13.20 The radon risk at the site has been assessed using the UK Public Health England interactive radon ¹⁶ map. The interactive radon map shows that the site is in an area where 0 % to 1 % of homes are above the UK Action Level for radon. Therefore, based upon Building Research Establishment guidance ¹⁷ radon protection measures are not required for the site.

Landfills

- 13.21 The closest recorded or suspected landfill is located approximately 270 m to the north of the site, at the former Overwood Quarry which was licensed to receive 'generally inert' materials.
- 13.22 The Envirocheck report recorded several areas of infilled land, the closest to the site was recorded approximately 202 m south of the site and dates from 1975 (infilled quarry or pit).

Registered Waste Transfer or Disposal Sites

13.23 A waste transfer site is located approximately 230 m north of the site. The licence holder for the waste transfer site is William Hamilton and Sons Limited, the maximum waste input is no greater than 10,000 and less than 25,000 tonnes per year and has been operational since 1999. The type of waste authorised at the waste transfer suite includes biodegradable waste as green waste consisting of plant matter and gully pot wastes.

Unexploded Ordnance (UXO)

13.24 The online Zetica Unexploded Bomb (UXB) map ¹⁸ identifies the site as being at a low risk from unexploded ordnance.

Sources of Contamination

- 13.25 The historic and current uses of the site give rise to the potential for the following types of contaminants to occur at the site, both within soil and groundwater:
 - Organic: Total petroleum hydrocarbons (TPH), Polycyclic Aromatic Hydrocarbons (PAHs),
 Volatile Organic Compounds (VOCs), Semi Volatile Organic Compounds (SVOCs), pesticides,
 herbicides and phenols;
 - Acid mine drainage from mining activities (when the rock containing sulphide minerals are
 oxidised due to lowering of groundwater, and then react with groundwater when
 groundwater levels rise resulting in generation of acidic sulphurous waters which causes

¹⁶ Health Protection Agency (November 2007) - Indicative Atlas of Radon in England, Wales and Scotland

¹⁷ BR 211(2015) Radon - Guidance on Protective Measures for New Buildings

¹⁸ https://zeticauxo.com/downloads-and-resources/risk-maps/. Date accessed 14/12/2020.

increased leaching of contaminants such as heavy metals into groundwater)), (iron sulphide, sulphates, heavy metals);

- Inorganic: metals, asbestos, cyanide; and
- Ground gases.

Sensitive Receptors

- 13.26 The following sensitive receptors have been identified:
 - Water environment (surface water features including ecological receptors within the surface waterbodies);
 - Construction workers;
 - Groundwater beneath the site (aquifers); and
 - Future site users.

Potential Effects

13.27 Tables 13.1 and 13.2 set out the potential effects which are anticipated and justification for the absence of significant effects. Reference should also be made to the Water Resources and Flood Risk assessment provided below.

Table 13.1: Potential Construction Effects

Potential Effect*	To be assessed in the EIA (Y/N)	Commentary	
Exposure of construction workers to contaminated soil	N	Standard construction control measures, including	
Generation of dust and potentially contaminated dusts, including asbestos.	N	provision of personal protective equipment ("PPE") to prevent direct exposure to contaminants. Including the implication of the CEMP.	
Exposure of construction workers to ground gases	N	Site is likely to be underlain by Made Ground, Coal Measures and potential mine workings, and as such there is potential for ground gases to be generated. This will be determined by ground investigation.	

Potential Effect*	To be assessed in the EIA (Y/N)	Commentary
		However, the risks to construction workers will be mitigated through standard construction control measures, including provision of PPE and confined spaces protocol to remove (and where not possible, manage) risk of staff being exposed to ground gases.
Risks to the underlying groundwater and surface water from the historic mine and underground workings, particular acid mine drainage.	N	An intrusive ground investigation (including groundwater monitoring) will be undertaken to determine the risks to the underlying aquifer and surface water.
Contaminants introduced by construction activities through leakages/spillages	N	Standard construction and control measures such as management of materials on site.
The development includes a 5 m deep bunker (from a general development level of 152m AoD), therefore, groundwater maybe encountered during the excavation works which will require management during construction. The aquifer may be disturbed during construction of the bunker.	N	The groundwater levels at the site will be determined by the intrusive ground investigation, which will determine the risk of encountering groundwater. The development will be designed to provide a water-tight structure and thus mitigate the requirement for long-term dewatering of structures constructed below the groundwater table. The provision of a watertight structure will also mitigate impacts from waste placed in the bunker leaking and thus affecting the water quality of the aquifer. During construction, any abstracted groundwater would be managed to ensure that groundwater impacted by contamination is not mobilised into other waterbodies. Assessment will be made, following intrusive investigations, into the presence of groundwater contaminants and whether the proposed works could create or mobilise e.g. acid mine waters. If present, measures would be designed to mitigate environmental risks from creation of and/or mobilisation of contaminated waters.
Changes in ground level as a result of earthworks and cut and fill activities may increase vulnerability	N	The proposed development will include hardstanding therefore, the risks to the underlying aquifer is reduced.

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Potential Effect*	To be assessed in the EIA (Y/N)	Commentary
of the underlying bedrock aquifer.		
Piling may disturb the aquifer. Creation of pathways via piling or other construction activities. There is the potential for contamination within the Made Ground to be mobilised via newly created preferential pathways into the underlying aquifers.	N	Standard construction control measures during the construction phase. Foundation Works Risk Assessment ("FWRA") would be produced to inform foundation and construction method to minimise migration risks.
Silt-laden surface water run-off from site, resulting in contamination of nearby controlled waters.	N	Unlikely that discharge to surface water will occur via runoff from site as the nearest waterbody is 100 m from the site. Nevertheless, standard construction control measures would be employed including management of surface water run-off and stockpiles throughout the construction phase.
Mobilisation of contaminants during piling, if required dewatering operations. Vertical migration of contamination in soils to Principal aquifer and from there lateral migration to nearby controlled waters.	N	Standard construction and control measures such as management of materials on site.

Table 13.2: Potential Operational Effects

Potential Effect*	To be assessed in the EIA (Y/N)	Réason
There is a risk of shallow ground instability affecting the development infrastructure (due to the recorded abandoned mine workings).	N	The presence and depth of abandoned mine workings and worked coal seams, which could result in shallow ground instability and effects on the development, will be investigated during the intrusive ground investigation. Subject to that investigation and assessment of the results,

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Potential Effect*	To be assessed in the EIA (Y/N)	Reason
		mitigation measures such as stabilisation may be required as part of the development construction work.
Exposure of future site users to contaminated soil	N	The proposed development design (including areas of hardstanding) would break potential pathways between in-situ contamination and sensitive site users in areas of the site constructed as buildings or hardstanding.
There is a potential risk of contaminants being introduced from the proposed development.	N	Assessment of suitable operational drainage measures for the site shall be provided in a Drainage Impact Assessment.
There is a risk of contaminants being mobilised through proposed soakaways	N	The risk of contaminants will be investigated through the intrusive ground investigation stage, and with mitigation measures in place if required, and/or siting of any soakaways into areas of the site which are not affected by leachable contamination.
Exposure of end users to ground gases	N	Site is likely to be underlain by Made Ground, Coal Measures and potential mine workings, as such has the potential to generate ground gases. The requirement for ground gas protection would be determined from the intrusive ground investigation. If ground gas protection measures are required these measures would be designed, installed and require verification.
Direct contact of aggressive soils with substructure building materials, including potable water supply pipes, potentially resulting in chemical damage or tainting of water supplies.	N	Concrete specification would match requirements of ground conditions, if needed, following the intrusive ground investigation. Water supply pipes would be specified as needed to match ground conditions.

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Mitigation

- 13.28 As part of the design process, ground and groundwater conditions will be characterised and managed through a number of measures including the ones listed below (where relevant). Some of these stages of work will take place after the planning submission and can be secured through an appropriately worded planning condition. In addition, consultation with SLC and SEPA to mitigate and manage any environmental effects of the proposals will be carried out; including:
 - Preliminary risk assessment, which would be prepared to SEPA standards and other UK standards such as EA Land Contamination Risk Management Framework (LCRM) and BS10175:2011+A2:2017. The preliminary risk assessment would be completed to a level adequate for a standalone assessment to support the planning application and include a Conceptual Site Model ("CSM");
 - Coal Mining Risk Assessment ("CMRA"); a CMRA will be required as the site is located within
 Development High Risk Area, as defined by the Coal Authority. Consultation will be carried
 out with the Coal Authority, in advance of any intrusive investigation that is carried out to
 assess the risks from shallow abandoned coal mine workings underlying the site;
 - The intrusive ground investigation will be designed to test the CSM developed at preliminary risk assessment stage, and would be used to inform the risks associated with potentially contaminated soil, groundwater and ground gases and will define the design and mitigation to be adopted during construction and operation of the development. The investigation will also inform the assessment of mining risk and requirement, or otherwise, for mitigation; and
 - Production of FWRA report to access the potential for the creation of pollutant linkages through piling or other ground improvement and construction methods if necessary.
- 13.29 Remediation options appraisal and development of a remedial strategy if risks are identified from the intrusive ground investigation. These may include:
 - Measures to mitigate cross contamination or mobilising contaminants from e.g. acid mine waters during and post construction;
 - Breaking potential contact pathways through a hardcover system across the site (with a cover system of clean soils in landscaped areas);
 - Ground gas/vapour protection measures;
 - Importation of certified topsoil/subsoil;

- · Appropriate site health, safety, waste and environmental management procedures;
- Development of appropriate foundation solutions, and
- Appropriate design of services (such as laying water supply pipes in clean material).
- 13.30 The remediation strategy would also include measures for site monitoring and a plan by which the required measures would be validated upon completion.
- 13.31 If considered necessary, a hydrogeological assessment of environmental impacts which could arise as a result of aquifer disturbance and groundwater lowering associated with the proposed construction of the development that requires significant excavation and the additional 5 m deep bunker;
- 13.32 A CEMP would be implemented to minimise or mitigate any construction effects on the environment.
- 13.33 In respect to ground conditions a number of potential contamination risks have been identified, whereby adverse effect may occur. However, these would be managed through appropriate design and mitigation methods to break those linkages and thus minimise the risks through the construction and operational phase. It is considered than an EIA is neither required to assess these impacts nor to present these mitigation measures.

Summary

- 13.34 It is proposed to scope out ground conditions from the EIA due to the absence of significant environmental effects. However, in the event that the intrusive investigations identify contaminants or high risk geo-environmental conditions, this topic will be reconsidered and scoped-in if necessary.
- 13.35 Notwithstanding the above, preliminary risk assessment will be submitted in support of the planning application. The generic quantitative risk assessment will be undertaken post planning therefore would support the discharge of the planning conditions.

Land Resources

Introduction

13.36 The site amounts to 6.2ha and will result in the loss of an agricultural use through the delivery of the proposals. As such, there is a potential effect for the associated loss of land resources.

Baseline Conditions

13.37 Land is designated into seven classes to determine its capability to support agricultural uses. Land defined as Classes 1 – 3.1 is identified as prime agricultural land. The site is identified as Class 3.2 and is therefore not prime agricultural land.

Potential Effects & Mitigation

13.38 Whilst the proposals will result in the loss of agricultural land, this is a relatively small amount in the context of the local and national provision of agricultural land. Furthermore, the site is not prime agricultural land. Significant effects are therefore not anticipated and this topic can be scoped out of the EIA.

Summary

13.39 It is proposed to scope out land resources from the EIA due to the absence of significant environmental effects.

Water Resources and Flood Risk

Introduction

13.40 Effects on the water environment relate to the potential for changes in runoff associated with the proposed drainage regime and any associated effects on flood risk, groundwater recharge and surface water and groundwater quality. There is also the potential for limited increases in demand for wastewater treatment and potable water supply post-construction.

Baseline Conditions

Surface Waters

- 13.41 Cander Water is located approximately 40 m west of the Proposed Development at its nearest point. Cander Water flows in a Northerly direction to a confluence with Avon Water in a northerly direction, the approximately 2.75km north of the site. Cander Water (SEPA Ref. Cander Water/White Corse Burn, watercourse ID: 10078) was assessed by SEPA in 2018 to be of 'Moderate' overall status, of 'Moderate' overall ecological status and 'Moderate' Physico-Chemical status under the Water Framework Directive (WFD).
- 13.42 The site is currently agricultural land in use for grazing and falls generally from east to west. Surface runoff from across the site is therefore assumed to fall in a westerly direction to the Cander Water, and shallow throughflow is assumed to fall in the same direction.

Groundwater

- 13.43 The Coal Measures strata beneath the site are classified by SEPA as a Moderately Permeable Aquifer. These are described as fractured or potentially fractured rocks that do not have high primary permeability. Although these formations will seldom produce large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers. Two Issues (springs) were recorded within woodland approximately 190 m south of the site and approximately 245 m north of site (near to Overton Farm), these springs feed into Cander Water. The site is not located within aSPZ. A well is located approximately 20 m northwest of the site, which is associated with Overwood Farm. The expected groundwater flow direction is towards Cander Water (southwest direction), however due to presence of the fault onsite this may affect groundwater flow.
- 13.44 No groundwater or surface water abstractions were recorded onsite or within 500 m of the site.

Flood Risk

13.45 According to SEPA Flood Risk Management Maps, the site is not located within an area assessed to be at risk of fluvial flooding. The probability of fluvial flooding at the site is assessed by SEPA to be less than 1 in 1000 (0.1%) in any given year. Flood Risk Management Maps do not record any areas of the site to be at risk of surface water flooding. No existing surface water drainage assets are recorded on mapping or available aerial imagery of the site.

Potential Effects & Mitigation

- 13.46 There is the potential for effects on groundwater and surface water quality as a result of leaks / spills and sedimentation during construction. The construction of foundations and the waste bunker may also impact on groundwater levels during construction. However, the nearest aquifer assessed by the BGS¹⁹ to be of Moderate or High productivity is in excess of 30km from the site.
- 13.47 There is the potential for pollution of surface waters and groundwater by leaks and spills from plant, equipment and contaminated runoff from the site. However, this is managed by best practice commonplace site management measures.
- 13.48 The site is greenfield and will therefore alter the surface water flows associated with the site.

 Accordingly, the Flood Risk Assessment submitted with the application will set out the existing and

¹⁹ British Geological Survey Geoindex (Onshore). Available online: https://mapapps2.bgs.ac.uk/geoindex/home.html?ga=2.141365041.262654197.1602670475-360476160.1575038393 [last accessed December 2020]

proposed discharge rates, subject to agreement with SLC. The drainage strategy will be designed to ensure no off-site flood risk impacts in line with policy and guidance.

- 13.49 As the site is not within the Flood Zone no specific mitigation measures are required.
- 13.50 Table 13.3 sets out the potential effects which are anticipated and justification for the absence of significant effects.

Table 13.3: Potential Water Resources and Flood Risk Effects

Topic Area	Construction Effect	Operation Effect	Commentary
Surface	Release of	Release of	During construction there is the potential for the
water quality	sediments or	pollutants,	release of excavated or stockpiled materials onsite
	pollutants to	process	due to surface runoff, or the potential for increased
	controlled	effluent or	rates of erosion of cleared ground. There is the
	waters	sewage	potential for the release of construction materials
		3000	held on site, and fuels/oils stored onsite or from
			plant operating onsite. Potential effects on surface
			water resources shall be managed through the
			implementation of a CEMP and the implementation
			of best practice according to SEPA guidance and
			Controlled Activities Regulation (CAR) regulations.
			It is anticipated that foul waters shall be treated via
			a packaged water treatment plant prior to
			discharge (to ground or surface water) under CAR
			license. Suitable materials shall be provided under
			relevant CAR licensing application material
			demonstrating that no adverse effects shall occur
			to receiving waters.
			There is the potential for the release of pollutants
			(process chemicals or fuels/oils) to downstream
			controlled waters. To prevent the release of
			pollutants, all potentially deleterious materials shall
			be stored according to CAR regulations at a
			suitable distance from watercourses. The majority
			of effluent produced onsite will either be
			evaporated or absorbed into the ash for transport
			off site. If the site is to be 'zero discharge' all liquid
			effluent exceeding storage capacity would be
			collected and removed from site. Were consent for
			discharge from the site to a suitable receiving
			water (via suitable treatment plant) sought,
			detailed assessment of measures to prevent the

Topic Area	Construction Effect	Operation Effect	Commentary
			release of pollutants shall be provided in relevant CAR licensing application material.
Surface water hydrology	Increases in surface runoff rates or alterations in flow paths due to compaction or sealing of surfaces, or temporary drainage measures during construction.	Alterations to surface runoff rates or alterations to flow paths due to surfacing of site drainage design	Assessment of suitable operational drainage measures for the site shall be provided in a Drainage Impact Assessment. Measures shall be outlined such that greenfield runoff rates are maintained at the site and discharge rates to Cander Water are maintained. Runoff from upslope areas shall be diverted around the site such that present flow rates are maintained.
Surface water temperature	There is limited potential for alteration to surface water temperatures during construction.	Release of effluent or surface water runoff to controlled waters at elevated temperatures	There is the potential that effluent at elevated temperatures could be released from the site or that the thermal mass of hardstanding could raise temperatures of surface runoff. Process water shall be stored onsite and treated prior to discharge from site (where a permit for discharge is sought) and suitable attenuation following treatment would allow correction of temperature prior to release from the site. Acceptable temperature ranges for discharge from the site would be determined in consultation with SEPA prior to application for a discharge permit. Suitable attenuation and the employment of SuDS methods (to be outlined in a Drainage Impact Assessment) shall moderate surface water temperatures prior to discharge from the site.
Groundwater quality	Release of pollutants to groundwater stores.	Release of pollutants or effluent to groundwater	Proposed excavations at the site may represent areas at which the unsaturated zone of the bedrock would be exposed and therefore of a relatively higher vulnerability with regard to groundwater contamination. However, the underlying aquifer is considered to be of Low productivity by the BGS and as such the potential for vertical migration of pollutants within the aquifer is limited. Effluent shall be stored in a "dirty water pit", were the storage pit compromised there is the potential for the release of polluted waters to groundwater.

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Tepic Area	Construction Effect	Operation Effect	Commentary
			Detailed design of proposed storage measures shall ensure that there is no potential for the release of contaminants from the site to groundwater.
Groundwater hydrology / recharge	Reduction in groundwater supplies or lowering in groundwater	Reduction in groundwater supplies	During the construction phases dewatering of excavation sites could lead to a localised lowering of the water table. However, given the limited permeability and productivity of the underlying aquifer, the sensitivity of the site to such changes is considered low. Were any private water supplies identified within 250m of the site a detailed risk assessment would be provided to demonstrate that a reduction in water supply would be avoided. There is the potential for a reduction in infiltration rates to lead to a reduction in groundwater recharge. SuDS measures implemented at the site and specified in a DIA shall ensure that recharge of groundwater resources is maintained. However, as the site is considered to be of a low sensitivity with regards to groundwater resources, this shall largely ensure that shallow throughflow is maintained.
Groundwater temperature	There is limited potential for alteration to groundwater temperatures during construction.	Infiltration of waters from the site could lead to localised increases in groundwater temperatures	The use of suitable SuDS and attenuation measures shall moderate water temperatures prior to infiltration. Taking in to account the low productivity of the underlying aquifer, groundwaters are considered to be of a low sensitivity to changes in temperature and there is considered the potential effects on ecology are not considered significant.
Flood risk	Potential increase in flood risk onsite. Potential increase in flood risk in downstream areas.	Potential increase in flood risk onsite. Potential increase in flood risk in downstream areas.	The site is located outwith SEPA fluvial Flood Risk Management Areas. Therefore, fluvial flood risk at the site is not considered to be significant. On-site storage would be designed to provide storage up to the 1 in 30 AEP event and attenuation measures would be designed such that SuDS features will not surcharge during a 1:30 event. Design would allow for exceedance flows for events with an AEP between 1:30 and 1:200, so that there is no overall increase in unacceptable on or off-site flood risk. A drainage strategy to be submitted with the planning application including calculations demonstrating suitable runoff rates and volumes for attenuation.

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13.51 As set out above, a series of commonplace measures will be identified within the standalone Flood
Risk Assessment and Drainage Strategy submitted with the planning application. There are no
flooding constraints and designing a drainage strategy to meet the necessary standards and guidance
criteria does not necessitate its requirement to be presented in an EIA. Accordingly, this topic has
been scoped out of the EIA.

Summary

13.52 A standalone Flood Risk Assessment and Drainage Strategy will be submitted with the application. The available evidence has not identified the risk of significant effects during construction or operation, and as such this topic can be scoped out of the EIA.

Lighting

Introduction

- 13.53 An external lighting scheme will be required for the proposed development.
- 13.54 An external lighting impact assessment will be carried out to ensure that there is limited light spill arising from the proposed development, and to confirm that there is no adverse effect on any sensitive,

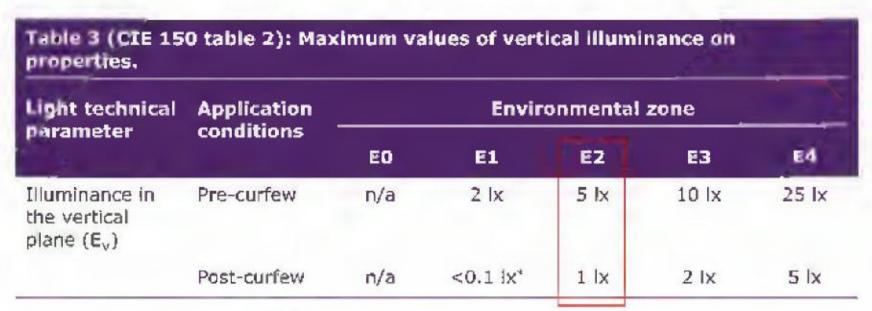
Baseline Conditions & Design Criteria

- 13.55 The existing installation is not significant in comparison to the lighting required for the current development. It is therefore not considered necessary to establish the baseline lighting conditions.
- 13.56 In order to determine the level of potential effect due to the artificial lighting design being proposed, the proposed scheme will be modelled, and design criteria set against recognised lighting standards.
- 13.57 Lighting calculations will be undertaken using Dialux 4.13 or later software.
- 13.58 The external lighting design will follow the 'Guidance for Reduction of Obtrusive Light GN01:2020 Institution of Lighting Professionals' (ILP) ILP GN01/2020 recognises the following environmental zones. It is anticipated that site falls under E2 rural zone with design restrictive criteria as below. However, this is to be confirmed with SLC.

Figure 13.1: Extract From ILP GN 01/20 Table 2

Guidance notes for the reduction of obtrusive light Guidance Note 01/20 Table 2: Environmental zones Surrounding Lighting environment Examples Zone EO Astronomical Observable dark skies, Protected Dark (SQM 20.5+) UNESCO starlight reserves, IDA dark sky places Natural E1 Dark Relatively uninhabited rural areas, National Parks, Areas of Outstanding (SQM 20 to 20.5) Natural Beauty, IDA buffer zones etc. E2 Rural Low district brightness Sparsely inhabited rural areas, village (SQM ~15 to 20) or relatively dark outer suburban locations Suburban E3 Medium district Well inhabited rural and urban brightness settlements, small town centres of suburban locations E4 Urban High district brightness Town/city centres with high levels of night-time activity

Figure 13.2 – Extract from ILP GN 01/20 Table 3



Potential Effects & Mitigation

- 13.59 The design criteria for the new external lighting on site will be established by the client to suit site operations. The lighting design will meet lighting standards as well as ecological and planning requirements.
- 13.60 In order to achieve the required performance, the following principles will be applied to the design:
 - Colour temperature 3000k lamps will be used in the design, in line with IL Guidance Note 8;
 - All luminaires specified will have zero upward light component as confirmed by manufacturer data sheets; and
 - No "maintenance factor" will be applied, in line with IL Guidance Note 8, so that the output from the luminaires "on day one" of the installation will be as modelled.

13.61 Lighting calculations will be produced to demonstrate compliance with the agreed design criteria.

Summary

- 13.62 A comprehensive lighting assessment will be carried out to assess the effects of artificial lighting on the local area.
- 13.63 The external lighting impact assessment will demonstrate that there is limited light spill arising from the proposed development, and confirm that there is no adverse effect on any sensitive,

Daylight, Sunlight and Overshadowing

Introduction

13.64 The proposed development will introduce a building and associated structures which could have daylight, sunlight and overshadowing effects on nearby receptors.

Baseline Conditions

13.65 A desk-based assessment has confirmed that the nearest residential receptor is located 520m south of the site.

Potential Effects & Mitigation

13.66 Based on the distance between the proposals and the nearest residential receptor, no significant effects are anticipated and this assessment does not need to form part of the EIA or planning application.

Summary

13.67 In summary, daylight, sunlight and overshadowing can be scoped out of the EIA and planning application.

Waste

Introduction

13.68 During demolition and construction activities, wastes should be correctly segregated to maximise reuse and recycling. Where any contaminated or hazardous arisings cannot be treated on site during remediation works, suitable disposal options should be identified as part of the environmental assessment process. Once operational, the proposed ERF will receive and process non-hazardous

residual, non-recyclable waste. Therefore, no significant waste effects are anticipated during the operational phase.

Baseline Conditions

13.69 Scotland's landfill ban has been extended to 31 December 2025 and it has been acknowledged there will be insufficient residual waste treatment capacity in Scotland available to process the residual waste once the Ban is in place.

Potential Effects & Mitigation

- 13.70 The construction of the proposed development will generate waste, which will require management. However, this will be managed in accordance with good practice to encourage waste minimisation, reuse and recycling where possible, and the quantities involved are likely to be negligible in relation to existing waste generation and management in South Lanarkshire. The requirement to manage construction waste in accordance with good practice will be included in the Construction Method Statement that will be required by a condition attached to any planning consent.
- 13.71 As presented earlier in this Chapter, it is not anticipated there are significant areas of contamination which would result in waste material requiring treatment.
- 13.72 By its nature, the proposed development will not lead to the generation of waste post-construction, other than the production of bottom ash, metals and air pollution control residues. However, it is envisaged that these will be recycled and no significant effects are predicted as a result of post-construction waste generation. No significant effects are therefore predicted on the county's waste management infrastructure.

Summary

13.73 The proposal comprises a waste facility, and whilst there will be a degree of waste generated during the construction process, this will be managed in line with standard best practice measures to reduce, reuse and recycle where possible. In the long term, the proposals provide a major waste infrastructure development that will help generate capacity once the landfill ban is instigated. There will be a degree of waste output from the facility; however, the ambition is to have this treated through other technologies or processes. It is not considered there will be significant waste impacts during construction and operation and this can be scoped out of the EIA.

Accidents and Disasters

Introduction

- 13.74 A new development can increase the risk from major accidents / disasters if it introduces new receptors to a location close to a major hazard site, such as a fuel terminal. Alternatively, new development itself can introduce a new source of major accident risk.
- 13.75 Paragraph 8 of Schedule 4 of the EIA Regulations requires that the EIA Report should include a description of the expected significant adverse effects of the development on the environment, deriving from the vulnerability of the development to risks of major accidents and / or disasters, which are relevant to the project concerned. Further, where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events, and the approach to managing emergencies.

Baseline Conditions, Potential Effects & Mitigation

- 13.76 The reference to disasters is interpreted to relate to natural events, as indicated by the preamble to the 2014 Directive (2014/52/EU) which states at paragraph 15 "In order to ensure a high level of protection of the environment, precautionary actions need to be taken for certain projects which, because of their vulnerability to major accidents, and/or natural disasters (such as flooding, sea level rise, or earthquakes) are likely to have significant adverse effects on the environment". Nonetheless, it is recognised that disasters can occur as a result of human intervention e.g. conflict and war, political influences etc.
- 13.77 The Proposed Development is located within a politically, geologically and meteorologically stable part of Europe. Accordingly, the facility is not at material risk from, for example, civil unrest, war, earthquakes or extreme weather conditions (hurricanes etc.).
- 13.78 With regards to major accidents, the planning application is for a type of development and technology that has been successfully deployed throughout the UK and Europe. The technology is therefore proven and well understood.
- 13.79 It should also be noted that a series of regulatory consents would be required to build and operate the Proposed Development, perhaps the most significant of which is a PPC Permit. The legislation that governs the Environmental Permitting regime is in place to protect human health and the environment. In order to obtain a PPC Permit, sufficient information must be provided to the SEPA to satisfy them that the facility can be operated within the regulatory requirements established by UK and European legislation. It also requires a Fire Prevention Plan. Once the PPC Permit has been

issued, the Proposed Development would be required to operate within the limits and conditions set out in the permit. Failure to do so may result in the facility being closed and could lead to prosecution of the operator.

13.80 In terms of any vulnerabilities specific to the Proposed Development in this particular location (i.e. on the Application Site), it is noted that the Site lies outside any areas at risk from coastal or fluvial flooding. The development is not considered to be vulnerable to any other potential 'natural' events that could result in significant environmental effects. There area is known for historic mining activities, and is designated in a high risk area. However, a suite of intrusive surveys are being undertaken to mitigate any ground conditions risk and ensure a safe and stable development platform to deliver the proposals.

Summary

13.81 Overall, there are no significant risks of major accidents or disasters associated with the proposed development, and it is considered this topic can be scoped out of the EIA.

Socioeconomics

Introduction

13.82 The proposals will lead to a series of benefits to the local community and nationally in Scotland, including construction phase jobs, direct and indirect spending in the local economy, additional business rates for South Lanarkshire, and long-term employment opportunities.

Baseline Conditions

- 13.83 The estimated total resident population in South Lanarkshire in 2019 was 320,500. The proportion of the resident population aged 16-64 was 202,200, equating to 63.1% in 2019, which is lower than the average across Scotland (64%), but higher than Great Britain as a whole (62.5%).
- The proportion of individuals classified as 'Economically Active' was 78.7% in South Lanarkshire in 2019, which is higher than Scotland (76.8%), and lower than Great Britain (79.1%) averages.

 Conversely, there was a lower proportion of individuals categorised as 'Economically Inactive' in South Lanarkshire (21.3%) compared with the averages across Scotland (23.2%) and slightly higher than Great Britain (20.9%).
- 13.85 The jobs density (i.e. the ratio of total jobs to population aged16-64) was 0.65 in South Lanarkshire in 2018, which is lower than the Scotland (0.82) and Great Britain (0.86) average densities. The dominant

employment sectors in South Lanarkshire are Services (Soc 2020 Major Group 6-7) and Processing (Soc 2020 Major Group 8-9).

Potential Effects & Mitigation

- 13.86 During the construction phase, the potential effects relate to construction related employment and the associated construction costs spent in the local and wider economy. These benefits will be calculated and presented within a Socioeconomics Benefits Statement.
- 13.87 In the long term, there will be long term apprenticeships and careers at the proposed development.

 These are anticipated to amount to c. 50 employees. Overall, whilst there will be benefits associated with the development and these will be presented within the Benefits Statement, it is not considered these effects need to be assessed within the EIAr.

Summary

13.88 Accordingly, it is proposed to scope out socioeconomics from the ElAr.

Proposed Structure of the EIA Report 14.

Volume 1: Non-Technical Summary

A Non-Technical Summary is required under the 2017 EIA Regulations and presents the findings of 14.1 the ElAr in a manner suitable for use by non-experts.

Volume 2: EIA Report Main Text

14.2	This volume will contain the main text of the EIAr. The proposed topics for consideration and their
	respective chapter headings are set out below.

- 1) Introduction; 2) Approach;
 - 3) Site Description;

4) Alternatives;

- 5) The Proposed Development;
- Landscape and Visual;
- 7) Ecology;
- 8) Archaeology and Cultural Heritage;
- 9) Traffic and Transport;
- 10) Air Quality;
- 11) Noise;
- 12) Climate Change; and
- 13) Summary of Mitigation and Residual Effects.

Volume 3: Appendices

This volume will contain supporting information and a collection of technical reports upon which the 14.3 conclusions of the ElAr are based.

15. Summary and Conclusions

- 15.1 The Scoping Report has been prepared to support a formal request to SLC for a Scoping Opinion under the 2017 EIA Regulations regarding the scope of the EIA and the likely content of the EIAr which will accompany the Planning Application.
- 15.2 The Scoping Report provides:
 - · An overview of the baseline environmental conditions and location of the site;
 - Details of the proposed development;
 - An overview of the likely environmental issues associated with the development; and
 - Methodologies proposed to undertake the specialist assessments.
- 15.3 Table 15.1 sets out a summary of the disciplines and topics which have been scoped into the EIA.

Table 15.1: Summary of the Proposed EIA Scope due to Significant Effects

Discipline	Likely Significant Effects Requiring Assessment
Landscape and Visual	Construction and Operation: The identified South Lanarkshire Landscape Character Types / Landscape Character Areas.
	Construction and Operation: Site features, landform and topography.
	Operation : Residential (associated with the Stonehouse and Kirkmuirhill settlement edges and other scattered hamlets / properties).
	Operation : Recreational and leisure users associated with the core paths (HM/2519/1, HM/2522/1, HM/2523/1, HM/2524/1 and HM/2521/1).
	Operation : Recreational and leisure users associated with the Glasgow to Carlisle National Cycle Route National Cycle Route 74 (Strathclyde Park to Elvanfoot).
	Operation : Visitors and workers associated with the private Cander Moss SSSI wildlife resource.
	Operation : Highway users associated with the M74, Carlisle Road B7078, the A71, Strathaven Road B7086 and a network of local access roads.
Ecology	Construction and Operation: Designated sites (Clyde Valley Woods SAC) - Potential pollution events from construction flowing downstream along Cander Water.

Discipline	Likely Significant Effects Requiring Assessment
Archaeology and Cultural Heritage	Construction: Effects on unknown archaeological assets.
	Operational: Setting effects upon Scheduled Monuments, Listed Buildings and Conservation Areas within 5km of the Site, including cumulative effects.
Traffic and Transport	Construction : The temporary change in traffic flows and the resultant, temporary effects on the study network during the construction phase.
	Operational: The change in traffic flows and the resultant effects on the study network during the operational phase.
Air Quality	Construction : Generation of dust emissions onsite during the initial earthworks, construction, and movement of vehicles off-site (trackout) (i.e. material transferred on vehicle wheels to the public highway) associated with the construction of the development.
	Construction : Generation of exhaust emissions from road traffic associated with the import and export of materials during the construction phase.
	Operational: Generation of exhaust emissions from road traffic associated with the import and export of materials during the operational phase.
	Operational: Operational emissions associated with the ERF.
	Operational: Fugitive releases of odour and dust during the operation of the development.
	Operational: Cumulative operational emissions associated with any developments identified during the scoping process.
Noise	Construction: Assessment of the noise associated with construction activities on nearby receptors.
	Construction: HGV traffic related noise impacts on identified receptors.
	Operational: ERF operational noise impacts.
	Operational: Increased road traffic related noise impacts.

Date: January 2021

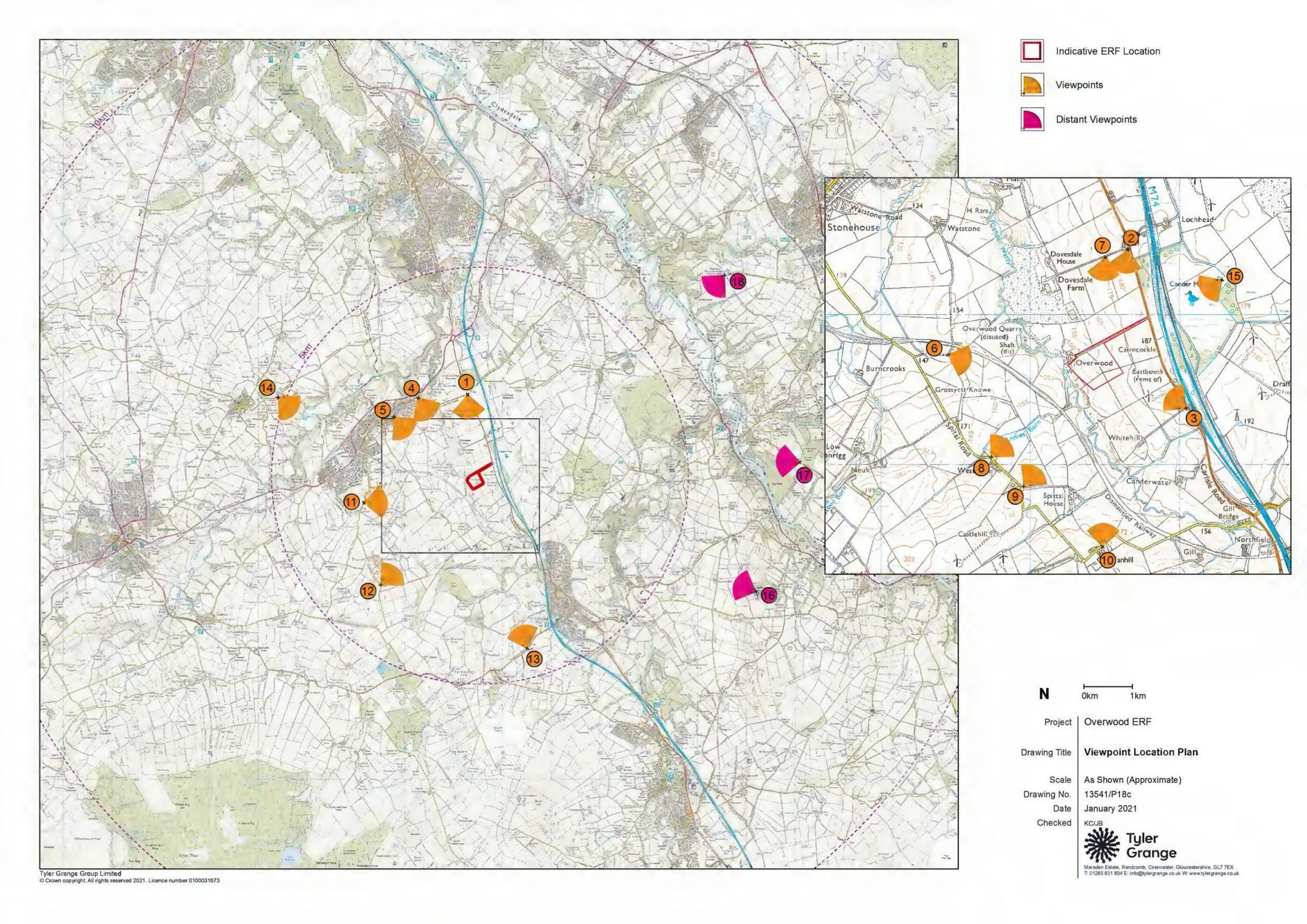
Discipline	Likely Significant Effects Requiring Assessment
Climate Change	Construction and Operation : GHG emissions from the construction and operation of the proposed development.
	Operational: Vulnerability of the proposed development to the following climate change effects.
	Operational: Increased winter precipitation.
	Operational: Increased frequency and magnitude of wind and storms.

15.4 We would welcome feedback on the proposed approach to the EIA and would be grateful if SLC would respond by way of a formal Scoping Opinion within the requisite 5 weeks in accordance with Regulation 17(6) of the 2017 EIA Regulations. If the Local Planning Authority require any additional information in order to make a decision, please do not hesitate to contact Avison Young.

Appendix | Site Location Plan



Appendix II Viewpoint Location Plan



Appendix III Heritage Study Area



Contact Details

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