



WHITESTONE
solar farm

WHITESTONE SOLAR FARM

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6.20 Appendix 9.10: Coal Mining Risk Assessment: Whitestone 1

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ENVIRONMENTAL STATEMENT

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Contents

9.10 Coal Mining Risk Assessment: Whitestone 1 4

Tables

Table 9.10.1 Summary of Mine Entries 10

Figures [EN0110020/APP/6.19]

Figure Number	Figure Title
3.1	Order Limits
3.2	Site Referencing
3.4	Environmental Designations
9.1	Study Area
9.2	ALC Survey Results
9.3	Coal Mining High Risk Development Areas
9.4	Mineral Safeguard Areas
9.5	SPZ and Ground Water Abstractions
9.7.1	Map of Potentially Contaminated Sites
9.10.1	Superficial Geology
9.10.2	Bedrock Geology
9.10.3	Borehole Locations

Appendices [EN0110020/APP/6.20]

Appendix Number	Appendix Title
9.1	Legislation, Policy and Guidance
9.2	Landmark Envirocheck® Report: W1
9.3	Landmark Envirocheck® Report: W2
9.4	Landmark Envirocheck® Report: W3
9.5	Landmark Envirocheck® Report for Cable Corridors
9.6	Agricultural Land Classification Report
9.7	Phase 1 Contaminated Land Report: W1
9.8	Phase 1 Contaminated Land Report: W2
9.9	Phase 1 Contaminated Land Report: W3
9.10	Phase 1 Coal Mining Risk Assessment: W1
9.11	Phase 1 Coal Mining Risk Assessment: W2
9.12	Phase 1 Coal Mining Risk Assessment: W3

ENVIRONMENTAL STATEMENT

Glossary

Term	Meaning
<i>Aquifer</i>	“Underground layers of water-bearing, permeable rock from which groundwater can be extracted” (British Geological Survey).
<i>Cable Corridors</i>	Corridors within which the high voltage cables would be constructed.
<i>Environmental Statement (ES)</i>	The Environmental Statement which presents the environmental information relating to the Proposed Development. The ES has been prepared to present information for formal consultation in accordance with current EIA regulation.
<i>Made Ground</i>	Land where the pre-existing ground surface is raised or replaced by artificial or man-made deposits.
<i>Order Limits</i>	Maximum extent of the Proposed Development comprising the Site and Cable Corridors.
<i>Secondary Aquifer</i>	Rocks which “can provide modest amounts of water, but the nature of the rock or the aquifer’s structure limits their use. They support water supplies at a local rather than strategic scale (such as for private supplies) and remain important for rivers, wetlands and lakes. They have a wide range of water permeability and storage” (Environment Agency). Secondary Aquifers may be further classified as ‘A’, ‘B’ or ‘Undifferentiated’ based on their permeability and ability to support local water supplies and/or base flow to rivers.
<i>Study Area</i>	This is an area which is defined for each environmental topic which includes the Order Limits as well as potential spatial and temporal considerations of the impacts on relevant receptors.
<i>The Applicant</i>	Whitestone Net Zero Ltd
<i>The Application</i>	The Application submitted to the Secretary of State for a Development Consent Order.
<i>The Proposed Development</i>	The proposed Whitestone Solar Farm.
<i>The Site</i>	The land planned to be used for solar PV array and associated infrastructure, BESS, substation, and landscaping and habitat enhancement. The Site is split into W1, W2, and W3.
<i>Whitestone 1 (W1)</i>	The northern parcels of the Whitestone Solar Farm.
<i>Whitestone 2 (W2)</i>	The middle parcels of the Whitestone Solar Farm.
<i>Whitestone 3 (W3)</i>	The southern parcels of the Whitestone Solar Farm.

Acronyms

Acronym	Meaning
<i>AIL</i>	Abnormal Indivisible Load
<i>BESS</i>	Battery Energy Storage System
<i>BGL</i>	Below Ground Level
<i>BGS</i>	British Geological Society
<i>DCO</i>	Development Consent Order

ENVIRONMENTAL STATEMENT

Acronym	Meaning
<i>ERM</i>	Environmental Resources Management
<i>ES</i>	Environmental Statement
<i>NSIP</i>	Nationally Significant Infrastructure Project
<i>PCS</i>	Power Conversion System
<i>PV</i>	Photovoltaic
<i>SAC</i>	Special Areas of Conservation
<i>SPA</i>	Special Protection Areas
<i>SSSI</i>	Sites of Special Scientific Interest
<i>W1</i>	Whitestone 1
<i>W2</i>	Whitestone 2
<i>W3</i>	Whitestone 3

Units

Units	Meaning
<i>Ha</i>	Hectares
<i>Km</i>	Kilometres
<i>kV</i>	Kilovolt
<i>M</i>	Metres
<i>MW</i>	Megawatts
£	Pound

9.10 Coal Mining Risk Assessment: Whitestone 1

Introduction

- 9.10.1 This Appendix of the Environmental Statement (ES) has been prepared by Environmental Resources Management (ERM) on behalf of Whitestone Net Zero Ltd (the Applicant) in relation to the Development Consent Order (DCO) Application for the construction, operation, maintenance and decommissioning of the Whitestone Solar Farm (the Proposed Development). It is understood that the Applicant wishes to understand the potential structural stability risks for redevelopment activities that may be undertaken in relation to the Proposed Development.

Order Limits

- 9.10.2 The extent of the Order Limits are described in **ES Volume 1, Chapter 3: The Site and Surrounding Area [EN0110020/APP/6.3]** and shown in **ES Volume 3, Figure 3.1: Order Limits [EN0110020/APP/6.19]**. The Proposed Development is described in **ES Volume 1, Chapter 5: The Proposed Development [EN0110020/APP/6.5]** and shown spatially on the **Works Plans [EN0110020/APP/2.3]**.

The Proposed Development

- 9.10.3 The Proposed Development involves the construction, operation and maintenance, and decommissioning of more than 100MW of solar photovoltaic (PV) array, Battery Energy Storage System (BESS), onsite substations and supporting infrastructure, and grid connection infrastructure. The grid connection infrastructure would connect the Proposed Development to the National Grid at the new 400 kilovolt (kV) National Grid substation proposed on land immediately east of Long Lane, Brinsworth, S60 4JJ (Long Lane 400kV Substation). National Grid have applied to Rotherham Metropolitan Borough Council for the development of this new substation which is intended by National Grid to be operational in time for the Proposed Development to connect in 2029. This substation is therefore not included in the Proposed Development and will be subject to a separate planning application taken forward by National Grid.
- 9.10.4 As the Proposed Development would have a generating capacity in excess of 100MW, it is considered to be a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008.
- 9.10.5 The Proposed Development would be located within the Order Limits. The Order Limits encompass the total area of the project comprising the Site and Cable Corridors. The Site is specifically the land that is planned to be used for solar PV array and associated infrastructure, BESS, substation, landscaping and habitat enhancement. The Site is split into Whitestone 1 (W1), Whitestone 2 (W2), and Whitestone 3 (W3).
- 9.10.6 Highway Works are sections of the highway network that will contain localised improvements, such as improvements to road edge where it is deteriorated, or temporary highway and traffic works required to safely accommodate the Abnormal Indivisible Load (AIL) deliveries. These areas will support the movement of construction vehicles on narrower sections of the local highway

network within parts of the construction vehicle routes to the Site (as described in **ES Volume 2, Chapter 13: Traffic and Transport [EN0110020/APP/6.13]**)

9.10.7 This Appendix is supported by the following figures **[EN0110020/APP/6.19]**:

- **ES Volume 3, Figure 3.1: Order Limits;**
- **ES Volume 3, Figure 3.2: Site Referencing;**
- **ES Volume 3, Figure 3.4: Environmental Designations;**
- **ES Volume 3, Figure 9.10.1: Superficial Geology;**
- **ES Volume 3, Figure 9.10.2: Bedrock Geology;** and
- **ES Volume 3, Figure 9.10.3: Bore Hole Locations.**

9.10.8 This Report covers the associated baseline and risks attributed to historic coal mining activity for W1. W2 and W3 will be covered in their own coal mining risk assessments (**ES Volume 3, Appendix 9.11: Coal Mining Risk Assessment: Whitestone 2 [EN0110020/APP/6.20]** and **ES Volume 3, Appendix 9.12: Coal Mining Risk Assessment: Whitestone 3 [EN0110020/APP/6.20]**).

Whitestone 1

9.10.9 W1 is the name for the northern area of the Site as shown in **ES Volume 3, Figure 3.2: Site Referencing [EN0110020/APP/6.19]**, located within the administrative area of CDC. W1 covers approximately 327ha of predominantly agricultural land, centred around NGR SK 503962.

9.10.10 W1 abuts the A630 to the north and is approximately 400m from the village of Clifton to the east and the M18 to the southeast. The southwest of W1 is parallel with the Doncaster-Rotherham border, with Firsby Reservoir to the southwest and Hooton Roberts approximately 700m to the west. It is a broad open landscape set within a bowl (approximately 70m Above Ordnance Datum (AOD) gently rising with small hills such as Beacon Hill (approximately 146m AOD) to the east. The landscape comprises predominately larger irregular arable fields, with a mix of hedgerows and lines of trees forming boundaries, which are occasionally gappy or non-existent. There are several properties situated in the hamlet of Firsby to the southwest of W1, however most nearby residential properties are concentrated in Clifton, approximately 4

9.10.11 The solar PV arrays will be mounted on frames with foundations extending up to 4m below ground level (BGL). The BESS, Substations and Power Conversion System (PCS) will be mounted on permanent concrete foundations which may extend up to 4m BGL. The cable routes will be installed in temporary trenches, which will be dug to depths of up to 1.5m BGL.

9.10.12 W1 is shown in **ES Volume 3, Figure 3.2: Site Referencing [EN0110020/APP/6.19]**. As shown on **ES Volume 3, Figure 9.10.3: Bore Hole Locations [EN0110020/APP/6.16]**, the areas of the Proposed Development which have been identified as having the highest potential risks due to historic coal mining activity. This was determined through an assessment of the Mining Remediation Authority Map Viewer¹ and identifying which areas of the Proposed Development overlapped with areas designated as Development High Risk Areas. As such, these are the areas that will be focused on for this risk assessment. These areas of W1 will be henceforth referred to as the Site.

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- 9.10.13 Historically this area has been subject to extensive deep coal mining activities. The Silverwood, Kilnhurst, Yorkshire Main and Maltby Collieries have been identified as having worked coal seams beneath the Site.
- 9.10.14 This Report uses available, identified data to review the potential coal mining risks that may be associated with future redevelopment and also determine if an intrusive investigation is warranted.

Environmental Site Setting

- 9.10.15 ERM has completed an assessment of the environmental setting of the Site (geology, hydrogeology, hydrology, and surrounding land uses including sensitive receptors). A summary of the current setting is presented below:

Geology

- 9.10.16 The Site is not underlain by any superficial deposits, nor are there any areas of artificial or made ground.
- 9.10.17 The solid (bedrock) geology underlying the Site consists of Pennine Upper Coal Measures of mudstone, siltstone and sandstone.
- 9.10.18 According to the Coal Mining Consultants Report (Annex A) and the British Geological Society (BGS) Geoindex2, there is one geological fault in the northern section, intersecting in the northeast of the Site and running in a southwest-northwest direction. In the southern section, another fault is located centrally in the Site running in a southwest-northeast direction.
- 9.10.19 There are several boreholes recorded within the vicinity of the northern section. Two of note are refs. SK59NW25 and SK59NW23, which are deep boreholes from the Silverwood Colliery used to prove the extent of various coal seams. They both show interbedded coal measures with sandstones and siltstones in the upper 50m BGL. There are 13 total named coal seams identified from depths between 320m BGL to 1020m BGL.
- 9.10.20 The southern section contains two boreholes (refs. SK59SW136 and SK59SW137). The lithology is shown as topsoil and clay, followed by interbedded sandstone, siltstone and mudstone along with thin layers of coal up to the final depth of 19m BGL. The superficial and bedrock geology are shown on **ES Volume 3, Figure 9.10.1: Superficial Geology [EN0110020/APP/6.19]** and **ES Volume 3, Figure 9.10.2: Bedrock Geology [EN0110020/APP/6.19]**, respectively.

Hydrogeology

- 9.10.21 The coal measures bedrock underlying the Site are classed as a Secondary A aquifer.
- 9.10.22 There is no record from the surrounding borehole logs of a groundwater depth

Hydrology

- 9.10.23 The northern section contains two significant surface water features. Kearsley Brook straddles the northern boundary while The Brook adjoins Kearsley Brook in the northwest corner and runs through the centre of the Site in a north-south direction.

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- 9.10.24 The southern section intersects for a short distance with Hellaby Brook, which flows in a north-south direction, at the very southern edge of the Order Limits.

Other Sensitive Land Uses

- 9.10.25 There are no Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) or Special Protection Areas (SPA) within 1km of the Site.
- 9.10.26 The nearest sensitive land use is Ashfield Brick Pits SSSI, located ~1000m north of the northern section of the Site.

Vulnerability and Sensitivity

- 9.10.27 ERM considers the groundwater vulnerability to be low-moderate due groundwater depth being undefined but with variable permeability of the geology. ERM considers the groundwater sensitivity to be moderate due to the classification of the coal measures bedrock as a Secondary A aquifer.
- 9.10.28 ERM considers the surface water vulnerability to be high due to the closest water feature being located on Site. ERM considers the surface water sensitivity to be moderate based on the Environment Agency's classification of moderate ecological and chemical status of both Kearsley Brook and Hellaby Brook.

Coal Authority Report Review – North

- 9.10.29 ERM have reviewed the Coal Authority Report (380829767_1, dated 7 July 2025) for the Site which is summarised below. The Coal Authority Report is shown in Annex A.

Past Underground Coal Mining

- 9.10.30 Past underground coal mining is considered to be a Low risk to the northern section of W1.
- 9.10.31 The northern section of W1 is in an area that could be affected by underground mining in three seams of coal from 748m to 992m depth and last worked in 2003.
- 9.10.32 The seams are not likely within influencing depth of the surface and if movement in the ground had occurred due to coal mining activity associated with these workings, this should have ceased by now.
- 9.10.33 In addition, the northern section of W1 is in an area where the Coal Authority believes there is coal at or close to the surface. This coal may have been worked at some time in the past.
- 9.10.34 The potential presence of coal workings at or close to the surface should be considered, particularly prior to any site works or future development activity, as ground movement could still be a risk. All ground disturbance associated with the Proposed Development will only be up to a depth of 4m BGL which is somewhat short of the suspected depth of past underground workings. This is further considered later in the risk assessment.

Present Underground Coal Mining

- 9.10.35 Present underground coal mining is considered to be a Low risk to the northern section of W1.

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- 9.10.36 The northern section of W1 is not within an area that could be affected by present underground mining.
- 9.10.37 The northern section of W1 is not in an area where the Coal Authority has received an application for or is currently considering whether to grant a licence to remove or work coal by underground methods.
- 9.10.38 The northern section of W1 is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.
- 9.10.39 The northern section of W1 is not in an area likely to be affected from any planned future underground coal mining. However, reserves of coal exist in the local area which could be worked at some time in the future.

Future Underground Coal Mining

- 9.10.40 Future underground coal mining is considered to be a Low risk to the northern section of W1.
- 9.10.41 The northern section of W1 is not in an area where the Coal Authority has received an application for a coal mining license.

Mine Entries

- 9.10.42 Mine entries are considered to be a Medium risk to the northern section of W1.
- 9.10.43 There are three recorded mine entry located on the Site. They are all recorded as mine shafts (refs. 450396-001, 450396-002 and 451397-002) located in the south, centre and north of the Site respectively. The condition of the disused mine shafts are described as having unknown treatment details. The Coal Authority notes that pre-1947, there was no requirement for operators to record mine entry treatment details when ceasing operations. Therefore, it does not necessarily mean that these shafts were left untreated. They are shown on **ES Volume 3, Figure 9.3: Coal Mining High Risk Development Areas [EN0110020/APP/6.19]**.

Coal Mining Geology

- 9.10.44 Coal mining geology is considered a Low risk to the northern section of W1.
- 9.10.45 The Coal Authority are not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

Past, Present and Future Opencast Coal Mining

- 9.10.46 Past, present and future opencast coal mining is considered a Medium risk to the northern section of W1.
- 9.10.47 There are no recorded opencast mines within the Site or within 500m of W1.
- 9.10.48 There is one conjectured coal outcrop located in the north of the Site. The Coal Authority also reports that there are likely unrecorded shallow underground workings within the vicinity of the mine entries. As such most of the Site is classified as a Development High Risk Area.

Coal Mining Subsidence

- 9.10.49 Coal mining subsidence is considered a Medium risk to the northern section of W1.
- 9.10.50 A total of nine subsidence claims have been made at the Site from 1995 to 2005. Five of these were rejected while two were settled by repairs (total of £42,198.55) and the other two were settled with a compensation payout (of at least £49,048.00). There are a further three subsidence claims within 50m of W1 that do not match the address. There have been no subsidence claims in the last 20 years.
- 9.10.51 There are no current Stop Notices associated within any of these claims delaying the start of remedial works or repairs to the northern section of W1.
- 9.10.52 The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine Gas

- 9.10.53 Mine gas is considered a Low risk to the northern section of W1.
- 9.10.54 The Coal Authority has no record of any mine gas incidents occurring within 500m of W1. The Coal Authority states that this does not necessarily mean that no mine gas is present within the vicinity of the Site and that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases.

Hazard Related to Coal Mining

- 9.10.55 Hazard related to coal mining is considered a Low risk to the northern section of W1.
- 9.10.56 The northern section of W1 has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.
- 9.10.57 There have been no site investigations or remediated sites within 50m of the Site.

Mine Water Treatment Schemes

- 9.10.58 Mine water treatment schemes are considered a Low risk to the northern section of W1.
- 9.10.59 The Coal Authority has no record of Mine Water Treatment Schemes within 500m of W1.

Coal Authority Managed Tips

- 9.10.60 Coal Authority managed tips are considered a Low risk to the northern section of W1.
- 9.10.61 The Coal Authority report that there are no Coal Authority Managed Tips within 500m of W1.

Summary of Mine Entries

Table 9.10.1 Summary of Mine Entries

Entry Type	Reference	Grid Reference	Treatment Description*	Mineral
Shaft	450396-001	450699 396184	Treatment details unknown	Coal
Shaft	450396-002	450972 396706	Treatment details unknown	Coal
Shaft	451397-002	451181 397074	Treatment details unknown	Coal

*Before the coal industry was nationalised in 1947, there was no requirement for a mine operator to record mine entry treatment details when a mine was abandoned. Therefore, it is not unusual for there to be no treatment details for many of the 176,000 recorded mine entries on the Coal Authority database. Despite this, the fact that there are no treatment records does not necessarily mean that the mine entries were left untreated when abandoned.

Coal Authority Report Review – South

9.10.62 ERM have reviewed the Coal Authority Report (380830070_1, dated 7 July 2025) for the Site which is summarised below. The Coal Authority Report is shown in Annex A.

Past Underground Coal Mining

- 9.10.63 Past underground coal mining is considered a Low risk to the southern section of W1.
- 9.10.64 The southern section of W1 is in an area that could be affected by underground mining in three seams of coal from 713m to 1000m depth and last worked in 2001.
- 9.10.65 The seams are not likely within influencing depth of the surface and if movement in the ground had occurred due to coal mining activity associated with these workings, this should have ceased by now.
- 9.10.66 In addition, the southern section of W1 is in an area where the Coal Authority believes there is coal at or close to the surface. This coal may have been worked at some time in the past.
- 9.10.67 The potential presence of coal workings at or close to the surface should be considered, particularly prior to any site works or future development activity, as ground movement could still be a risk.

Present Underground Coal Mining

- 9.10.68 Present underground coal mining is considered a Low risk to the southern section of W1.
- 9.10.69 The southern section of W1 is not within an area that could be affected by present underground mining.
- 9.10.70 The southern section of W1 is not in an area where the Coal Authority has received an application for or is currently considering whether to grant a licence to remove or work coal by underground methods.

9.10.71 The southern section of W1 is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

9.10.72 The southern section of W1 is not in an area likely to be affected from any planned future underground coal mining. However, reserves of coal exist in the local area which could be worked at some time in the future.

Future Underground Coal Mining

9.10.73 Future underground coal mining is considered a Low risk to the southern section of W1.

9.10.74 The southern section of W1 is not in an area where the Coal Authority has received an application for a coal mining license.

Mine Entries

9.10.75 Mine entries are considered a Low risk to the southern section of W1.

9.10.76 There are no recorded mine entries within the Site or within 100m of W1.

Coal Mining Geology

9.10.77 Coal mining geology is considered a Low risk to the southern section of W1.

9.10.78 The Coal Authority are not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

Past, Present and Future Opencast Coal Mining

9.10.79 Past, present and future opencast coal mining is considered a Medium risk to southern section of W1.

9.10.80 There are two records for Unlicensed Opencast Sites located in the centre of the Site. These are located in close proximity to a conjectured coal outcrop and may suggest historic opencast surface mining, which has subsequently been infilled. The Coal Authority deems these as Development High Risk areas and also areas of probably shallow workings, although the BGS Geindex² does not identify them as infilled land. These identified areas are partly located on land already worked, as the M18 motorway lies within their boundaries.

9.10.81 There are no opencast licensed areas within W1.

Coal Mining Subsidence

9.10.82 Coal mining subsidence is considered a Medium risk to the southern section of W1.

9.10.83 There is one coal mining subsidence claim recorded on the Site. Occurring in 2005 and located at Moor Lane, Braithwell, the claim was settled by a combination of repairs and compensation.

9.10.84 There is no current Stop Notice delaying the start of remedial works or repairs to the southern section of W1.

9.10.85 The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine Gas

- 9.10.86 Mine gas is considered a Low risk to the southern section of W1.
- 9.10.87 The Coal Authority has no record of any mine gas incidents occurring within 500m of W1. The Coal Authority states that this does not necessarily mean that no mine gas is present within the vicinity of the Site and that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases.

Hazard Related to Coal Mining

- 9.10.88 Hazard related to coal mining is considered a Low risk to the southern section of W1.
- 9.10.89 The southern section of W1 has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.
- 9.10.90 There have been no site investigations or remediated sites within 50m of the Site.

Mine Water Treatment Schemes

- 9.10.91 Mine water treatment schemes are considered a Low risk to the southern section of W1.
- 9.10.92 The Coal Authority has no record of Mine Water Treatment Schemes within 500m of W1.

Coal Authority Managed Tips

- 9.10.93 Coal Authority managed tips are considered a Low risk to the southern section of W1.
- 9.10.94 The Coal Authority report that there are no Coal Authority Managed Tips within 500m of W1.

Shallow Coal Mining Risk Assessment

- 9.10.95 Based on review of the Coal Authority Report, there are three main identified risks from past coal mining activities to W1.
- 9.10.96 Firstly, relating to the potential for historical mine entries from coal mining activities in the development area, which may reflect localised disturbed ground or voids. A total of three mine shafts were recorded within the Site, with all three of these have been reported as having no treatment details. With no treatment details available, and as such an unknown condition of the backfill material, the risk to the future development is considered to be medium.
- 9.10.97 Secondly, there are ten total coal subsidence claims within the Site boundaries (nine north, one south) and a further three within 50m of the northern section of the Site. Five of these claims were rejected, while the remaining five have been settled with compensation or repairs. Although no current stop notice is in place, and the Coal Authority is not aware of any request having been made to carry out preventive works, there is the possibility that further subsidence from coal

mining can occur within the Site boundaries or subsidence has not been recorded, although there have been no claims or records of subsidence in the last 20 years. This is of a higher likelihood in the areas of the Site with mine entries and the potential of unknown voids. As such, the risk from subsidence is considered to be medium.

- 9.10.98 Finally, relating to the areas of unlicensed opencast mining within the Site. These are only present in the southern section, where there is a conjectured coal outcrop near the surface. These areas are considered High Risk for Development by the Mining Remediation Authority. The nature and extent of the backfilled material is currently unknown and could pose a contamination and subsidence risk. As such the risk from opencast mining is considered to be medium.

Conclusions

- 9.10.99 With regards to the development area, a review of available Coal Authority and BGS data has established the following risk ratings:
- 9.10.100 ERM has not identified any significant risk to the development from past, current or future deep coal mining activities. Although there has been extensive underground coal mining beneath the Site, the last recorded activities occurred in 2003 with the shallowest seam worked at 713m BGL. There have been ten total subsidence claims within the vicinity of W1 between 1993 to 2005, coinciding with the end of the deep mining activity. There have been no further claims in the last 20 years.
- 9.10.101 Three mine entries were identified within W1. As all three of these have no information regarding their current condition or their treatment, ERM considers this a risk to development as there could be the presence of contamination from backfilling material and unknown voids which could create a subsidence risk. ERM recommends that below ground installations, including foundations for solar panels and other permanent infrastructure, is avoided in the zones of influence around known mine entries. If this cannot be avoided, then further Phase 2 investigations to establish the geotechnical risk, or other mitigation will be required.
- 9.10.102 ERM considers there to be a medium-high risk that shallow coal underground workings have occurred within W1, drawn around the mapped mine entry shafts and potentially areas of historic surface workings. A review of Coal Authority and BGS data indicates the presence of shallow coal outcrops in the southern section, which were likely worked from opencast mines and subsequently infilled with mine spoil and other unknown material. BGS borehole log ref. SK59SW136 identified coal measures and potential evidence of coal workings at shallowest depths of approximately 4 - 15m BGL.
- 9.10.103 If, during construction, disturbed ground or voids are identified it is expected that this could be managed during the construction in accordance with Coal Authority requirements. With the condition of the infilled land unknown, potential contamination could have the possibility of being migrated during construction activities.
- 9.10.104 ERM recommends a site walkover and likely Phase 2 geotechnical assessment to assess the condition and treatment of the mine entries, the status of the adjacent land due to suspected shallow underground and opencast coal mining activities, as well as, and the geotechnical stability of the Site to confirm the risk from subsidence.



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