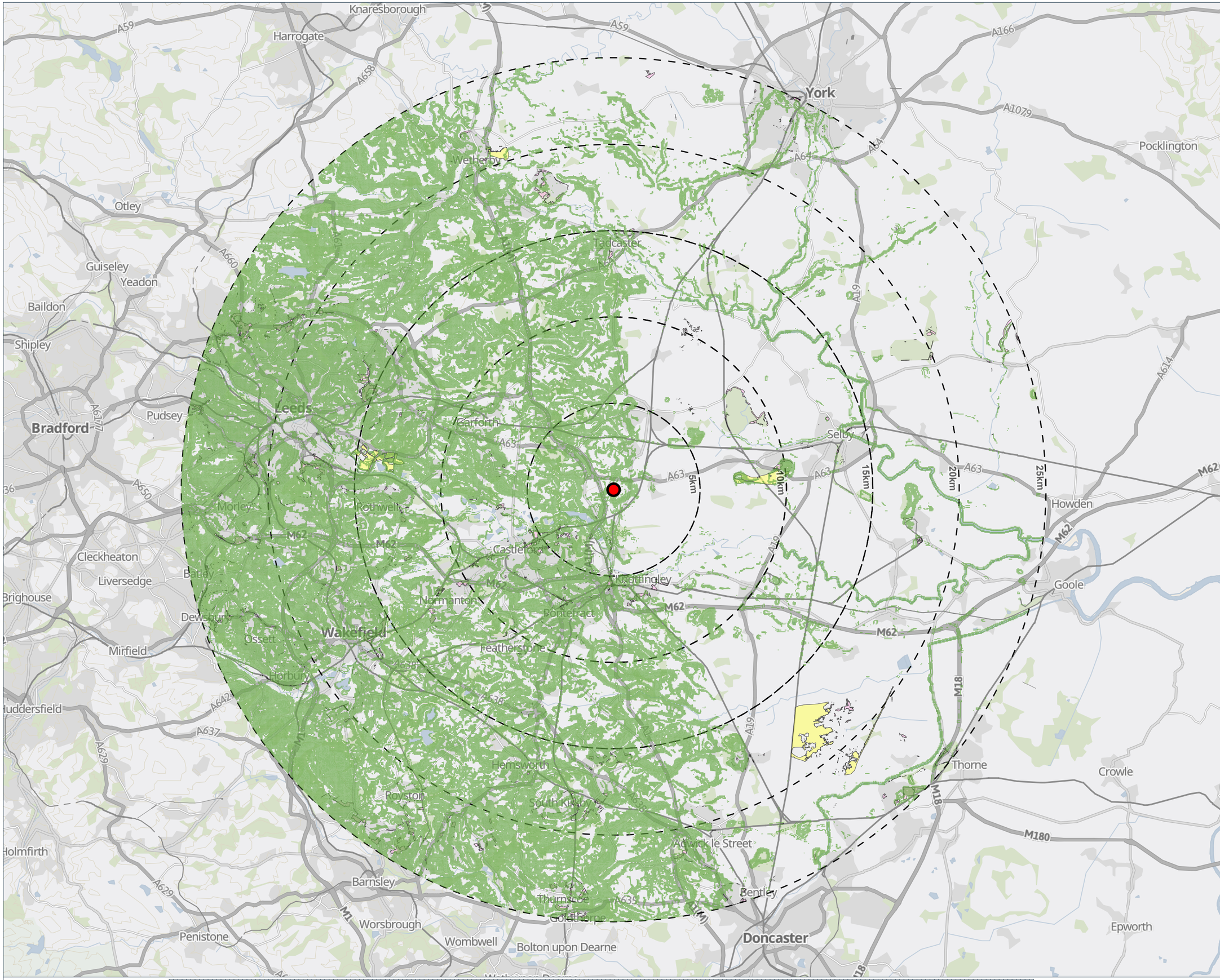

Site Plan

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Scale: 1:200000

DALCOUR MACLAREN

Key:

- Existing National Grid Monk Fryston Substation
- Area of Search

OS Terrain 50 Slope

- >=3% Gradient

Unconstrained Land

- 0 - 40.00 ha
- 40.01 - 4224 ha

Title:
Figure 5 - Topographic Gradient

Location:
Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 448453, 429122

Scheme Name:
Light Valley Solar

Drawing Name:
Information Plan

Drawing No: 24003651_PLN_INFO_1249.1

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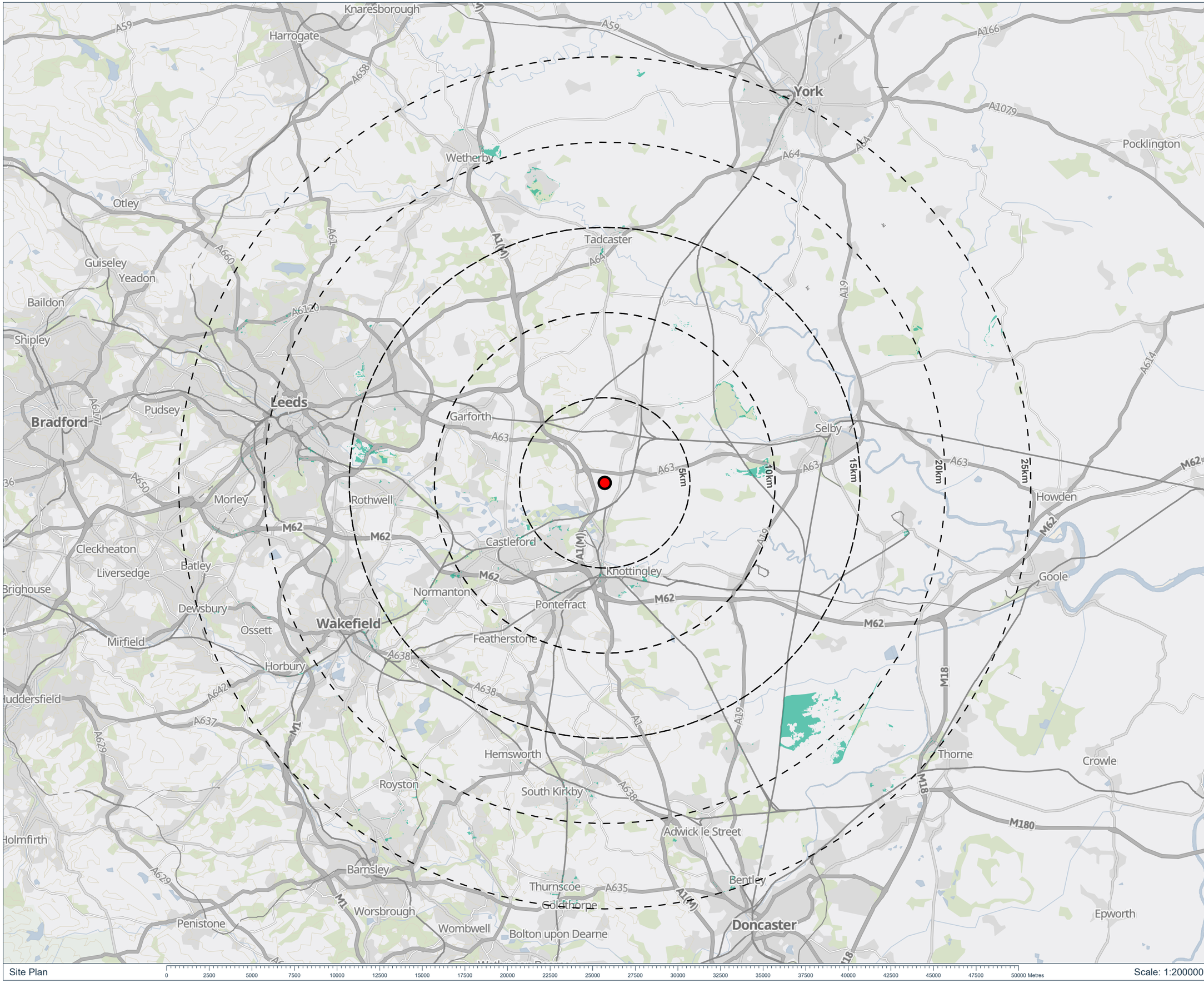
Light Valley Solar



Site Plan

0 2500 5000 7500 10000 12500 15000 17500 20000 22500 25000 27500 30000 32500 35000 37500 40000 42500 45000 47500 50000 Metres

Scale: 1:200000

Key:

- Existing National Grid Monk Fryston Substation
- Area of Search
- Residual Unconstrained Land <3% Gradient Topography

Title: Figure 6 - Residual Unconstrained Land with Excluded Areas

Location: Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 448453, 429122

Scheme Name: Light Valley Solar

Drawing Name: Information Plan

Drawing No: 24003651_PLN_INFO_1250.1

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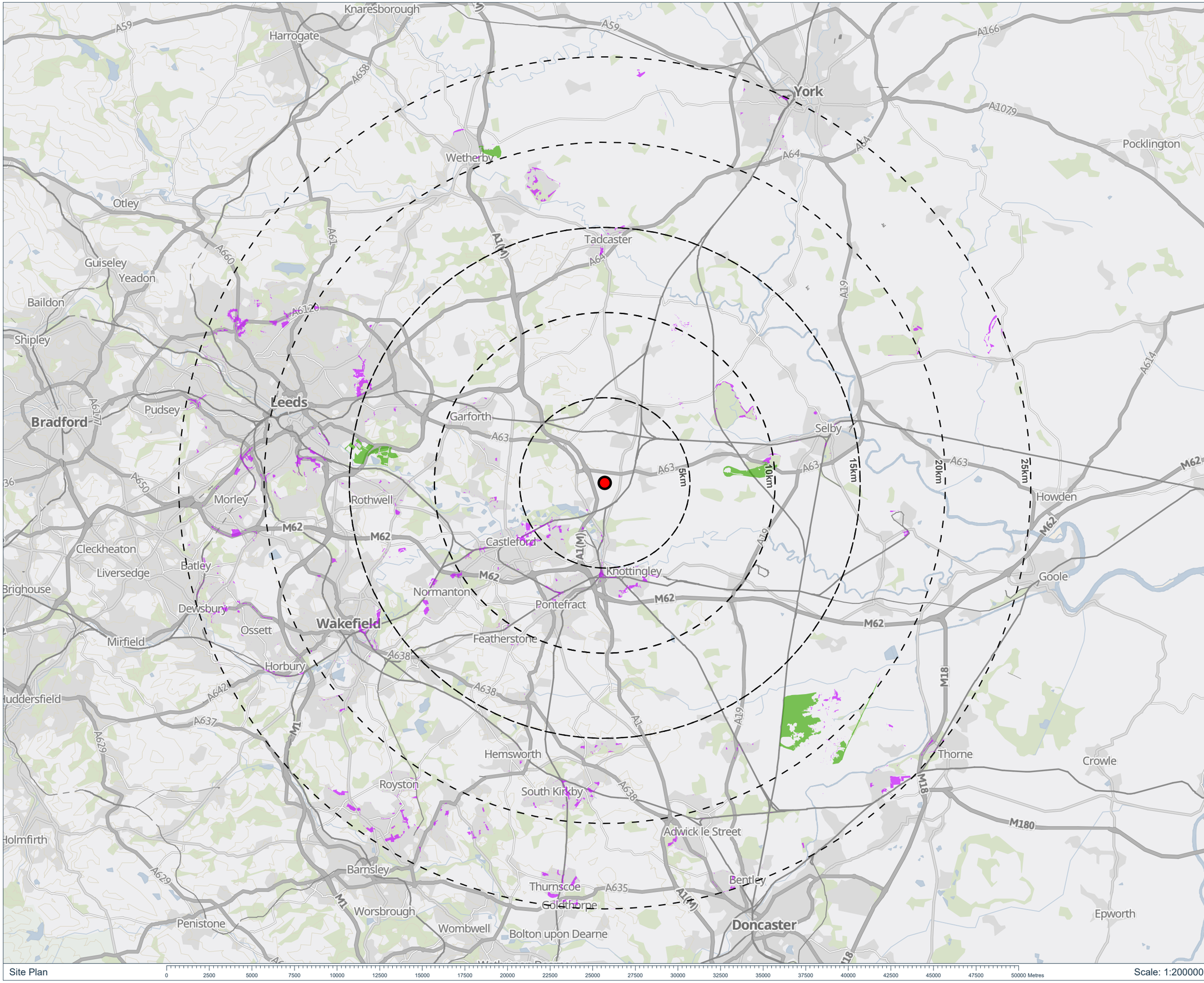

Site Plan

0 2500 5000 7500 10000 12500 15000 17500 20000 22500 25000 27500 30000 32500 35000 37500 40000 42500 45000 47500 50000 Metres

Scale: 1:200000

DALCOUR MACLAREN

Key:

- Existing National Grid Monk Fryston Substation
- Area of Search

Residual Unconstrained Areas

- <40 hectares
- >40 hectares

Title: Figure 7 - Selected Residual Unconstrained Land

Location: Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 448453, 429122

Scheme Name: Light Valley Solar

Drawing Name: Information Plan

Drawing No: 24003651_PLN_INFO_1251.1

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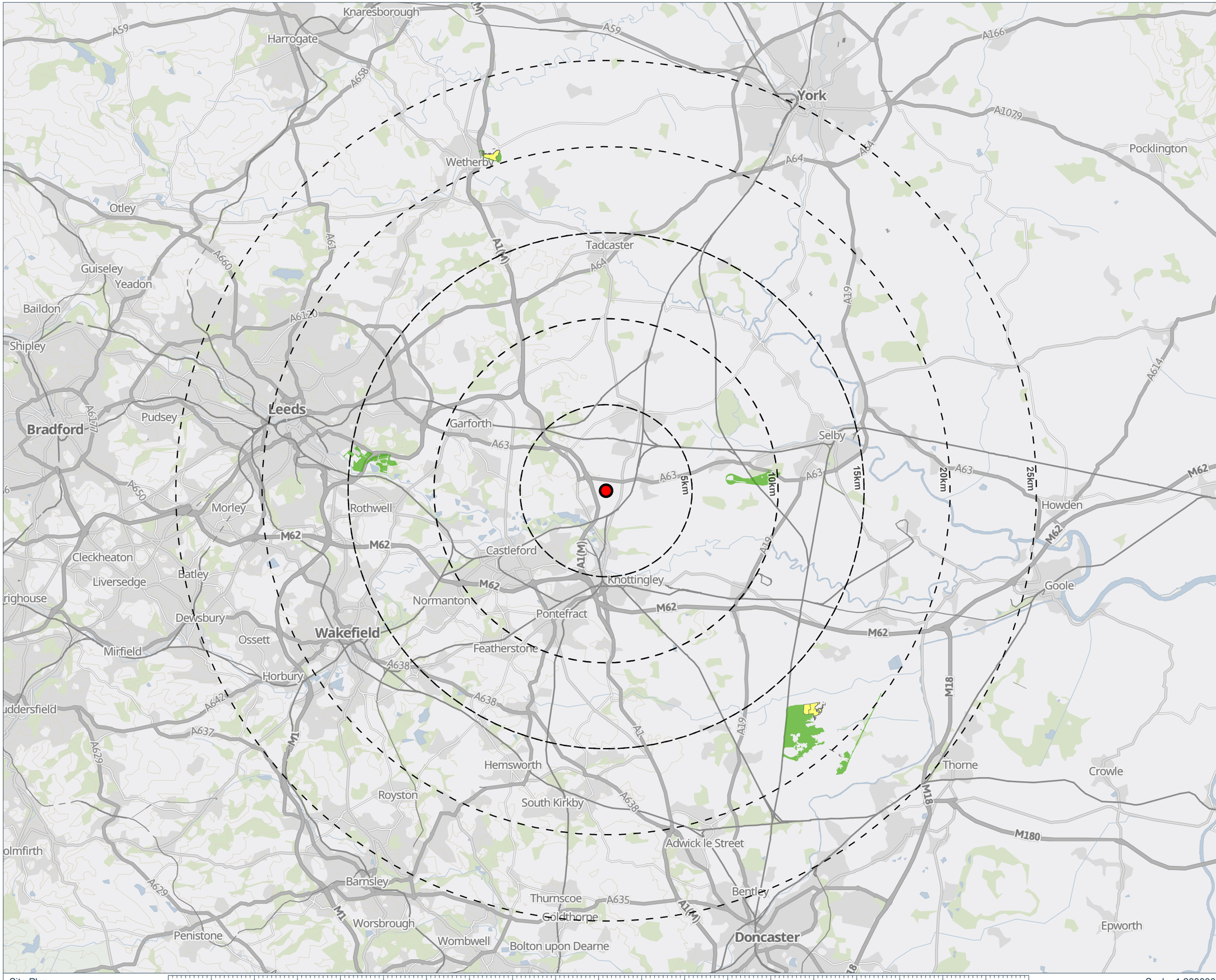

Key:

- Existing National Grid Monk Fryston Substation
- Area of Search
- Residual Unconstrained Area (over 40 ha)
- Unconstrained area under same title ownership (over 40 ha)

Title:
Figure 8 - Unconstrained areas under same title ownership (>40ha)

Location:
Monk Fryston Sub Station, Fairburn, North Yorkshire, LS25 5LD

Coords: 448726, 429295

Scheme Name:
Light Valley Solar

Drawing Name:
Information Plan

Drawing No: 24003651_PLN_INFO_1423.1

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Light Valley Solar

Site Plan

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Scale: 1:200000