Lime Down
Solar Park

Cable Route Corridor Mining Risk - Technical Memorandum

May 2026
Revision 1

Planning Inspectorate Reference: EN010168
Document Reference: EXAM/9.14
The Infrastructure Planning (Examination Procedure) Rules 2010

Geosyntec consultants

engineers | scientists | innovators

ISO 9001
ISO 14001
ISO 45001

Certificate Number 14638

Cable Route Corridor Mining Risk - Technical Memorandum

Lime Down Solar Farm

Prepared for

Line Down Solar Park]

Prepared by

Geosyntec Consultants Ltd

Suite 4D, Northspring

70 Spring Gardens

Manchester M2 2BQ
United Kingdom

Project Number: 26008710

May 2026

LIMITATION

Geosyntec Consultants Ltd (Geosyntec) has prepared this report for the sole use of Lime Down Solar Park Ltd in accordance with the Agreement under which our services were performed. No other warranty, express or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Geosyntec, which will not be unreasonably withheld.

Unless otherwise stated in this report, the assessments made assume that the site and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by Geosyntec, unless otherwise stated in the report.

Where assessments of works or costs required to reduce or mitigate any environmental liability identified in this report are made, such assessments are based upon the information available at the time and may be subject to further investigations or information which may become available. It is therefore possible that cost estimates, where provided, may vary outside stated ranges. Where assessments of works or costs necessary to achieve compliance have been made these are based upon measures which, in Geosyntec's experience could normally be negotiated with the relevant authorities under present legislation and enforcement practice, assuming a pro-active and reasonable approach by site management.

COPYRIGHT

TABLE OF CONTENTS

1 INTRODUCTION

1.1 General

Geosyntec have been commissioned by Lime Down Solar Park Ltd (the "Client") to prepare a Mining Risk Technical Memorandum for the 'Cable Route Corridor' ("the Site"), which connects the proposed Lime Down solar farm with the Existing National Grid Melksham Substation. The purpose of the memorandum is to summarise the key project risks identified from the Mining Risk Assessment (MRA) (**ES Volume 3, Appendix 19-11: Mining Risk Assessment [APP-257]**) and propose types of ground investigation techniques for the route. This document does not replace the MRA but seeks to provide clarity on risks and ground investigation techniques. The 'Appendix A - Drawings' has been lifted from the MRA.

The MRA was prepared in line with: The Mining Remediation Authority (MiRA) 'Planning Applications and Coal Mining Risk Assessments;' and CIRIA C758 'Abandoned Mine Workings Manual'. The MRA was a comprehensive review and understanding of recorded and probable mining features that could present themselves as hazards to the proposed scheme. The MRA identified a high-risk area which is localised in the south of the Site broadly located between the villages of Gastard and Whiteley as presented on GCU0357002-GEOS-LDSF-MRA-D-G-1018 in Appendix A of this document.

As such, this memorandum will be focused on the high and medium risk areas identified from the MRA.

1.2 Scheme Overview

The proposed scope of works is the development of a new solar farm with ancillary infrastructure and associated cable route to feed into the existing National Grid Melksham Substation. The Site forms part of this wider scheme and is known as the 'Cable Route Corridor.' The cable is anticipated to be trenched at shallow depths (understood to be up to 2m of excavation as per **Environmental Statement Volume 1, Chapter 3 The Scheme [APP-055]** apart from key crossings at 'Avoidance Areas' as shown in **Environmental Statement Volume 2, Figure 3-2 Key Construction Phase Features [APP-082],** which are locations where trenchless technologies rather than open cut trenches will be used to avoid environmental receptors or engineering constraints within the Cable Route Corridor.

2 SOURCES OF INFORMATION

Geosyntec have consulted with the sources of information presented below. The interpretation and conclusions drawn by Geosyntec are based on the acceptance of accurate information provided by third parties. Geosyntec do not accept liability for any inaccurate information supplied by third parties.

3 GROUND MODEL

A high-level ground model is provided as Table 3.1 and is based on the information supplied in the data listed in Section 2 and the MRA. The BGS maps and geology have been summarised for the medium and high-risk mining areas only. GeoIndex Viewer and the BGS 1:10,000 maps available for the Site have been reviewed for geological and mining information. Note that mapped superficial deposits are absent from the majority of the Site. It is anticipated that the upper stratum will be completely weathered to a clay, becoming rock strength at relatively shallow depths.

- 1:10,560 Sheet ST86NE, 1957-8
- 1:10,560 Sheet ST86NE, 1971
- 1:50,000 Sheet 265 Bath, Bedrock and Superficial, 2011.

The strata listed below is indicative only and needs to be confirmed through intrusive investigations. The depths and thicknesses will vary across the Site.

Table 3.1, Anticipated Geology

Group	Formation	Description	Approximate Anticipated Depth (m BGL)
Artificial Deposits	Made Ground	Made Ground is not recorded on the BGS Mapping for the Site. However, Made Ground associated with historical land uses such as agriculture, mines and quarries are anticipated to be present.	0.0 to Unknown
Superficial Deposits	Non-specified	Although not specified geological deposits, the maps for the Site record 'Clay with Limestone', 'Clay and Sandy Clay' 'Silty Clay' 'Poorly Drained Clay' and 'Limestone Brash' at the surface.	0.0 to 2.0
Great Oolite Group	Forest Marble Formation - Mudstone	Mainly grey clay with sandy lenses and partings. Flaggy, shelly and oolitic limestone and some sandstone at the base. Approximately 20m in thickness. Underlies the majority of Site.	0.0 to 10.0
Great Oolite Group	Chalfield Oolite (Historically Great Oolite Formation)	Comprising Upper Rags and Bath Oolite which are whitish streaky shell fragmented oolite with coralline limestone at base which overlies the workable oolite. Present at depth. Part of the Chalfield Oolite Formation which is historically called the Great Oolite. Also known locally as Oolite Freestone and Bath Freestone. Up to 36m in thickness.	10 to 36.0

3.1 Structural Geology

There are two (2) geological faults intersecting the Site as presented in Table 3.2 below. With respect to dip and dip direction, BGS Sheet 1:10,560 ST86NE indicates a dip of 4 degrees to the southeast however this is anticipated to be variable based on faulting in the vicinity.

Table 3.2, Geological Faults

Fault Number	Grid Reference	Orientation	Throw Direction	Comment
1	388616, 166940	NE/SW	SE	Conjectured. Part of Atworth – Lacock Fault Belt
2	388492, 167688	NE/SW	SE	Conjectured. Part of Atworth – Lacock Fault Belt

3.2 Hydrogeology

A review of hydrology and hydrogeological data from DEFRA's online MAGIC Map tool (DEFRA, 2025) indicates the bedrock at the Site is a Secondary A aquifer. Some areas of Site do not have an aquifer designation.

The NERC Report WAVG85008 (NERC, 1985) states that mines absent of clay cover (such as by the Forest Marble) were prone to flooding. Therefore, the Great Oolite was more economically acceptable where overlain by the Forest Marble such as within the Site.

It is understood Monks Park Mine and Park Lane were prone to flooding with the absence of water pump.

4 MINING HAZARDS

4.1 Overview

This section is a high-level overview of the mining hazards identified from the MRA. For rationale and justification of the risks this document should be read in conjunction with **Environmental Statement Volume 3, Appendix 19-11 Mining Risk Assessment [APP-257]** whereby Geosyntec undertook a desk-based review of available mining records for the Site and developed a risk assessment for legacy mining hazards. Geosyntec reviewed historical mine abandonment plans, lidar data, BGS data and technical papers, and additional stakeholder information such as the Mendip Cave Registry and published books.

Interpretation of the information was undertaken using ArcGIS Pro.

4.2 Bath Stone

The Site lies in an area of Bath Stone mining which is the collective name given to the commercial Jurassic Limestone within the southwest of England.

It is understood the Bath Stone is part of the Great Oolite Formation which comprises a massive limestone with few marl beds and therefore suitable as commercial 'freestone' (NERC, 1985). Historically, the Great Oolite comprises the Combe Down Oolite, Twinhoe Beds, Bath Oolite and Upper Rags. It should be noted that the Fullers Earth Formation is economically viable and lies stratigraphically below the Great Oolite Group and is anticipated to be present beneath the Site.

The Bath Stone is known as a Freestone, terminology denoting a highly workable rock. The Bath Stone has been worked since Roman Times with records in Corsham, until present day, initially from surface before moving underground around 1725 with the completion of canals and then the rail in 1841 at Corsham. The NERC report notes of an 'elaborate system' of over 60 mine galleries (drifts/tunnels) connected to a secondary tunnel, the name of the mine is not specified. The CIRIA Abandoned Mine Workings Manual states that few records were kept of the rock mining within the west Wiltshire area and therefore unrecorded workings are probable.

The majority of underground Bath Stone mining has been undertaken historically using pillar and stall methods whereby rooms were excavated using hand tools leaving support pillars in place to support the roof rock. It is understood from the NERC report that remaining pillars were often cut with narrow base to allow for greater extraction which can lead to instability, especially in the case of pillar robbing. Historically, some quarries were used to obtain Bath Stone however this was of inferior quality, often adits were driven from the working face.

4.3 Failure Mechanisms

Failure of the underground workings can present themselves at surface as crown holes which is the upward migration of voids and fissures. Surface subsidence can occur when the underground workings collapse under the weight of the overlying rock which creates depressions at surface within

what is known as the 'zone of influence' (Shadbolt, 1977). Typically, areas of pillar and stall workings show non-uniform subsidence due to unpredictable collapse nature of the individual pillars.

In the case of underground mining at the Site, the extent of current mine management and mineral ownership is unknown and therefore it is plausible any groundwater pumping that historically took place has ceased which can exacerbate erosion of pillars. Groundwater ingress can wash away fines within bedrock joints and weaken the pillars or roof and can also rot away ancillary wooden or steel supports. Other factors influencing the stability is the loading (and unloading) regime of the rock, pillar spacing, rock jointing, rock fissures and faulting, and roof rock thickness.

It should be noted that the NERC report indicates few instances of ground instability from Bath Stone mining.

4.4 Recorded Underground Mines

There are six (6) recorded underground mines within the wider area as presented in the table below

Table 4.1, Recorded Mines Within Vicinity of Site

Mine Name	Working Dates	Recorded Workings Beneath the Site (Y/N)	Working Depth	Working Height
Monks Park	Unknown – Present at time of publication	Yes	10 to 25m	6 to 7m
Ridge Mine	Unknown to 1914	No	25m	Unknown
Eastlays Mine	Unknown to 1930s	Yes	20m	4m
Park Lane Mine	Unknown to 1958	No	4.3m	Unknown
Elm Park Mine	Unknown	No	15 to 20m	Unknown
Goodes Hill	Unknown	No	c.20m	Unknown

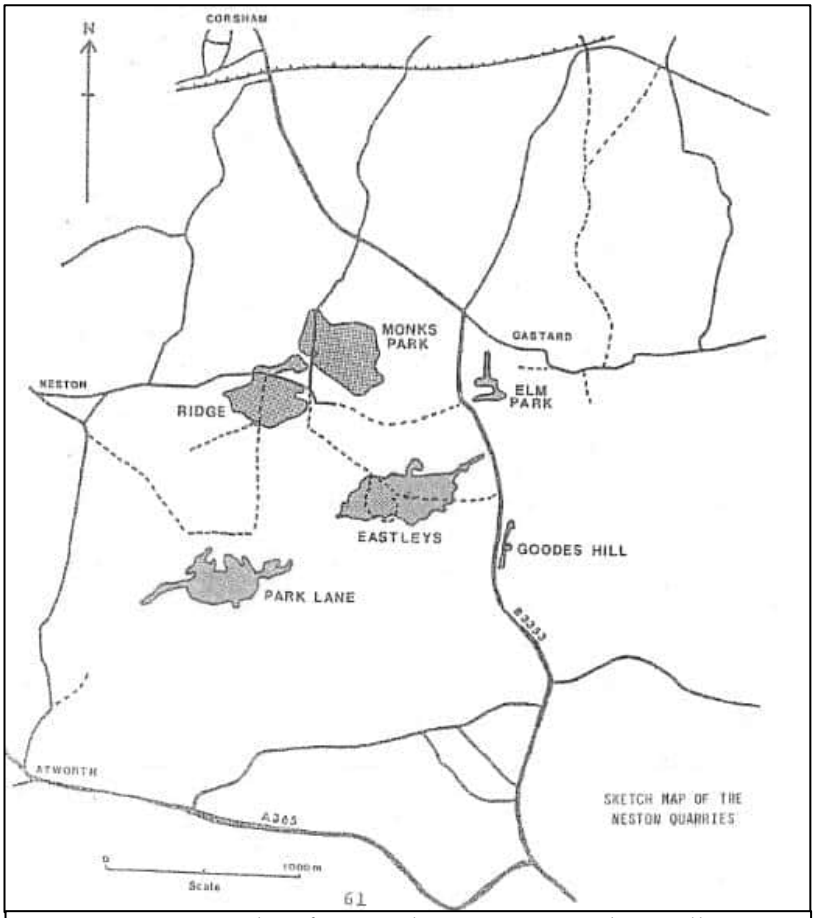


Figure 4-1, Extract taken from Bath Freestone Workings illustrating Underground Recorded Workings, Liz Price (1984)

4.5 Abandonment Plans

Geosyntec procured the abandonment plans listed in Table 4.2 below and georeferenced these to the Cable Route Corridor. The abandonment plans record mining and mine entries beneath and within influencing distance of the Site as presented on drawings GCU0357002-GEOS-LDSF-MRA-D-G-1006 to 1009 in Appendix A. The workings are associated with Monks Park Mine at approximately 388051, 168248 and Eastlays Mine at 388464, 167758. The recorded workings at Eastlays are assumed to be a roadway or heading which extends from the main mine area (west of Site) to beneath the B3353 road (east of Site).

Table 4.2, BGS Abandonment Plans

ID	Series Number	Date	Workings Beneath the Site?	Comment
13209	KP13657	1982	Yes – Pillar and Stall workings extending from Monks Park.	Recorded workings at Monks Park, Ridge and Elm. Workings.
13224	KP13672	-	Yes – Roadways extending from Eastlays Mine east west beneath the Site.	Recorded workings at Monks Park, Ridge and Elm. Workings. Annotated with 'war department property' and 'exact position of boundary to be determined with them [war department].
13240	KP13688	1940	Yes – Roadway and chamber extending beneath the Site from Eastlays Mine and connected to an air shaft east of the B3533	Monks Park, Ridge, Park Lane and Elm Mines.
13241	KP13689	-	Yes – Eastlays and Monks Park as above.	Monks Park, Ridge, Park Lane and Elm Mines.

4.6 Underground Mining

Table 4.3 to Table 4.5 detail the recorded and probable workings beneath and within influencing distance of the Site. Influencing distance is taken as the definition by Shadbolt et al (1978) as 0.7 multiplied by the depth of workings outside of the Site boundary. There is no evidence for recorded underground mining within the Avoidance Areas for the horizontal directional drilling.

The recorded underground workings are presented on drawings GCU0357002-GEOS-SPHY-MRA-D-G-1014.

Table 4.3, Recorded and Probable Underground Workings

Reference No.	Mine Name	Working Evidence	Central Grid Reference	Anticipated Working Thickness (m)	Estimated Depth (m BGL)	Notes/Details	MRA Applicable Drawings (GCU00357002-GEOS-LDSF-MRA-D-G-XXXX)
U-01	Eastlays	Recorded	388462, 167767	4.0	20	Recorded on KP13657, KP13672, KP13688, KP13689. Depths have been provided from BGS NERC report WAVG85008. Inferred as a roadway with some chambers and additional roadway extending to the north and south. Two air shafts are located adjacent to the workings, one within the Site boundary (S-01) however are not mapped to intersect with the workings.	1007, 1008, 1009, 1013, 1014, 1018, 1021
U-02	Monks Park	Recorded	388050, 168252	6-7	10-25	Recorded on KP13689 and 1KP13657 and within BGS NERC report WAVG85008, depths provided from the report. Pillar and stall workings beneath an area of the cable route. It appears some headings are being driven on KP13657 and therefore is likely workings may extend beyond what is recorded especially considering the mine was in operation to 2018 and the mine plan dates from 1982.	1006, 1007, 1008, 1009, 1013, 1014, 1018, 1021
U-03	Monks Park	Probable	388159, 168730 (north) 388577, 167019 (south)	6-7	10-25	The Monks Park mineral rights are understood to extend across the whole of the area between the aforementioned grid references. Three mine entries, two within the Site boundary, are not attributed to any recorded workings and therefore suggest unrecorded workings.	1006, 1007, 1008, 1009, 1015, 1018, 1021

Table 4.4, Roadways and Headings Beneath the Site

Reference Number	Evidence of Working	Approximate Grid Reference	Source of Information	MRA Applicable Drawings (GCU00357002-GEOS-LDSF-MRA-D-G-XXXX)
R-01	Recorded	388462, 167767	BGS abandonment plans KP13689, KP13688 and KP13672 record a heading of an unspecified depth which crosses east/west beneath the Site. Another heading or perhaps room and pillar working is recorded to extend to approximately 388445, 167810. Same reference as U-01.	1007, 1008, 1013, 1014, 1015, 1018, 1021
R-02	Probable	388520, 167465	The 1984 Liz Price book references a heading being driven from Eastlays Mine to Goodes Hill Mine that was abandoned due to flooding. The book reports the heading passes the Goodes Hill air shaft (388687, 167464) but does not reach the Goodes Hill mine itself. As such, Geosyntec determine a probable roadway extending beneath the Site	1015, 1018, 1021

Table 4.5, Recorded Mine Entries Beneath the Site

Reference Number	Type	Evidence of Working	Grid Reference	Notes	MRA Applicable Drawings (GCU00357002-GEOS-LDSF-MRA-D-G-XXXX)
S-01	Shaft	Recorded	388465, 167744	Beneath cable route. Based on BGS maps and abandonment plans. Potential collapse crater of 9m and 12m zone of influence. Circular structure present at surface possibly associated with entry.	1003, 1009, 1016, 1018, 1021
S-02	Shaft	Recorded	388138, 168106	Beneath cable route. Inferred from historical OS mapping, does not align with any recorded workings. Please note this coordinate has changed since the MRA issue. Potential collapse crater of 9m and 19m zone of influence.	1003, 1007, 1008, 1016, 1018, 1021

Reference Number	Type	Evidence of Working	Grid Reference	Notes	MRA Applicable Drawings (GCU00357002-GEOS-LDSF-MRA-D-G-XXXX)
W-03	Well	Recorded	389048, 170045	Beneath cable route. Not believed to be associated with legacy mining based on historical records. Potential collapse crater of 9m and 19m zone of influence.	1003, 1017, 1018, 1021
W-04	Well	Recorded	170045, 170229	Beneath extended Site area. Not believed to be associated with legacy mining based on historical records. Potential collapse crater of 9m and 19m zone of influence.	1003, 1017, 1018, 1021

4.7 Surface Mining

There is one area of recorded surface mining within the cable route which is located at Avoidance Area 8. The quarry is documented by historical mapping and the BGS mines and quarries dataset. The BGS identify the quarry as Cheverden Farm Quarries but do not provide the extracted commodity. The quarry lies within the Cornbrash Formation and can be assumed to be a backfilled gravel pit. The quarry is now an agricultural field and the edge of a woodland.

5 COPY OF RISK MINING RISK REGISTER

Risk ratings and definitions are presented in Table 5.1 and Table 5.2. The Mining Risk Register is presented as Table 5.3.

Table 5.1, Risk Rating

Risk Rating	**Likelihood of the Consequences of the Hazard During Construction and Design Life (L)**		**Consequence (safety and network Disruption (C)**	
Risk Rating (R) = Likelihood (L) x Consequence (C).	Very Likely	5	Very High	5
	Likely	4	High	4
	Probable	3	Medium	3
	Unlikely	2	Low	2
	Negligible	1	Very Low	1

Table 5.2, Risk Definition

Risk Rating	**Risk Rating Score (out of 25)**	**Description**
High	13-25	High potential for event resulting in (unquantified) injury or fatality to site users, significant (unquantified) unplanned disruption to cable such as a breakage or adjacent infrastructure as a result of construction works.
Medium	9-12	Probable likelihood of risk occurring if intervention, risk control; risk management and risk mitigation not achieved not agreed and managed by designers, contractors and construction workers.
Low	5-8	Unlikely potential for an event resulting in (unquantified) injury or fatality to the public and/or Site users. Unlikely disruption to cable route.
Very Low	1-4	Unlikely for legacy mining risk to propagate at surface and effect the cable route. Risk shall be reviewed and reduced through risk control, management, and mitigation to achieve a reduced rating.

Table 5.3, Mining Risk Register

Reference	Feature	Likelihood	Consequence	Risk Rating		
				L	C	R
1	Recorded shallow workings and roadways (U01, U02 and R-01)	Historical abandonment plans record workings within the Bath Oolite beneath the Site in two locations. Workings are by pillar and stall method and are assumed to be less than 10T below surface level based on literature and historical boreholes, 10 to 25m BGL. It is possible the workings may be deeper or shallower; no depths are provided on historical abandonment plans.	Potential for existing voids to migrate to the surface and cause ground settlement or crown-holes leading to breaks in the cables. Unloading of bedrock through excavation for the cable trench can temporarily change the loading regime of the roof rock (of the workings). Plant tracking can also impact the loading regime of the rock. Plant and equipment should not be placed on recorded mining features.	4	4	16
2	Unrecorded shallow workings and roadways (U-03 and R-02)	The age of limestone workings within the wider Site area combined with the Savills mineral rights plan suggests workings may predate the abandonment plans. The Price 1894 book references a heading connecting Eastlays mine to Goodes Hill that was incomplete therefore it is plausible this passes beneath the cable route. The depth of this roadway is unknown.	Potential for existing voids to migrate to the surface and cause ground settlement or crown-holes leading to breaks in the cables. Unloading of bedrock through excavation for the cable trench can temporarily change the loading regime of the roof rock (of the workings). Unrecorded shallow roadways and workings may be encountered through deep excavations.	3	4	12

Reference	Feature	Likelihood	Consequence	Risk Rating		
				L	C	R
3	Recorded mine entries (and wells)	Two mine entries (S-01 and S-02) and two wells (W-01 and W-04) lie within the cable route and Avoidance Areas (area 10). The cable route will encounter these vertical shafts and wells during the excavation works. The treatment of these mine entries is unknown; it is possible the shaft has not been backfilled.	Mine entries pose a risk to ground stability and to the integrity of all scheme elements within influencing distance. Collapse of mine shafts can occur as a result of groundwater movements, bedrock degradation, vibration and ground movements. If shafts are untreated and construction works are taking place within influencing distance, then a working platform will be needed.	5	4	20
4	Unrecorded mine entries	Historical mapping and historical BGS maps have been used to map the mine entries beneath and within influencing distance of the Site. BGS abandonment plans have not identified the mine entries on some county series maps. It is understood many trial shafts have been sunk within the wider area and are unrecorded.	Mine entries pose a risk to ground stability and to the integrity of all scheme elements within influencing distance. Collapse of mine shafts can occur as a result of groundwater movements, bedrock degradation, vibration and ground movements. If shafts are untreated and construction works are taking place within influencing distance, then a working platform will be needed.	3	4	12

Reference	Feature	Likelihood	Consequence	Risk Rating		
				L	C	R
5	Mine gas encountered during construction	It is unlikely combustible and asphyxiant types of gases will be encountered within the cable route.	Ground gasses could be dispersed during drilling and pose a health and safety risk. Appropriate risk assessments to be carried out. Ground gas associated with backfilled surface workings may pose an asphyxiant risk depending on the backfilled spoil/arisings.	2	4	8
6	Surface workings	One area of recorded surface workings has been identified at Avoidance Area 8 (Cheverden Farm Quarries). The depths and dimensions of the historical quarry are unknown, and it is assumed it was a legacy gravel pit. Area is now agricultural land and lies adjacent to a brook.	Contaminant pathway may be created through the horizontal directional drilling (HDD).	3	1	3

6 PROPOSED GROUND INVESTIGATION

The preliminary risk assessment identified High risks relating to recorded and probable unrecorded shallow underground mine workings, recorded mine entries and potential unrecorded mine entries. Therefore, further investigation in the form of a Ground Investigation (GI) is recommended to improve the accuracy of the ground model and the extent of legacy mining feature beneath the Site.

It is imperative to establish land ownership and mineral rights for the areas of the cable route. All known existing underground facilities should be informed of the proposed works and contracts established to mitigate against possible liability issues.

GI recommendations are preliminary only and subject to change owing to the size of the Site and nature of the scheme. A mining specific Site walkover is essential in understanding the constraints of the Site and identifying any mining related features such as recorded mine entries.

Following on from the GI, the mining risk assessment can be refined, and a mitigation/treatment strategy can be determined (if required).

The recommendations provided below are for mining investigations only and exclusive of geotechnical and environmental investigations. When the GI is designed, both scopes of work can be combined once the geotechnical and environmental GI is defined.

Ciria C578D and the UK Specification for Ground Investigations (3rd Edition) should be used to scope the GI. A robust risk assessment will be required for the GI and contractors experienced in mining GI should be used.

6.1 Geophysical Investigation

Prior to intrusive GI, non-intrusive geophysical investigations are recommended to help delineate locations of recorded and unrecorded mining hazards including mine entries and workings and reduce the extent of intrusive GI. The geophysical investigation may identify significant fissures within the limestone which may be impacted through residual movement from erosion and groundwater and cause collapse of underground workings.

Geophysical techniques are proven methods of identifying voids within the ground albeit this is caveated by interference from buried infrastructure, groundwater and depth of anticipated voids. As such, consultation with a specialist should take place when designing the GI.

Should geophysical techniques be suitable, it is recommended that linear arrays of geophysical surveys including microgravity, resistivity tomography and electromagnetic/magnetic mapping are undertaken along the Cable Route Corridor within the probable mining area. At a minimum, the surveys should take place parallel to the recorded mine workings and above the recorded mine entries. It is recommended the surveys should start from the west of the Cable Route Corridor and work eastward. Geophysical surveys should be radial from mine entry S-02.

Based on the outcome and success of the geophysical investigation, intrusive investigation may be recommended.

6.2 Intrusive Investigation

There may be a requirement for the Permits and Indemnifications to enter and disturb mineral rights that need completing prior to intrusive works. Therefore, intrusive GI needs to be arranged with landowners, mine owners, regulators and other relevant stakeholders including the Mining Remediation Authority (MRA) to ensure legalities and risks are mitigated and potential treatment discussed.

6.2.1 Underground Workings

The geophysical investigation may identify potential voids / disturbed ground which need confirmation from drilling boreholes. Rotary cored boreholes are recommended to obtain class 1 geotechnical samples for testing and identify voids/works and their respective depths. The boreholes are also important to understand the presence of fissures and jointing which influence the ground and legacy mining stability.

The arrangement of the boreholes would be dependent on the geophysical survey results.

Should a geophysical survey be omitted, then the intrusive GI is recommended to be implemented on a grid system at approximately 10/15m centred however note mining features could be missed. To reduce on cost, a combination of rotary cored boreholes and open hole drilling could be used.

Boreholes should be drilled to at least 2m into competent bedrock below the workings, this is anticipated to be around 30m BGL. Evidence of workings may not always present as voided ground but could include (but not be limited to) broken ground, poor/incomplete recovery, loss of drilling flush, change in torque and presence of anthropogenic material such as timbers and brick

6.2.2 Mine Entries and Wells

Two mine entries and two wells are located within the Site boundary. It is recommended that the cable route is micro-sited around recorded mine entries and unrecorded entries identified from geophysical and intrusive investigations. Treatment records and anecdotal information from landowners should also be sought.

The most economic technique to locate the mine entries and wells is using a long reach excavator to excavate a series of trenches down to natural strata or rockhead in order to expose the surface of the mine entry or well. An investigation area should be delineated with the excavations working inwards towards the centre. During the works, a careful watch should be maintained for any feature which may represent an unrecorded mine entry, such as circular brickwork or anomalous areas of fill/timber. Should any such feature be identified it should be reported, investigated and acted upon as necessary.

Mine entry S-01 appears to have a circular structure at the surface which may or may not be associated with some form of cap, this should be investigated prior to ground investigation. To confirm the

presence of a shaft, angled probing is recommended from two locations surrounding the feature using an appropriate drilling technique. The drillers should note the angle of investigation, loss of drilling flush and reduction in torque.

Other methods to locate entries include probing in for form of dynamic sampling or rotary open hole, this method produces less damage to surface should landowners be wanting minimal disturbance. The probing should be undertaken on a spiral type of grid in order to find the mine entry centre and a platform should be used for the rig and personnel.

In addition, the possibility of unrecorded mine entries within the Site area cannot be discounted. During the works a careful watch should be maintained for any feature which may represent an unrecorded mine entry, such as circular brickwork or anomalous areas of fill/timber. Should any such feature be identified it should be reported, investigated and acted upon as necessary.

6.2.3 Surface Workings

Dynamic sampling should be undertaken at Avoidance Area 8 to investigate the depth and extent of Cheverden Farm Quarry and obtain environmental sampling to ensure a contaminant pathway isn't created by the HDD and to investigate the geotechnical properties of the soils and rock.

6.2.4 Geoenvironmental Investigation

No specific sources of potential contamination have been identified in association with the land underlain by the mine, but it is acknowledged that contamination of soil and groundwater can be associated with mining. Therefore, geoenvironmental samples will also be taken from intrusive investigation locations in order to determine whether impacts associated with mining. Samples will be analysed for contaminants associated with mining activity; primarily Polycyclic Aromatic Hydrocarbons, an extended suite of metals, Total Organic Carbon and sulphates. Additional analysis may be undertaken based on the information gained via the intrusive investigation.

7 TREATMENT / GROUND STABILISATION

At the time of writing, it is imprudent to confirm the absence or requirement for treatment.

Once workings are identified and their extent confirmed, the most economical and safest option would be to microsite the cable route and establish avoidance areas for construction workers and equipment. If this is not possible then consideration to treatment/ ground stabilisation should be discussed in order to:

- Reduce the likelihood of catastrophic collapse and development of crown holes;
- Infill voided ground; and
- Locate and infill voids capable of causing a catastrophic collapse that could affect the stability of the cable and potential future Site users.

The general procedure to investigate and treat cavity and broken ground involves drilling boreholes on a regular grid pattern to such depths that they intersect the cavity or broken ground. A grout consisting Pulverised Fuel Ash (PFA), Ordinary Portland Cement (OPC) with or without sand is then injected into the boreholes to infill any cavities or broken ground however other methods such as expanding foams could be used.

Treatment of mine workings and entries must be discussed with landowners and mine owners. The Mining Remediation Authority should be consulted regarding any potential interactions with mine workings. Further interactions with planning authorities are not anticipated to be required, but may be necessary as part of the Development Consent Order application.

Depending on the loadings imposed to the ground, it may be possible for an engineered liner for the cable to be used such as a geotextile which will support the cable from ground disturbance below. This is caveated by the liner being maintained throughout the design life and discussions/advice from a specialist.

8 REFERENCES

BGS, 1984. *Geology of the Bristol district: the Lower Jurassic rocks. Memoir British Geological Survey..* [Online]
Available at: https://webapps.bgs.ac.uk/memoirs/docs/B01778.html
[Accessed 24 April 2025].

BGS, 2004. *Mineral resource information in support of national, regional and local planning : Wiltshire (comprising Wiltshire and the Borough of Swindon) (CR/04/049N),* Nottingham: BGS.

BGS, 2023. *Wiltshire (comprising Wiltshire and Swindon) mineral resources : mineral resource information in support of national, regional and local planning (Map).* s.l.:s.n.

BGS, 2024(d). *BGS Sheet 12 Hydrogeological Map of South Yorkshire (1:100,000) (1982).* [Online]
Available at: https://largeimages.bgs.ac.uk/iip/hydromaps.html?id=southern-yorkshire.jp2

BGS, 2025. *BGS GeoIndex Onshore Viewer.* [Online]
Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html

BGS, 2025. *BGS Maps Portal.* [Online]
Available at: https://www.bgs.ac.uk/information-hub/bgs-maps-portal/
[Accessed 19 February 2025].

BGS, n.d. *Non-coal Mining Plans - BGS Information Hub.* [Online]
Available at: https://www.bgs.ac.uk/information-hub/scanned-records/mining-plans-2/
[Accessed 23 May 2025].

Buro Happold, 2023. *Thorpe Park Development - Bulk Earthworks and Mining Legacy (TP2) - Mining Feature Records - MLLR & East,* s.l.: s.n.

CIRIA, 2019. *Abandoned mine workings manual. (ISBN: 978-0-86017-765-4),* s.l.: s.n.

DEFRA, 2025. *Magic Map.* [Online]
Available at: https://magic.defra.gov.uk/MagicMap.html
[Accessed 19 February 2025].

Department for Environment, Food & Rural Affairs, 2024. *Magic Map.* [Online]
Available at: https://magic.defra.gov.uk/magicmap.aspx

Google, 2025. *Google Earth.* [Online]
Available at: https://earth.google.com
[Accessed 19 February 2025].

Gov.UK, 2014. *Guidance on the planning for mineral extraction in plan making and the application process..* [Online]
Available at: https://www.gov.uk/guidance/minerals
[Accessed 30 May 2025].

Historic England, 2025. *Aerial Photo Explorer.* [Online]
Available at: https://historicengland.org.uk/images-books/archive/collections/aerial-photos/
[Accessed 19 February 2025].

Historic England, 2025. *Search the List: Map Search.* [Online]
Available at: https://historicengland.org.uk/listing/the-list/map-search
[Accessed 19 February 2025].

Know Your Place - West of England, 2025. *Know Your Place: Historic Maps.* [Online]
Available at: https://maps.bristol.gov.uk/kyp/?edition=wilts
[Accessed May 2025].

Lime Down Solar Park Data Viewer, 2025. s.l.: Lime Down .

Mendip Cave Registry and Archive, 2025. *Mendip Cave Registry.* [Online]
Available at: https://www.mcra.org.uk/registry/index.php
[Accessed 24 April 2025].

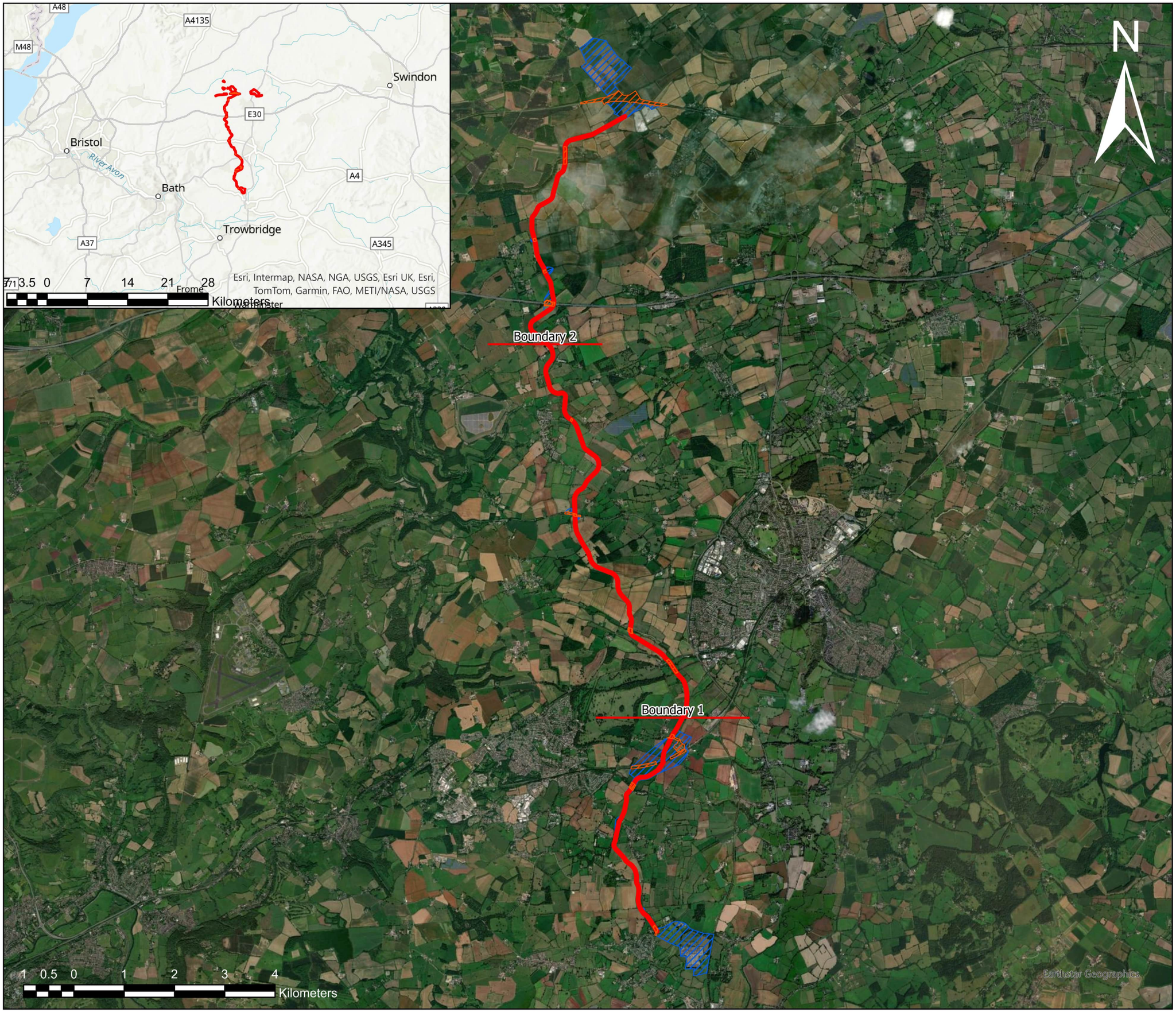
Mendip Cave Registry and Archives, n.d. *Mine Entry Interactive Map.* [Online]
Available at: https://www.mcra.org.uk/registry/searchresults.php
[Accessed 25 April 2025].

National Library of Scotland, 2025. *Side by Side Viewer.* [Online]
Available at: https://maps.nls.uk/geo/explore/side-by-side
[Accessed 2019 February 2025].

NERC, 1985. *Environmental Geology Study: Parts of West Wiltshire and South-East Avon,* s.l.: BGS.

Ordnance Survey, 2025. *OS Maps.* [Online]
Available at: https://explore.osmaps.com/
[Accessed 20 February 2025].

Price, L., 1984. *Bath Freestone Workings.* s.l.:s.n.



Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area

Revision

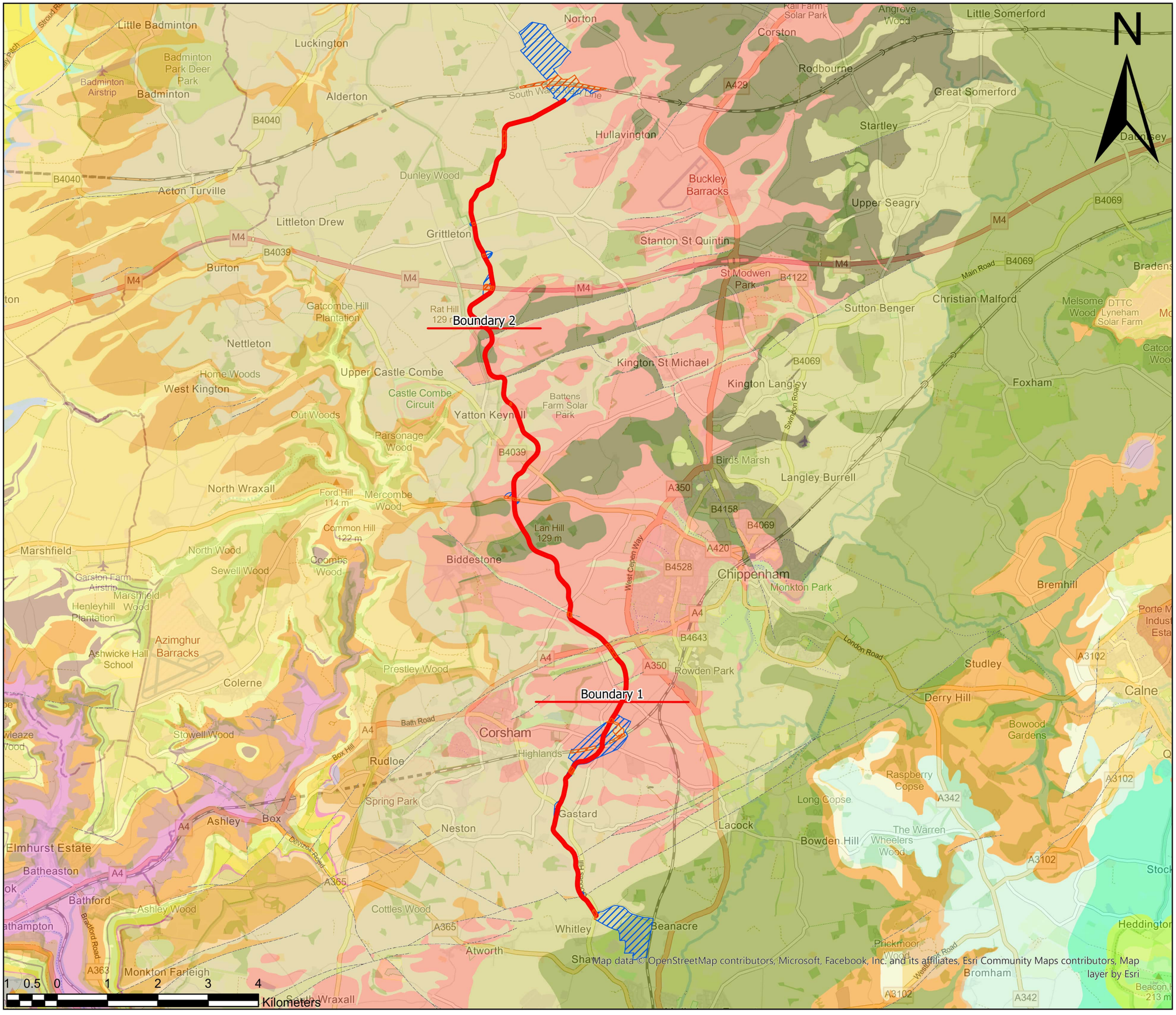
P01

Drawing Title

Site Location Plan

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1001



Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area

Revision

P01

Drawing Title

Solid Geology

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1002

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Boundary 1
W-04
W-03
S-02
S-01
W-02
W-01
N
0.5 0.25 0 0.5 1 1.5 2
Kilometers
Maxar, Microsoft

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025.
5. Historical maps have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Adit
- Shaft
- Well

Revision

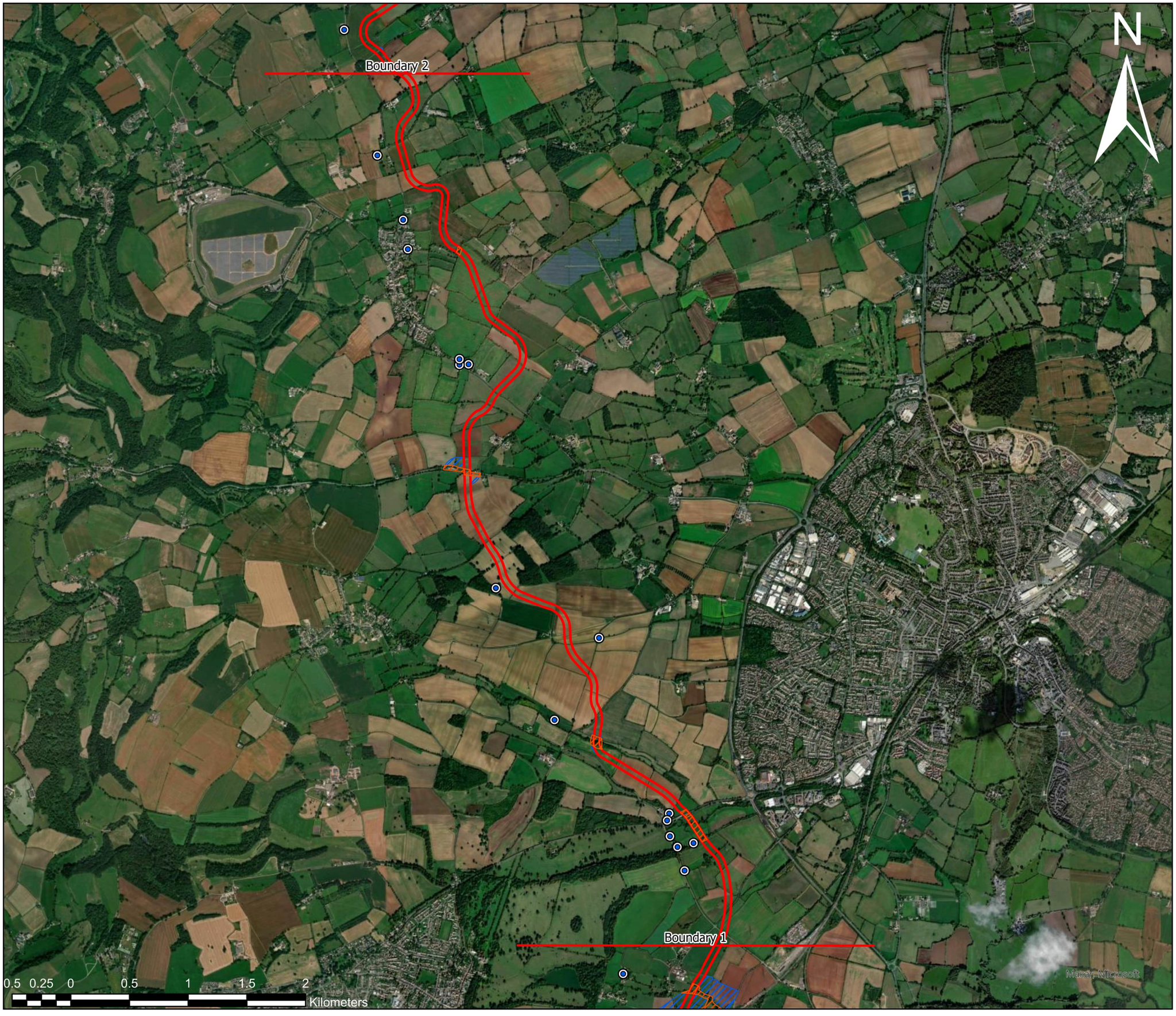
P01

Drawing Title

Mine Entries and Wells - 1

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1003



Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025.
5. Historical maps have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Adit
- Shaft
- Well

Revision

P01

Drawing Title

Mine Entries and Wells - 2

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1004

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025.
5. Historical maps have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Adit
- Shaft
- Well

Revision

P01

Drawing Title

Mine Entries and Wells - 3

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1005

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

N

Boundary 2

0.5 0.25 0 0.5 1 1.5 2 Kilometers

Maxar, Microsoft

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Abandonment plans have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- HDD Avoidance Areas
- 50m corridor
- Extended Area

Revision

P01

Drawing Title

BGS Plan KP13657 ID13209

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1006

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Abandonment plans have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area

Revision

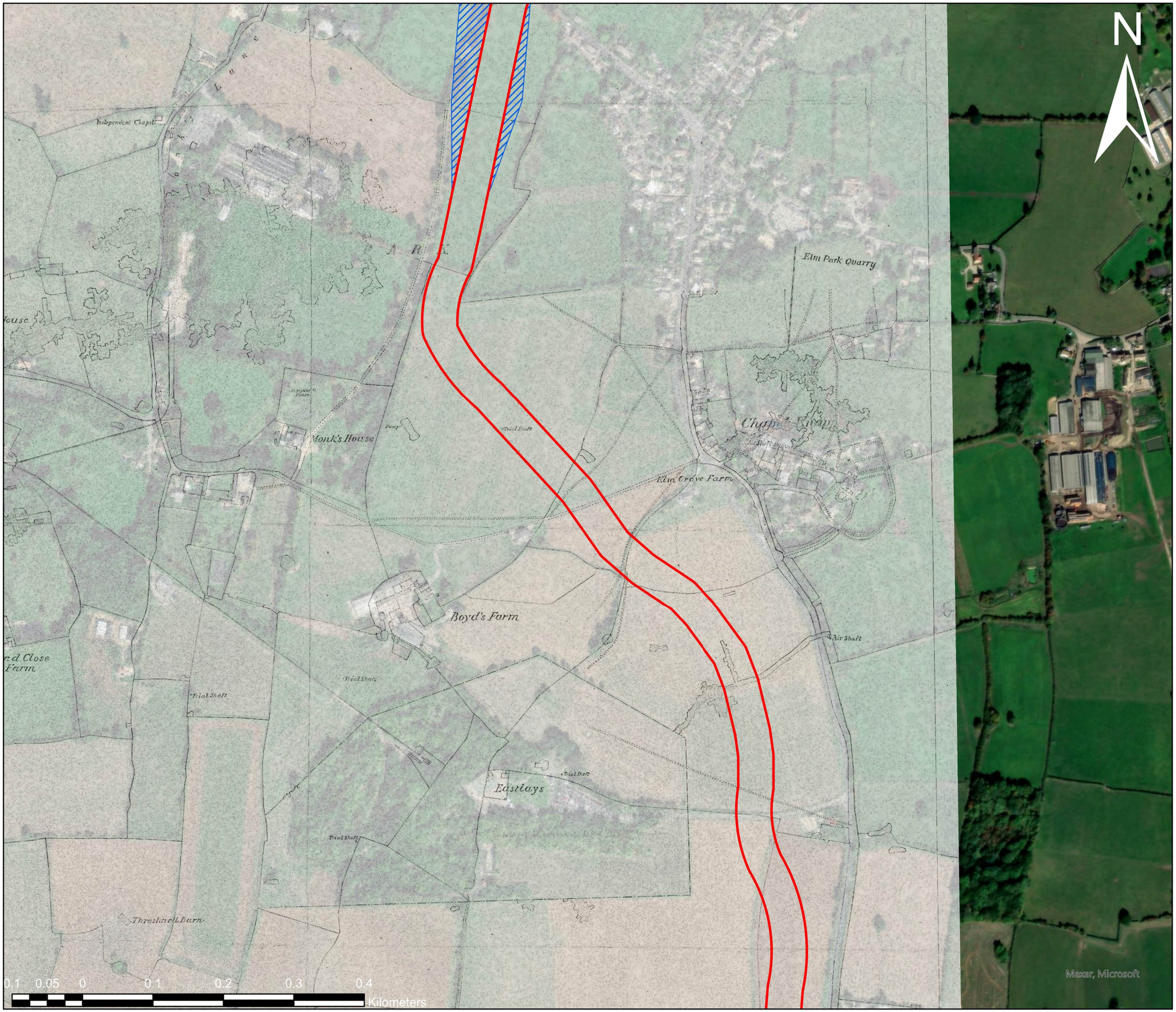
P01

Drawing Title

BGS Plan KP13672 ID13224

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1007



Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Abandonment plans have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area

Revision

P01

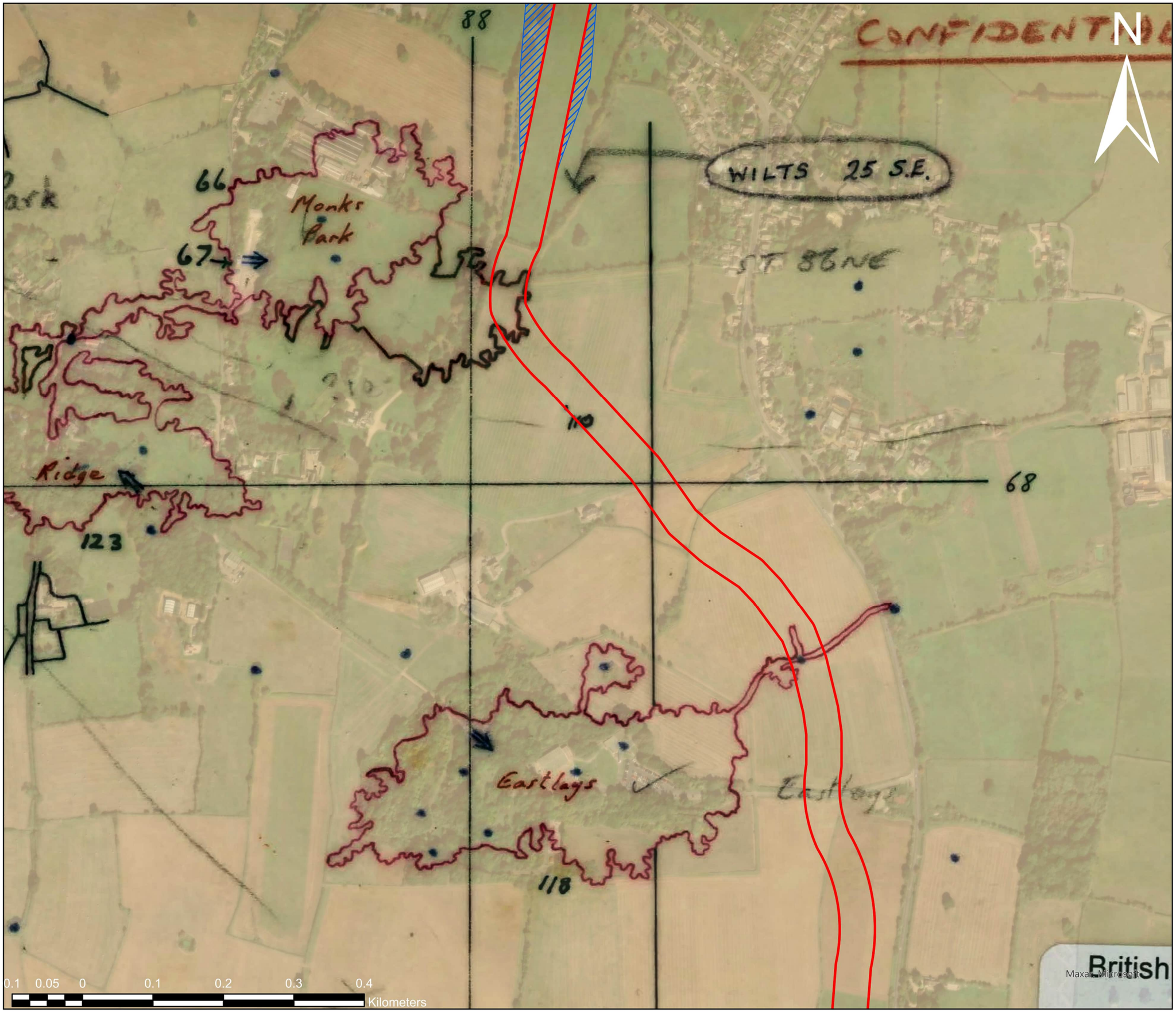
Drawing Title

BGS Plan KP13688 ID13240

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1008

Produced: GB Checked: MF Reviewed: MF Date: 03/04/2025



Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Abandonment plans have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area

Revision

P01

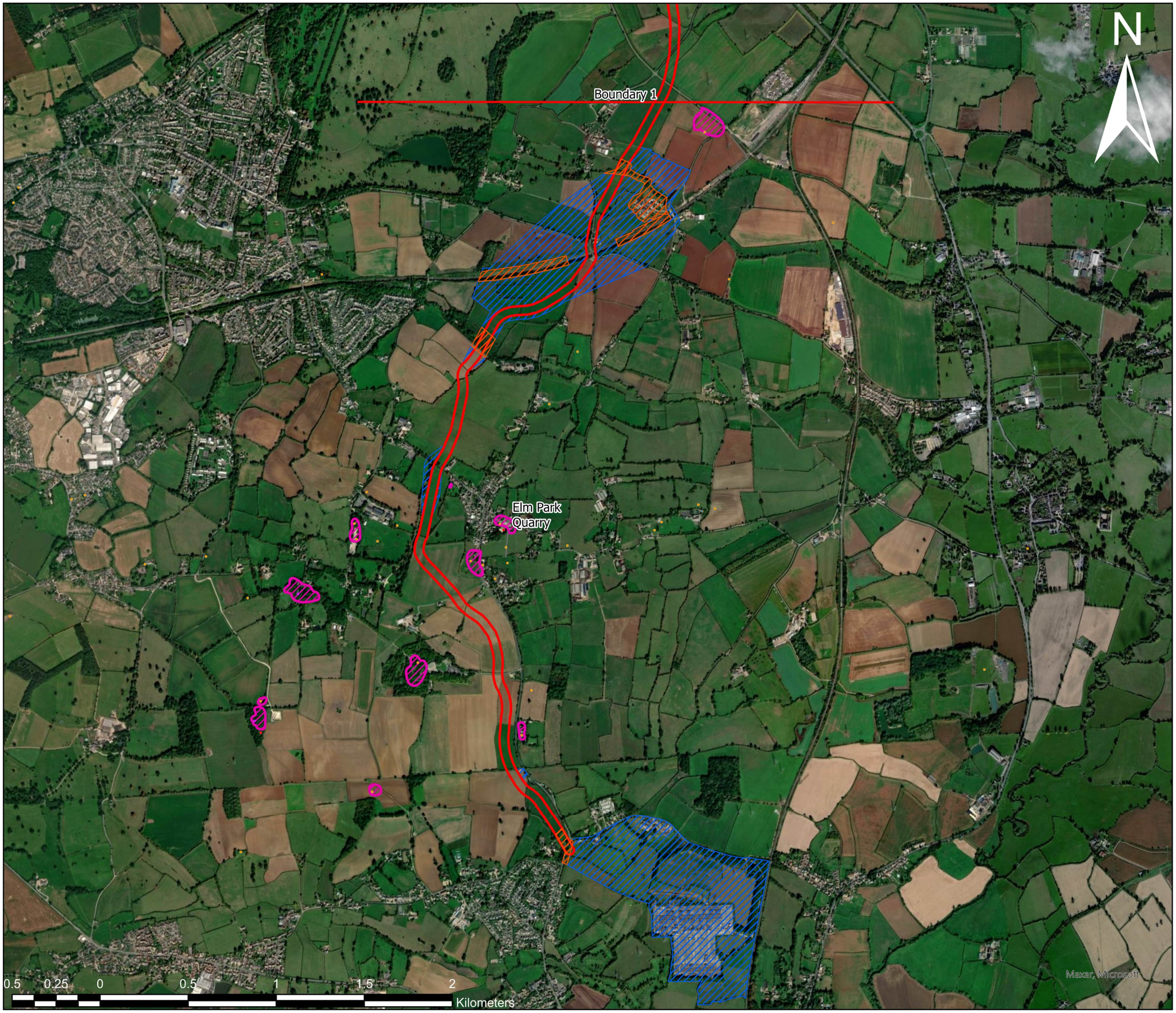
Drawing Title

BGS Plan KP13689 ID13241

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1009

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025



Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Historical maps with surface workings have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area

PIT_STATUS
- Active
- Ceased
- Dormant
- Inactive
- Special

- SurfaceFeatures

Revision

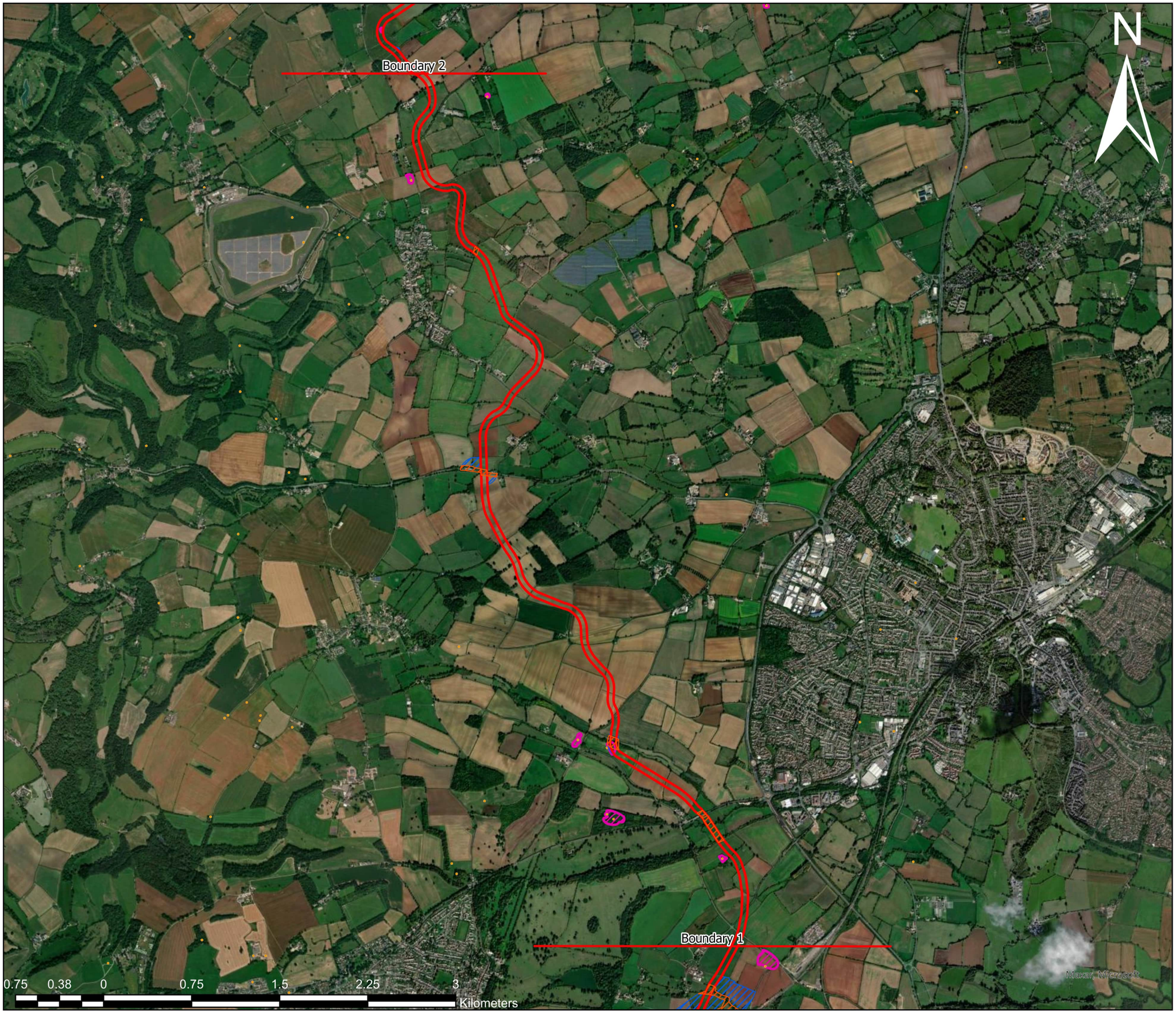
P01

Drawing Title

Surface Mining - 1

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1010



Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Historical maps with surface workings have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area

PIT_STATUS
- Active
- Ceased
- Dormant
- Inactive
- Special

- SurfaceFeatures

Revision

P01

Drawing Title

Surface Mining - 2

Drawing Number

GCU0357002-GEOS-SPHY-MRA-D-G-1011

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Historical maps with surface workings have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area

PIT_STATUS
- Active
- Ceased
- Dormant
- Inactive
- Special

- SurfaceFeatures

Revision

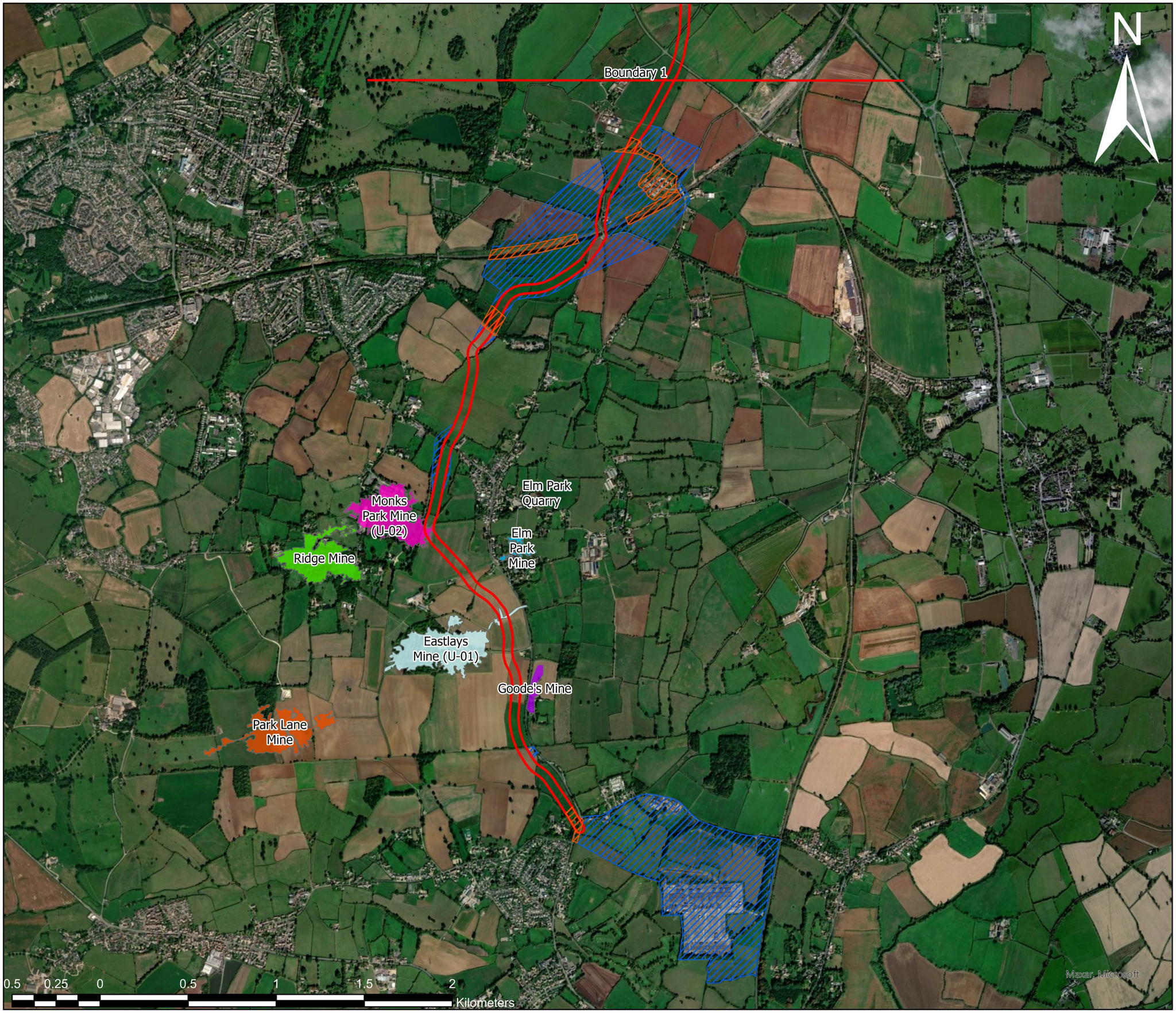
P01

Drawing Title

Surface Mining - 3

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1012



Produced: GB Checked: MF Reviewed: MF Date: 03/06/20025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Abandonment plans have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Roadways
- Eastlays Mine (U-01)
- Elm Park Mine
- Goode's Mine
- Monks Park Mine (U-02)
- Park Lane Mine
- Ridge Mine

Revision

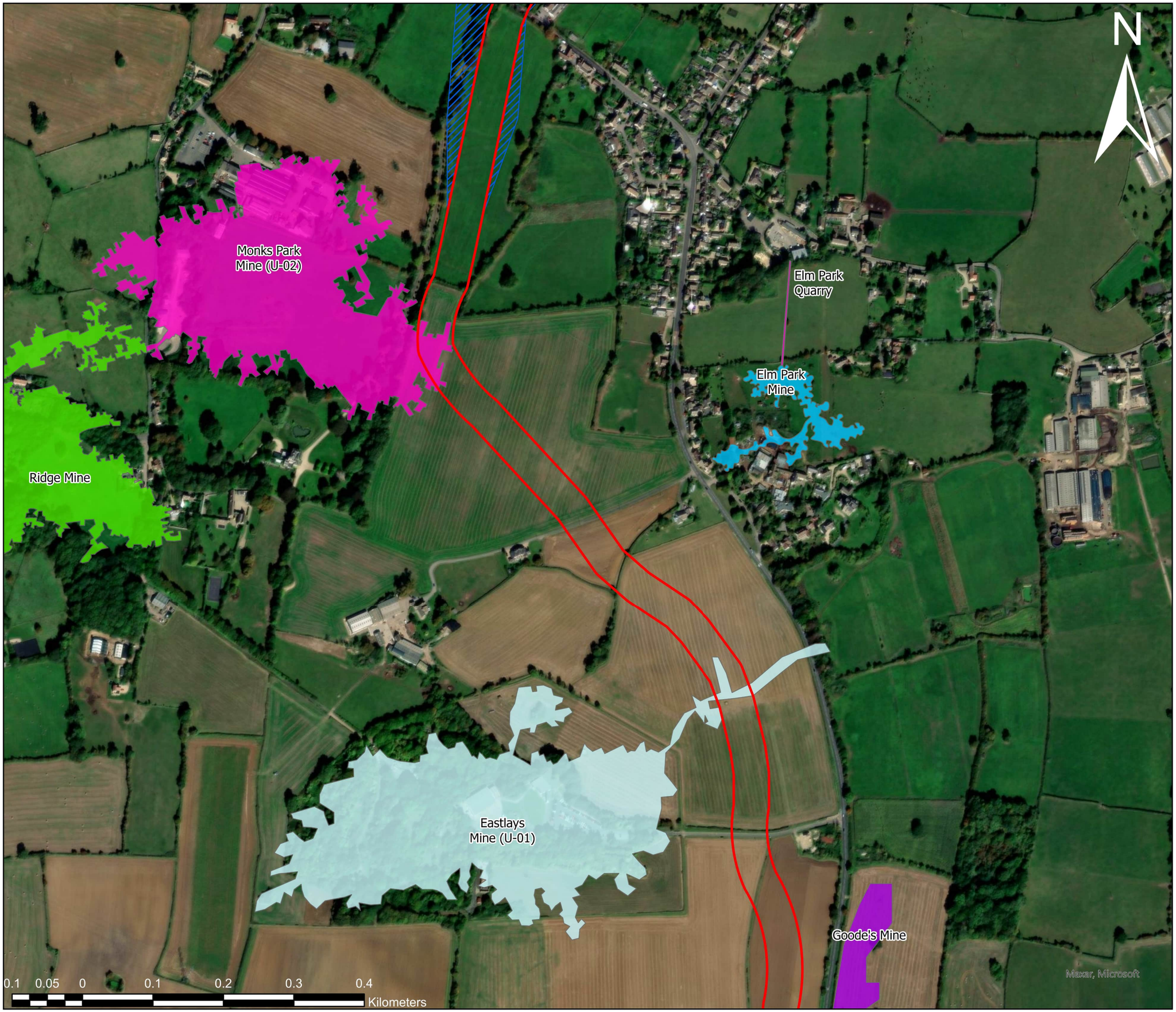
P01

Drawing Title

Recorded Underground Mining and Roadways - 1

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1013



Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. Abandonment plans have been georeferenced relative to features near the Site. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Roadways
- Eastlays Mine (U-01)
- Elm Park Mine
- Goode's Mine
- Monks Park Mine (U-02)
- Park Lane Mine
- Ridge Mine

Revision

P01

Drawing Title

Recorded Underground Mining and Roadways - 2

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1014

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for AECOM and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. The accuracy of data illustrated is indicative only.

Legend

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- R-02
- U-03

Revision

P01

Drawing Title

Probable Underground Workings

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1015

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for AECOM and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. The accuracy of data illustrated is indicative only.

Legend

- Mine Entry Zone of Influence
- Adit
- Shaft
- Well

Revision

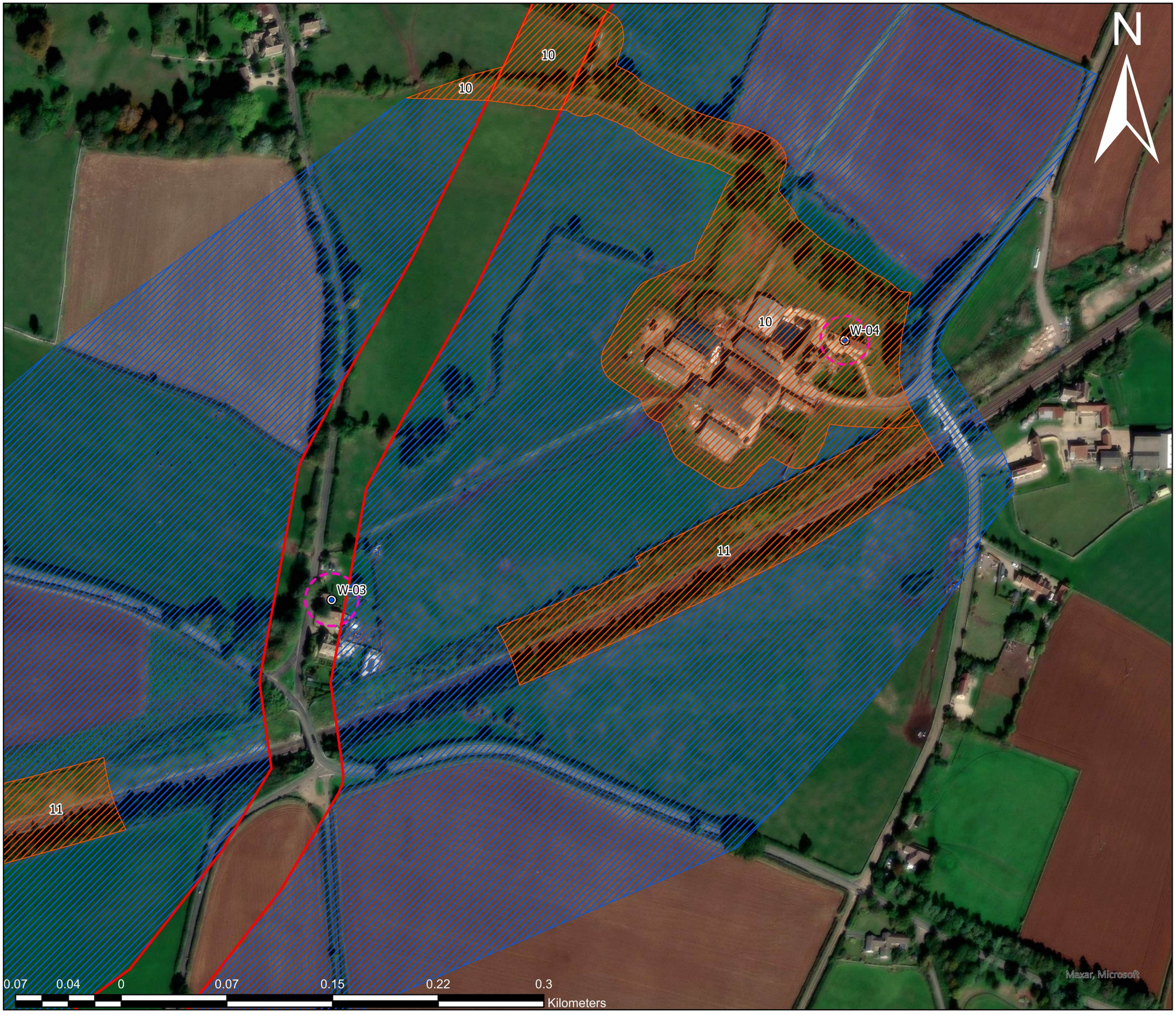
P01

Drawing Title

High Risk Mining Areas

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1016



Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for AECOM and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. The accuracy of data illustrated is indicative only.

Legend

- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Mine Entry Zone of Influence
- Adit
- Shaft
- Well

Revision

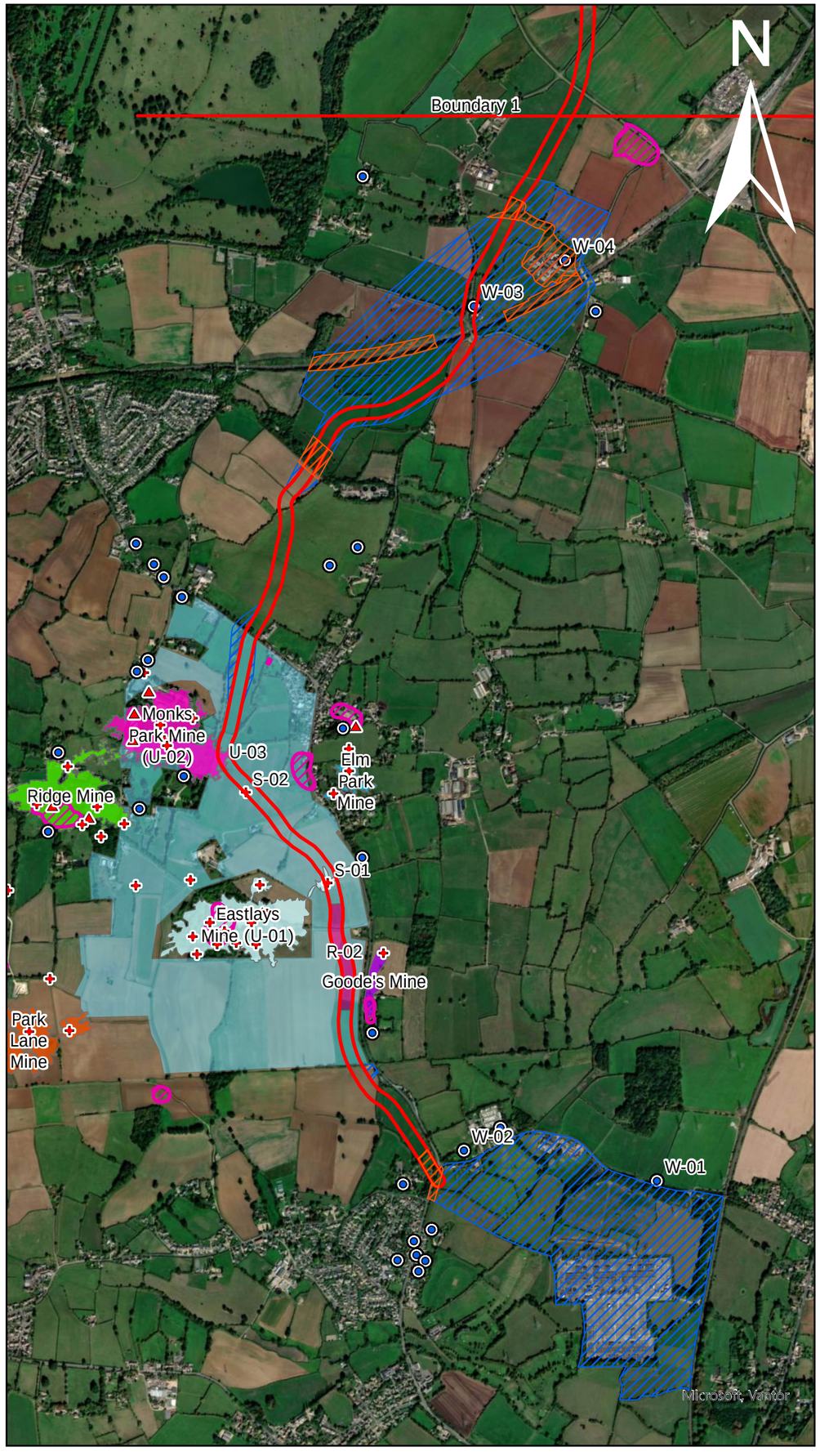
P01

Drawing Title

Zone of Influence -2

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1017



Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. The accuracy of data illustrated is indicative only.

Legend

- 50m corridor
- Low
- Medium
- High

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Adit
- Shaft
- Well
- Adit
- Shaft
- Well
- SurfaceFeatures
- Eastlays Mine (U-01)
- Elm Park Mine
- Goode's Mine
- Monks Park Mine (U-02)
- Park Lane Mine
- Ridge Mine
- R-02
- U-03

Revision

P02

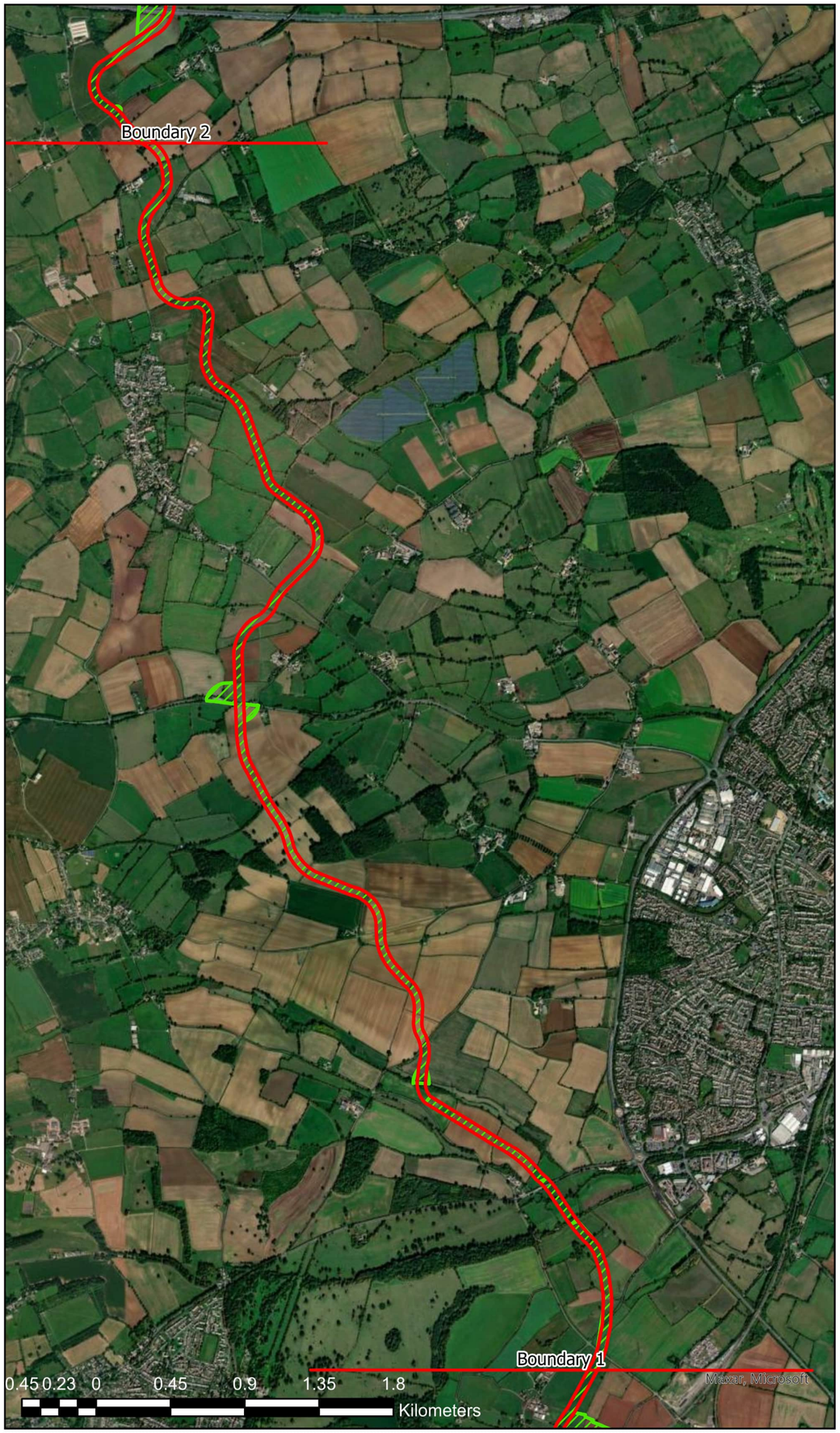
Drawing Title

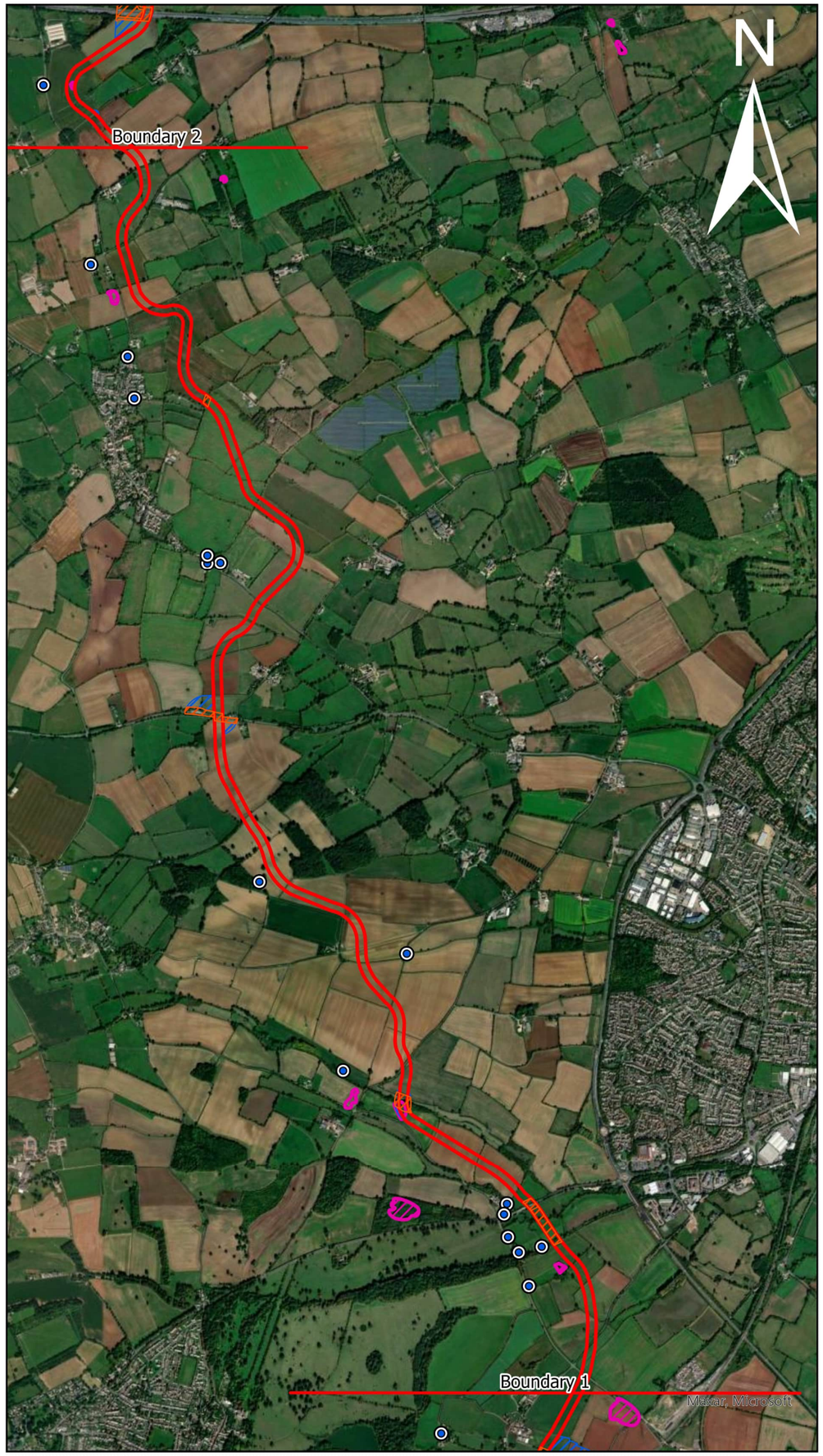
Qualitative Risk Assessment -1

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1018

Produced: GB Checked: MF Reviewed: MF Date: 06/03/2026





Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. The accuracy of data illustrated is indicative only.

Legend

Class
- 50m corridor
- Medium
- High

Risk Rating
- Low

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Adit
- Shaft
- Well
- SurfaceFeatures

Revision

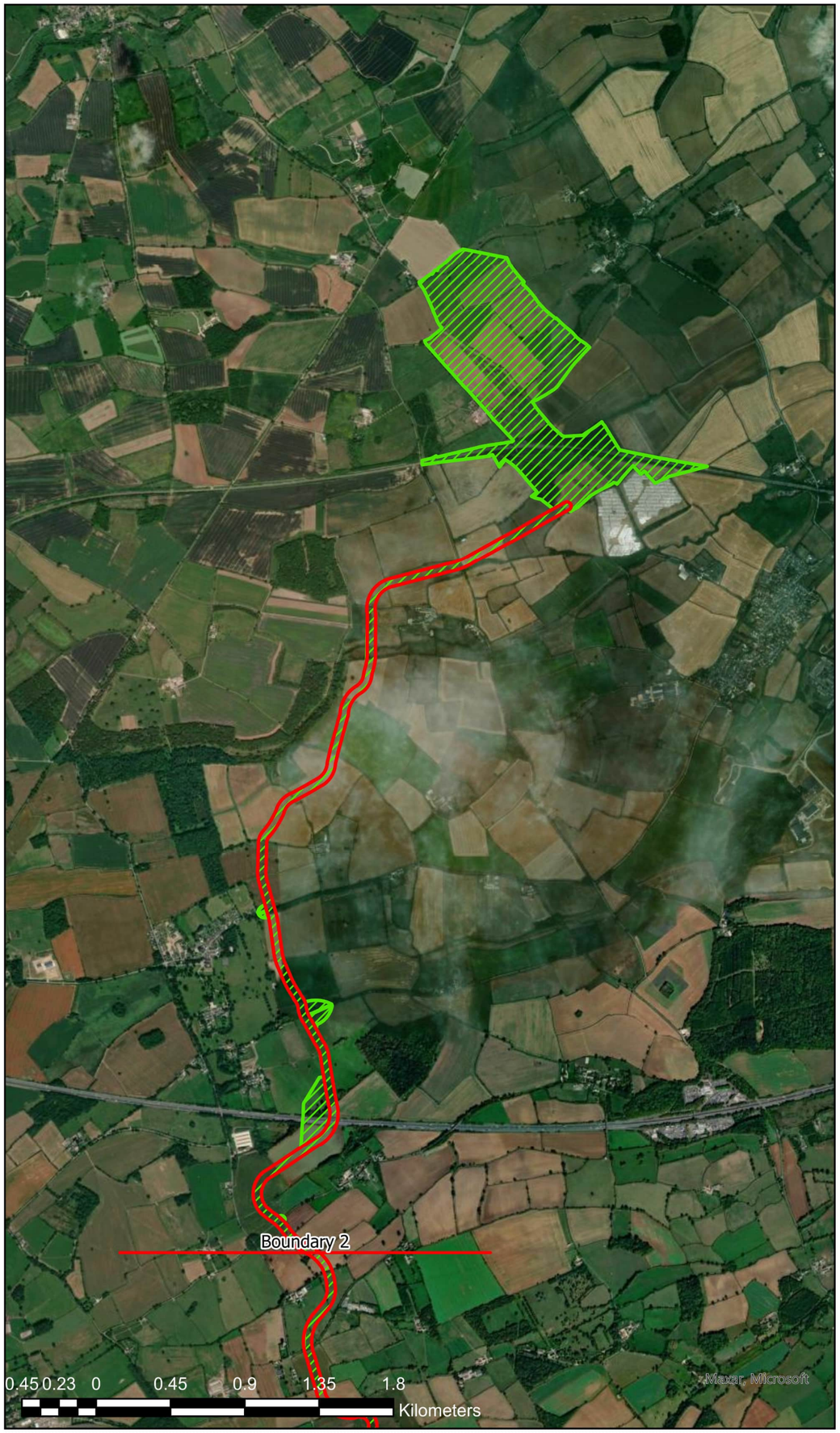
P01

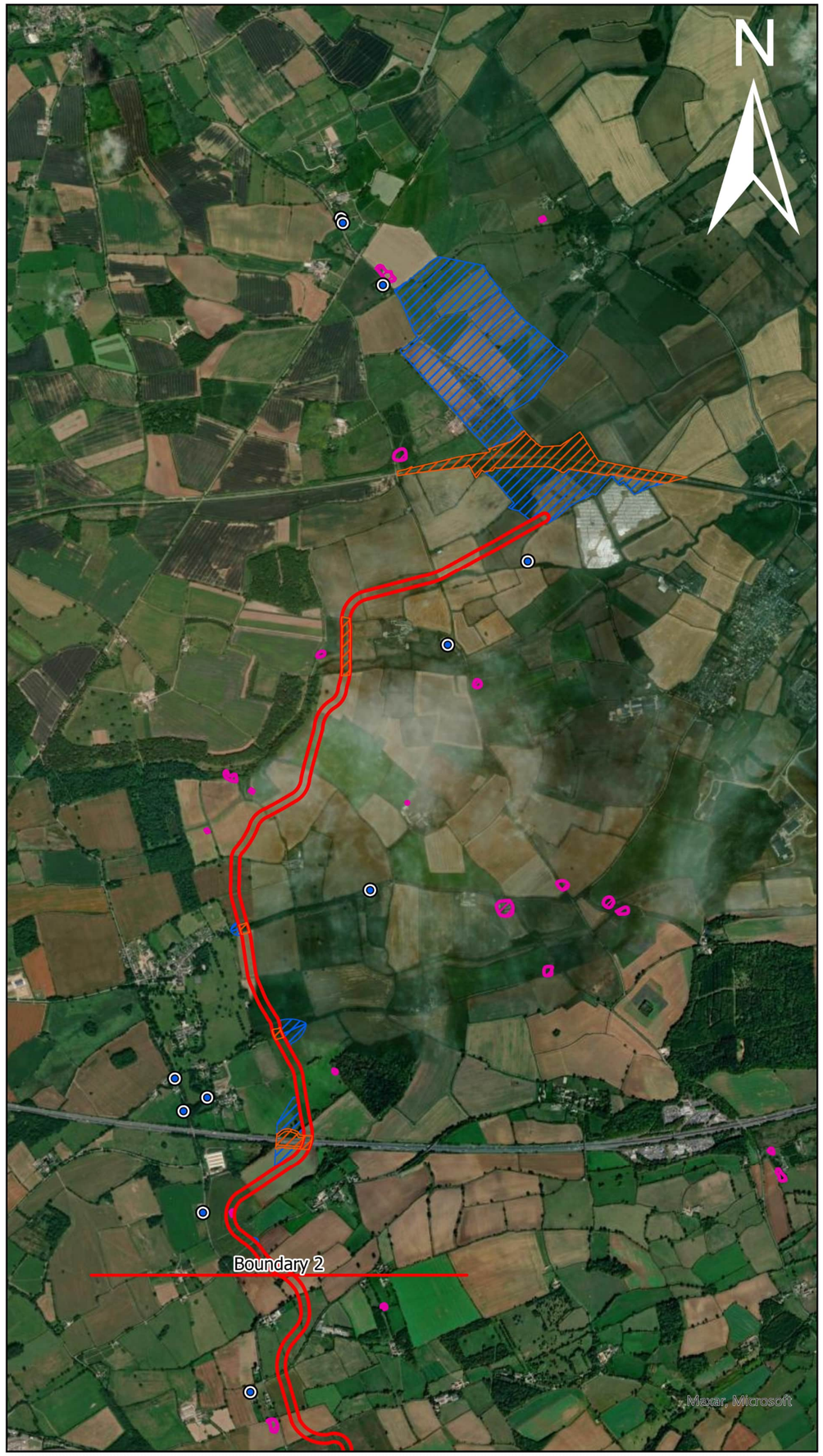
Drawing Title

Qualitative Risk Assessment - 2

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1019





Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025

Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. The accuracy of data illustrated is indicative only.

Legend

Class
- Medium
- High
- 50m corridor

Risk Rating
- Low

- MRA Drawing Boundary
- HDD Avoidance Areas
- 50m corridor
- Extended Area
- Adit
- Shaft
- Well
- SurfaceFeatures

Revision

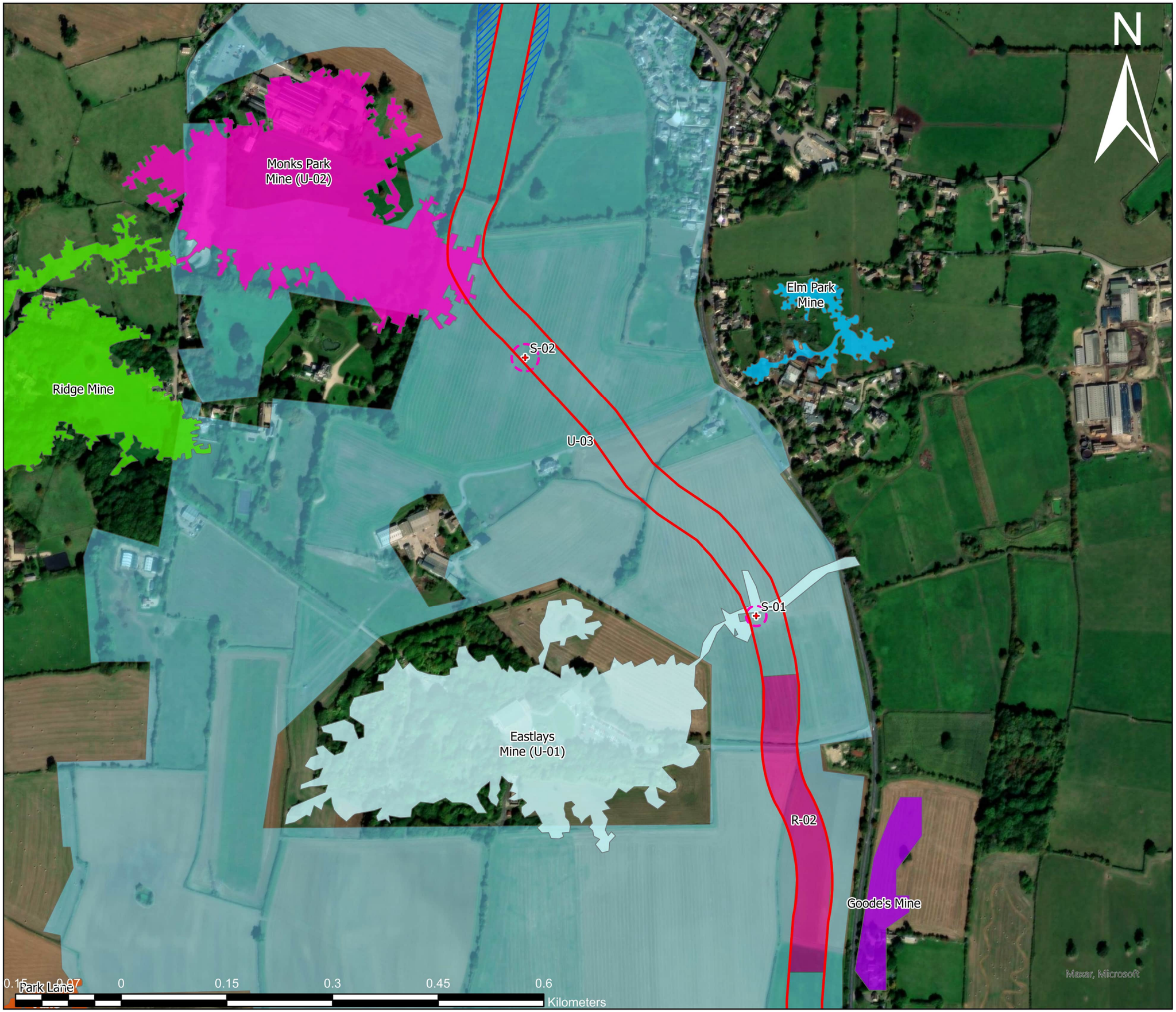
P01

Drawing Title

Qualitative Risk Assessment - 3

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1020



Geosyntec consultants

Project

Lime Down Solar Farm
Mining Risk Assessment
CGU0357002

Client

Lime Down Solar Park Limited

Notes

1. This drawing and its contents have been prepared and are intended solely as information for the Client and use in relation to the Lime Down project. Geosyntec Limited assumes no responsibility to any other party in respect or arising out of or in connection with this drawing and/or its contents.
2. Do not scale from this drawing.
3. This drawing should be read in conjunction with GCU0357002-GEOS-LDSF-MRA-R-G-1001
4. Contains British Geological Survey materials © UKRI 2025
5. The accuracy of data illustrated is indicative only.

Legend

- 50m corridor
- Mine Entry Zone of Influence
- Adit
- Shaft
- Well
- Eastlays Mine (U-01)
- Elm Park Mine
- Goode's Mine
- Monks Park Mine (U-02)
- Park Lane Mine
- Ridge Mine
- Probable Roadway (R-02)
- Probable Underground Workings (U-03)

Revision

P01

Drawing Title

High Risk Mining Areas

Drawing Number

GCU0357002-GEOS-LDSF-MRA-D-G-1021

Produced: GB Checked: MF Reviewed: MF Date: 03/06/2025