Westport BESS Design and Access Statement

Prepared by: Arthian Ltd.

For: Westport Energy Storage Ltd.

Site: Westport BESS

Date: 16/04/2025

Document Ref: 2025-REP-2

Issue-2.0

www.arthian.com

Quality Assurance

Issue Record

Revision	Description	Date	Author	Reviewer	Approver
0.1	Draft for internal review	01/04/2025	BT	SC	SC
1.0	First Version	04/04/2025	BT	SC	SC
2.0	Amendments following client comments	16/04/2025	BT	SC	SC

Staff Detail

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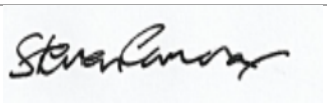
SC	Steven Cameron	Principal Planning Lead	

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1. Introduction

1.1 Planning Application

Westport Energy Storage Limited. (herein the Applicant) is applying to the Scottish Ministers for consent under Section 36 of the Electricity Act 1989 for the construction and operation of a proposed up to 150MW proposed Battery Energy Storage System (BESS) and associated infrastructure (herein referred to as the 'Proposed Development'). The Application Site would cover a site area of approximately 18.3 hectares with the compound and tracks (actual Proposed Development) covering no more than 4-hectares. The Proposed Development is situated on land at Killoch, East Ayrshire, KA18 2QH, approximately centred on grid reference E248076, N620884 (herein referred to as the 'Application Site').

1.2 Description of Development

The description of the Proposed Development is as follows:

"The construction and operation of a Battery Energy Storage System (BESS) development and its associated infrastructure."

1.3 Environmental Impact Assessment

The Electricity Works (Environmental Impact Assessment (EIA)) (Scotland) Regulations 2017 identify types of development as either Schedule 1 or Schedule 2. Schedule 1 development always requires an EIA to be undertaken unless it is exempt development. Schedule 2 identifies types and scales of development that may require an EIA whereby a project is likely to have significant effects on the environment.

BESS, such as the Proposed Development, are not listed within Schedule 1 of the EIA Regulations, Therefore, an EIA is not mandatory. Schedule 2 developments within the EIA Regulations are defined as:

"The carrying out of development (other than development which is Schedule 1 development) to provide any of the following

(1) A generating station;
(2) An electric line installed above ground –
   a. With a voltage of 132 kilovolts or more;
   b. In a sensitive area; or
   c. The purpose of which installation is to connect the electric line to a generating station the construction or operation of which requires consent under section 36 of the Electricity Act 1989."

While BESS is not explicitly identified and detailed in Schedule 2, the Schedule does refer to generating stations (of a type that is not classed as Schedule 1 development). In reference to a letter issued by the Chief Planner regarding battery storage consents in August 2020, *"the Scottish Government considers that a battery installation generates electricity and is therefore to be treated as a generating station"*[1]. It is therefore considered that the Proposed Development falls under Category (1) of Schedule 2.

An EIA Screening request was lodged with the Energy Consents Unit (ECU) on the 2nd December 2024. An EIA screening response was received from the ECU on the 18th February 2025 confirming the Scottish Ministers adopt the opinion that *"the proposal does not constitute EIA development and that the application submitted for this development will not require to be accompanied by an EIA report."*

1.4 The Applicant

Westport Energy Storage Ltd will be responsible for the development of the Proposed Development. The Section 36 application is supported by the technical expertise of RES (Renewable Energy Systems Ltd).

RES is the world's largest independent renewable energy company, working across 24 countries and active in wind, solar, energy storage, green hydrogen, transmission and distribution. As an industry innovator for over 40 years, RES has delivered more than 27GW of renewable energy projects across the globe and supports an operational asset portfolio exceeding 41GW worldwide for a large client base.

More recently, between 2020-2024, RES successfully developed, consented and secured investment for over 400MW of battery energy storage projects, including: the 50MW Roaring Hill Project, in Fife; the 80MW Stoney Project, in Buckinghamshire, and the 50MW Drum Farm Project, in Moray. Furthermore, following the development and construction of the 100MW Lakeside Project in North Yorkshire, RES has recently taken on full asset management services for the project which is currently the largest transmission-connected BESS in the UK.

The Applicant is committed to finding effective and appropriate ways of engaging with all its stakeholders, including local residents and community organisations, and believes that the views of local people are an integral part of the development process. The Applicant is also committed to developing long term relationships with the communities around its projects, proactively seeking ways in which it can support and encourage community involvement in social and environmental projects near its developments.

[1] Scottish Government: Battery Storage Consents: Chief Planner Letter August 2020. Available online: Battery storage consents: Chief Planner letter August 2020 - gov.scot

1.5 Requirements for a Design and Access Statement

This Design and Access Statement (DAS) has been prepared in accordance with the following legislation, policy and guidance:

- The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013[2];
- Planning Advice Note (PAN) 68: Design Statements[3];
- Planning Circular 3/2022: Development Management Procedures[4];
- CABE, Design & Access Statements: How to write, read and use them[5]; and
- East Ayrshire Local Development Plan 2[6].

Much of the above is covered in the Planning Statement which will also accompany the planning application. Repetition has been avoided as much as possible.

The remainder of this DAS is structured as follows:

- Section 2: Application Site Context;
- Section 3: Environmental Considerations;
- Section 4: Design Evolution;
- Section 5: Design Solution;
- Section 6: Access; and
- Section 7: Conclusion.

This DAS should be read in conjunction with the following documents prepared to accompany the planning application:

- Design and Access Statement (this report);
- Planning Statement;
- Pre-Application Consultation (PAC) Report;
- Landscape and Visual Impact Assessment (LVIA);
- LVIA Graphics & Visualisations;
- Landscape Masterplan;
- Ecological Impact Assessment (EcIA);
- Biodiversity Net Gain (BNG) Report;
- Noise Impact Assessment

[2] The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013. Available online: The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

[3] Scottish Government: Planning Advice Note (PAN) 68: Design Statements (2003). Available online: Planning Advice Note 68: Design Statements - gov.scot

[4] Scottish Government: Planning Circular 3/2022: Development Management Procedures. Available online: 3. Making a Planning Application - Planning circular 3/2022: development management procedures - gov.scot

[5] CABE (2006) Design and Access Statements: How to write, read and use them. Available online: Design and access statements: how to write, read and use them

[6] East Ayrshire Council: Local Development Plan 2 (2024). Available online: Information about local development plan 2 · East Ayrshire Council

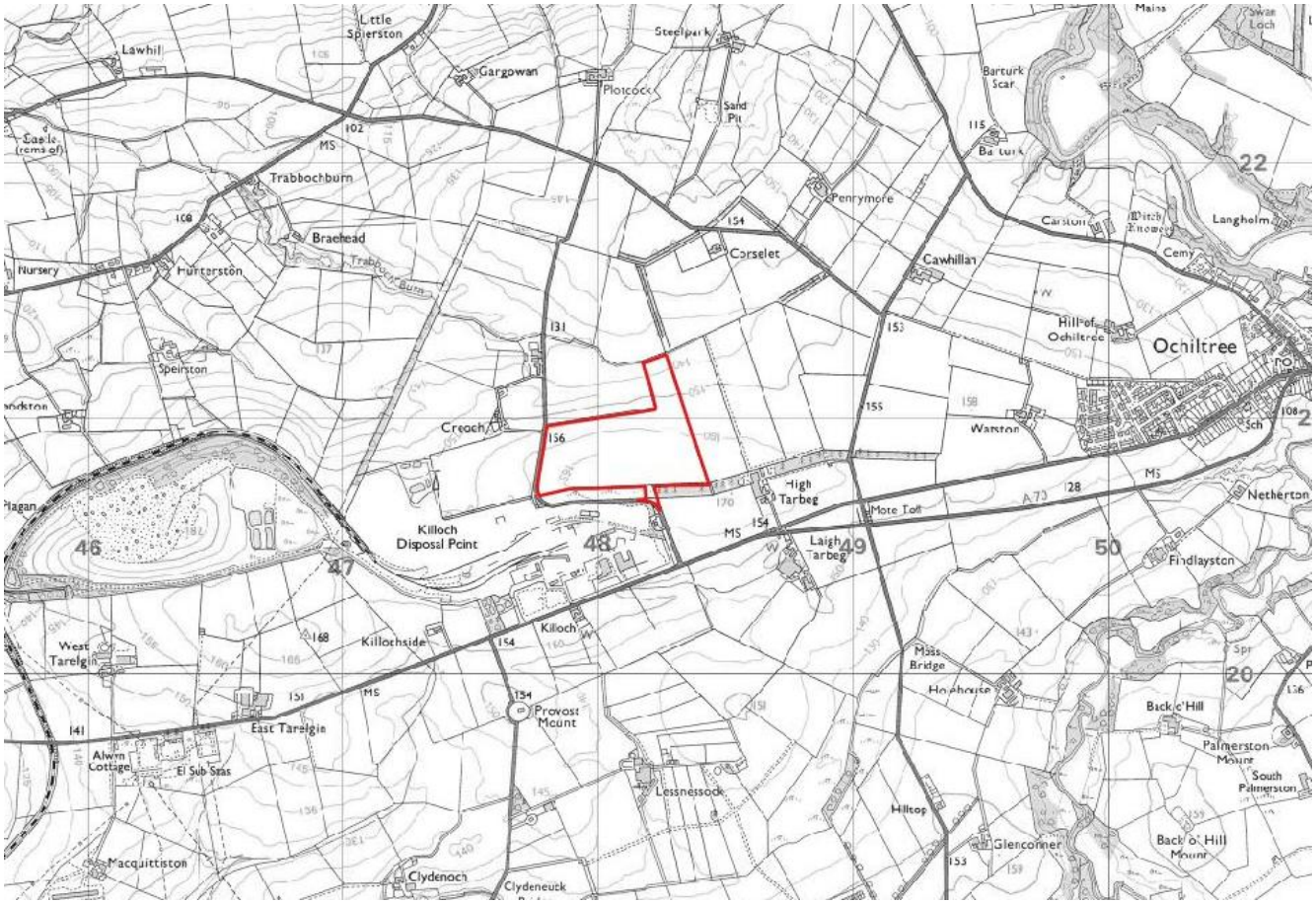
- Flood Risk Assessment and Drainage Strategy;
- Transport Statement;
- Construction Traffic Management Plan (CTMP);
- Historic Environment Assessment;
- Preliminary Contamination Risk Assessment (Phase I) Report;
- Coal Mining Risk Assessment (CMRA);
- Construction Environmental Management Plan (CEMP);
- Land Capability Classification for Agriculture (LCCA) Report;
- Tree Survey Report & Arboricultural Impact Assessment; and
- Outline Fire Risk Management Plan (OFRMP).

2. Application Site Context

2.1 Introduction

For the purpose of this DAS, the term 'Application Site' refers to the red line boundary as shown on Image 2.1 below.

Image 2.1: Location Plan



2.2 Application Site Description

The Application Site is located on land at Killoch, East Ayrshire. Whilst the Application Site covers approximately 18.3-hectares of agricultural land used for pasture farming, the compound and tracks (actual Proposed Development) cover no more than 4-hectares. A 33kV overhead line crosses the middle of the Application Site and an 11kV overhead line crosses at the east corner and briefly at the north. A slurry route from the existing slurry tank to the south is also present at the Application Site.

The Application Site comprises agricultural land bound by sparse field boundary hedgerows, fence lines and an Ancient Woodland Inventory designation to the south. A topographical survey was undertaken at the Application Site, detailing that the site slopes from approximately 168.49 metres Above Ordnance Datum (m AOD) in the south-east in the north-eastern boundary to 133.61m AOD in the northern boundary.

According to Scotland's Soils Land Capability for Agriculture Map, the land within the Application Site mostly comprises Class 4.1 land which is considered to be land capable of producing a narrow range of crops, primarily grassland with short arable breaks of forage crops and cereal.

A Land Capability Classification for Agriculture (LCCA) Report was submitted alongside this planning application. The report determined that 67% of the Application Site is Class 4.1 land and the remaining 33% is Class 4.2 land. Therefore, the land at the Application Site is not considered to be prime agricultural land.

An Ancient Woodland Inventory designation lies adjacent to the Application Site boundary to the south classified as 2B – 'Long established plantation woodland (continuously wooded since 1860). An arboriculturist undertook a site visit and confirmed that this is not ancient woodland, both sections to the south have been cleared and replanted at various times. In addition to this, they are not Ancient Semi-Natural Woodland (ASNW) or Planted Ancient Woodland Sites (PAWS) and do not appear to have much or any evidence of significant increased value.

Notwithstanding the above, no loss of trees is anticipated for the construction and operation of the Proposed Development.

2.3 Surrounding Area

The village of Ochiltree lies approximately 1.75km to the east of the Proposed Development at its closest, the settlement of Coalhall lies approximately 3.7km southwest at its closest and the village of Drongan lies approximately 4km southwest at its closest.

The A70 is situated approximately 300m to the south of the Application Site which leads to the town of Ayr to the west and the town of Cumnock to the east. Creoch Road runs adjacent to the Application Site to the west and to the south.

2.4 Accessibility

The access route would be taken from the A70 Ayr Road located to the south, leading to Creoch Road which would provide access to the Application Site via two points – one to the south and one to the west. The access point to the west of the Application Site would be for emergency access.

Details of this can be found within the Transport Statement submitted alongside the planning application.

2.5 Planning History of Application Site

A search was undertaken in March 2025 of any existing and/or approved developments located within the boundary of the Application Site using the East Ayrshire Council planning search facility. No planning history was found at the Application Site.

A search was also undertaken of any BESS developments within a 5km vicinity using the East Ayrshire Council planning search facilities. Table 2.1 provides information in relation to BESS developments within 5km of the Application Site.

Table 2.1: Cumulative Search of BESS Developments found within 5km of the Application Site.

Reference	Description of Development	Year Determined	Decision
23/0604/PP	Battery Energy Storage System (BESS) with a maximum generating capacity of 29.9MW involving the installation of up to 18 battery containers, a substation and related electrical equipment, and associated ancillary infrastructure including a new access track, existing access track improvements, surface water drainage/SUDS, acoustic fencing, perimeter fencing with lighting/CCTV, and landscape planting | Land South of Electricity Substation, A70 From B730 To U74, Bardarroch, Ochiltree, East Ayrshire. Located approximately 2.5km to the southwest of the Application Site boundary.	2025	Granted Conditionally
23/0580/PP	Formation of 50MW Battery Storage Facility, comprising up to 24 battery storage container blocks and associated infrastructure, storage containers, site offices, comms house, noise attenuation fencing, CCTV and lighting poles and associated access, landscaping and underground grid connection cable | Land Off Ayr Road, Coylton, A70 From B730 To U74, Bardarroch, Ochiltree, East Ayrshire. Located approximately 2.2km to the southwest of the Application Site boundary.	2024	Granted Conditionally
22/0405/PP	Development of a 49.9MW battery energy storage facility and associated infrastructure | Killoch Depot, Killoch	2023	Granted Conditionally

	Colliery off A70 West of Ochiltree, East Ayrshire, KA18 2RL. Located adjacent to the south of the Proposed Development		

2.6 Site Selection

The Application Site was deemed suitable for BESS development for the following reasons:

- It maintains sufficient distance from potentially sensitive residential receptors.
- It maintains sufficient distance from potentially sensitive environmental receptors.
- The Application Site is not located on prime agricultural land.
- The Application Site is in close proximity to hedgerows, trees, woodland and the colliery, allowing for natural screening of the Proposed Development, particularly to the south.
- The Application Site lies within close proximity of the local highway network, with access available from the A70 leading to Creoch Road.
- The Application Site is approximately 1.9km from the existing Coylton Substation which is the project's Point of Connection.

3. Environmental Considerations

3.1 Introduction

A number of environmental assessments have been undertaken for the Proposed Development. These assessments have been undertaken to identify the baseline conditions on site, which in turn have influenced the design process. This section of the DAS identifies environmental or technical considerations within and close to the Application Site, and how they relate to the design process.

3.2 Landscape & Visual

A Landscape and Visual Impact Assessment (LVIA) has been carried out and is included as part of the planning application submission. The LVIA contains the detail of which this section of the DAS is a summary.

To minimise adverse effects, the Proposed Development has been carefully sited and utilises existing boundary vegetation to incorporate the development into the landscape. The development layout has further worked with existing topography in the site where possible.

Following construction works, it is considered that the Proposed Development could be successfully integrated into the immediate surroundings. The overall characteristic landform within the Application Site i.e. the general fall from north to south, has been respected with only occasional earthworks required, with the remainder of the site preserved.

The highest level of adverse effect is primarily limited to a site level and close range and limited to the agricultural grassland field of the site itself, noting more highly valued characteristics (hedgerows) have been retained with the exception of the new access location on the western boundary where a length of approx. 13m is removed. Effects would be reduced over time as the Proposed Development becomes integrated into the landscape and landscaping matures.

Upon decommissioning and accounting for the very long-term and permanent nature of the landscape mitigation, there will be a minor-moderate benefit at the site level.

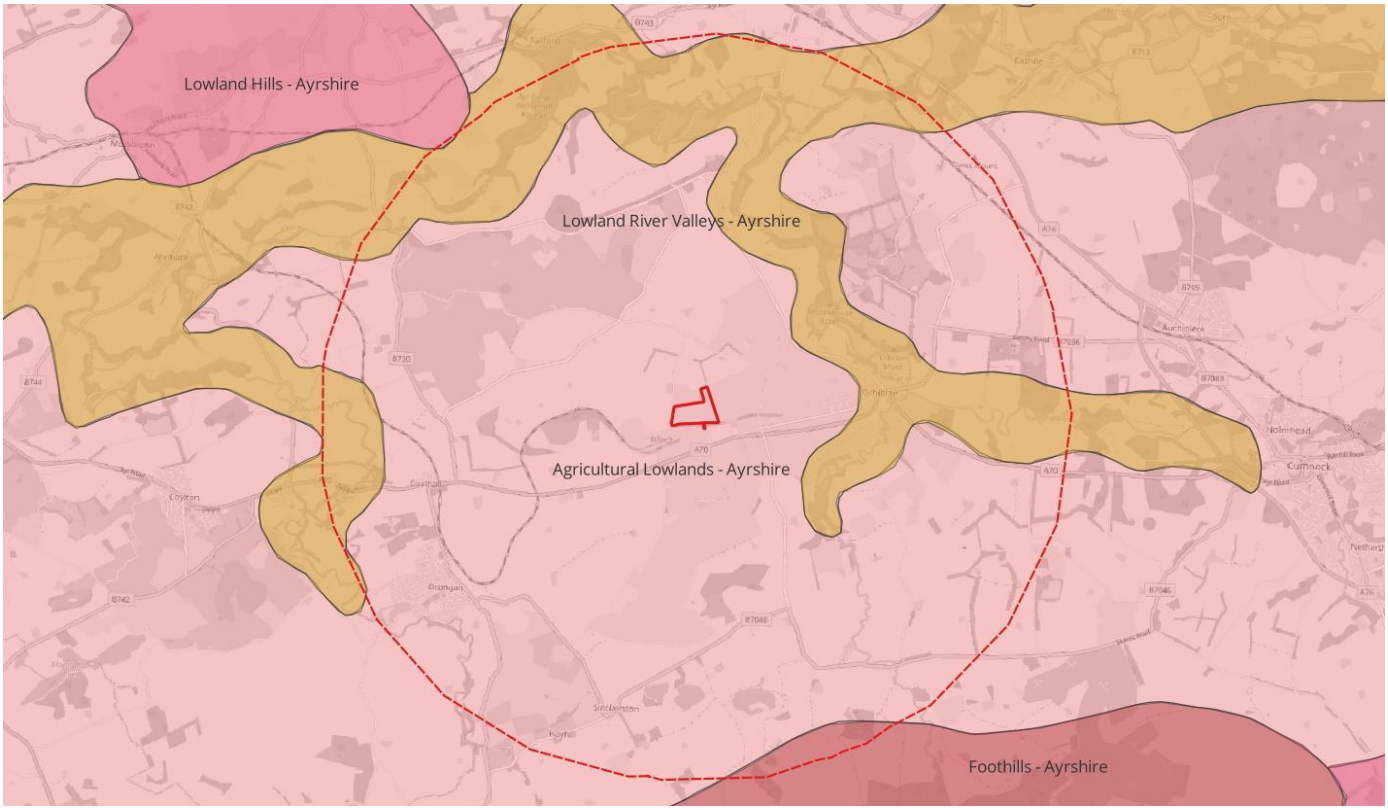
The findings of the LVIA evidence that unacceptably adverse landscape and visual effects have been avoided, and green infrastructure is also enhanced at a site level by ensuring historic field boundaries are both improved and restored where absent, enhancing landscape connectivity across this large open landscape area, between existing landscape features.

3.2.1 Landscape Character

The landscape assessment contained within the LVIA considers the effect of the Proposed Development on the Landscape Character Types (LCTs) covering the Application Site and the surrounding area.

According to NatureScot digital map-based national Landscape Character Assessment (LCA[7], the Application Site is located in the Agricultural Lowlands – Ayrshire Landscape Character Type (LCT). As shown in Image 3.1 below, within a 5km radius, the Application Site is approximately 1.3km to the northwest of the Lowlands River Valley – Ayrshire LCT at its closest, approximately 4.6m to the northwest of the Foothills – Ayrshire LCT and approximately 4.9km to the southeast of the Lowland Hills – Ayrshire LCT.

Image 3.1: Landscape Character Types with a 5km buffer



The Proposed Development is within a gently rolling landscape that falls from east to west towards the coastline, defined by agricultural land-uses and areas of former mineral workings. Established woodlands on skylines are notable landscape features. As highlighted above, the local host Landscape Character Type (LCT) is LCT 66 -

[7] NatureScot: Scottish Landscape Character Types Map and Descriptions. Available online: Scottish Landscape Character Types Map and Descriptions | NatureScot

'Agricultural Lowlands – Ayrshire' and is one of the largest in Ayrshire. The landscape character assessment doesn't assign a value to the LCT.

Regarding LCT 68 – Lowland River Valleys – Ayrshire, occasional locations are identified on the ZTV as possibly having some visibility but in reality, the undulating topography and extensive tree cover results in no effects being recorded on this LCT. The scale and characteristics of the 'host' landscape is considered suitable for the type and form of development proposed.

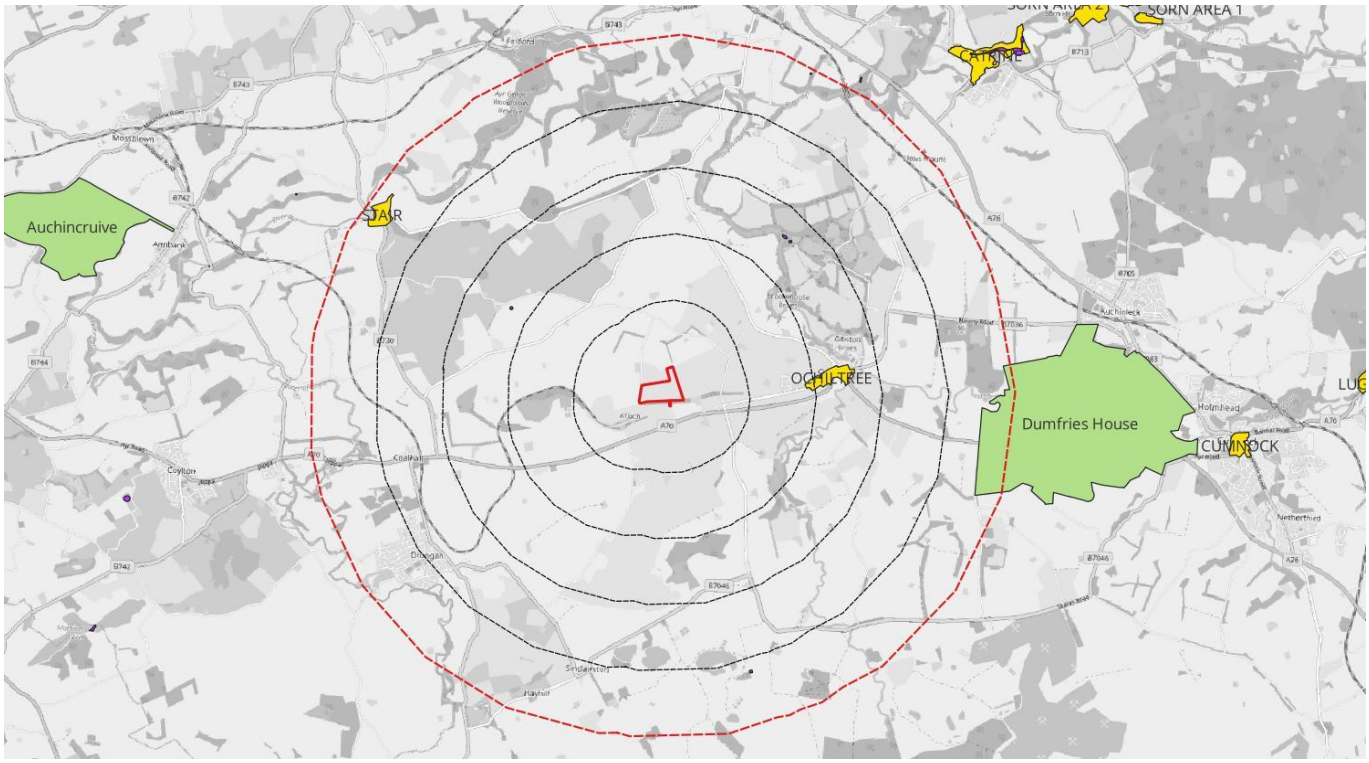
As concluded in the LVIA, the effects on the character of the host landscape are limited. Adverse effects at Year 1 will be limited to a moderate level at the Application Site boundary, reducing to a negligible level within 1km of the Site. By Year 15, effects will have reduced to negligible-minor in close proximity to the Site, noting the very long-term benefits achieved through landscaping.

3.2.2 Landscape Designations

There are no statutory or non-statutory landscape-led planning designations covering the Application Site. The closest designation is Ochiltree Conservation Area located approximately 1.75km to the east.

There are designated landscapes located near the Application Site, as shown on Image 3.2 below, with Gardens and Designed Landscapes in Green and Conservation Areas in yellow. While not a landscape designation, Scheduled Monuments (dark purple) have been included on Image 3.2 due to the influence they can have on the overall character of the local area.

Image 3.2: Landscape Designations with 1km buffers



The LVIA considers a number of visual receptors, including residential properties (individual residencies and settlements) and transport routes (the A70 to the south and the other nearby A-class and B-class roads in the vicinity of the Application Site).

Core Paths within the vicinity of the Application Site are illustrated in Image 3.3 below.

Image 3.3: Core Paths within 5km of the Application Site Boundary

As per the conclusions of the LVIA, the highest level of adverse visual effect is experienced by road users where the local road runs parallel and immediately adjacent to the Application Site's western boundary, where moderate-major adverse effects will be experienced at Year 1, noting views will be transient and oblique to the direction of travel. These effects will diminish through the incorporation of hedgerow planting along this boundary. Further north along the same local road, for users travelling southwards where the road is generally aligned with the site, the level of effect is identified as moderate adverse without mitigation and minor adverse with established mitigation.

Ultimately, the landscape and visual changes attributable to the Proposed Development are thought to be relatively limited and localised and the Application Site has the capacity to accommodate the Proposed Development in landscape and visual terms without any unacceptable effects.

3.3 Ecology

An Ecological Impact Assessment (EcIA) has been undertaken for the Proposed Development following a Phase 1 habitat survey and Phase 2 surveys conducted for wintering birds, submitted to accompany the planning application.

The EcIA undertaken and submitted as part of the planning application highlights that given the number of trees in a relatively small area, this may increase the likelihood of a roost being present. Nonetheless, no works

impacting trees are required to facilitate the construction of the BESS. General recommendations with regards to artificial lighting on site are listed in the EcIA.

Furthermore, a small section of hedgerow is required to be removed in order to meet proper safety standards for the installation of the emergency access road to the west. The newly planted hedgerow will exceed the amount to be lost and result in 10.11% BNG for hedgerow units as per the Biodiversity Net Gain (BNG) Report and Illustrative Landscape Masterplan submitted alongside the planning application.

Two wintering bird surveys were carried out at the Application Site in January and February 2025 starting at one hour before dawn. Birds recorded within the site boundary were found primarily on the vegetated borders, flying overhead, or resting on built features such as the stone wall to the northern boundary of the overhead lines which cut through the site. The section of agricultural land that will be lost as a result of the development is not considered significantly important to the local bird species found within the area. Should vegetation require clearance between the months of March – August inclusive, a nesting bird check should be undertaken by a suitably trained ecologist a maximum of 48hours prior to the cut.

Following these surveys, general good practice mitigations have been recommended, detailed within the EcIA.

The Application Site does not contain any special designated areas with respect to ecology. The proposals include retaining and protecting most of the hedgerows, allowing wildlife to utilise the site during construction of the development and upon completion. There will also be creation of soft landscaping such as wildflower and tree planting which will provide benefits in the long-term for wildlife.

The National Planning Framework 4 (NPF4) sets out policies to protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks (Policy 3). The East Ayrshire Local Development Plan 2 (LDP2) sets out policies for development to enhance biodiversity, proportionate to the nature and scale of the development proposal (Policies OS1 and NE4). However, there is no current mandatory or otherwise quantitative target for biodiversity net gain in Scotland. Nonetheless, the Proposed Development would result in 15.59% BNG for habitat units, 10.11% BNG for hedgerow units and 16% BNG for watercourse units. Landscape enhancement measures proposed for the Proposed Development are detailed in the Illustrative Landscape Masterplan (ILMP) and include the following:

- To mitigate potential views from the north, a proposed belt of native shrub and tree planting is to be implemented along the northern boundary of the site and is to wrap around the eastern and western corners;
- Areas to be affected by earthworks to facilitate the development are to be reinstated with a wildflower grass seed mix to aid biodiversity;
- Pockets of woodland planting to be included between the existing woodland belt and the Proposed Development to filter potential views of the development from the adjacent road to the south.
- New native hedgerow to be planted along the western boundary with the local road where currently missing. All new and existing hedgerow along western boundary to be managed to a height of 3m for the duration of the development.

3.4 Cultural Heritage & Archaeology

A Historic Environment Assessment was undertaken to accompany the planning application. There are no designated heritage assets within the Application Site boundary or within a 1km study area. The Ochiltree Conservation Area is approximately 2km to the east of the Proposed Development and includes a number of listed buildings. There are two non-designated heritage assets within the Application Site, comprising the locations of two former farmsteads shown on historic mapping but no longer extant (Westport and West Tarbeg).

The Proposed Development is also not within the settings of any designated heritage assets and it does not contribute to the heritage value of any of the assets within the 1km study area, given the distance of separation of intervening topography. There is a degree of intervisibility between the site and two extant farmsteads to the west (Creoch House and Tally Ho) which are shown on historic mapping and include historic buildings.

The assessment concluded that the construction phase of the Proposed Development would not impact any recorded heritage assets, as the development footprint avoids the locations of two former farmsteads. The potential for any as yet unrecorded assets to be present within the site is low but cannot be ruled out. A programme of archaeological work in advance of or during the construction phase could, if required by the planning authority, provide appropriate and proportionate mitigation that could be secured as a condition of planning consent.

Furthermore, the operational phase of the Proposed Development would have a neutral effect on the historic environment, being out with the settings of any heritage assets or as a result of the proposed landscape planting which would limit the visibility of the proposed development in views of and from two historic farmsteads to the west. No historic environment mitigation, beyond the landscape proposals already embedded into the design of the proposed development is recommended in relation to the operation of the proposed development

The landscape mitigation embedded into the design of the Proposed Development has been taken into consideration and it is concluded that no further mitigation is required in relation to the predicted neutral effect of the operation of the proposed development on the historic environment.

3.5 Flood Risk & Drainage

3.5.1 Flood Risk

A Flood Risk Assessment & Drainage Strategy (FRA & DS) has been undertaken to accompany the planning application. The FRA concluded that the Application Site is at low risk of flooding from all sources. Therefore, no site-specific mitigation measures are considered necessary.

3.5.2 Drainage Strategy

The proposed development will introduce 31,247m^2 of hardstanding area which includes the BESS, the access roads and the gravelled area surrounding the BESS. The remaining permeable, soft landscaped areas will occupy 164,753m^2.

The increase in hardstanding area will result in an increase in surface water runoff rates and volumes. In order to ensure the proposed development will not increase flood risk elsewhere, surface water discharge from the site will be controlled.

Various options of surface water discharge have been assessed. Surface water should discharge to Trabboch Burn at a limited discharge rate of 24.96l/s subject to approval from SEPA/LLFA. Attenuation storage will be required on site in order to restrict surface water discharge to 24.96l/s. The required attenuation storage will be provided in the form of a SuDS pond to the north-east of the site.

The proposed surface water drainage scheme will ensure no increase in runoff over the lifetime of the development.

3.6 Noise

An Acoustic Impact Assessment (AIA) of the Proposed Development was undertaken in accordance with the guidance provided by East Ayrshire Council (EAC) which states that operational noise from the Proposed Development should at no time cause the ambient noise level to exceed 50Db(A)1hr at the façade of any noise-sensitive location having the potential to be affected by the Proposed Development. In addition to this, once operational, night-time noises during the hours of 11pm-7am should not cause the internal noise level in any affected property to exceed NR25.

As concluded in the AIA, the results of the assessment show that, following mitigation, the predicted noise levels resulting from the introduction of the Proposed Development, at the nearest neighbouring properties, remain below the daytime and night-time noise level limits for all receptors and can be considered acceptable in terms of the limits provided by EAC.

4. Design Evolution

4.1 Design Process and Changes

The design process for the Proposed Development has been an iterative one. As environmental constraints and sensitivities have been identified, the layout of the Proposed Development has undergone a series of modifications to avoid and/or reduce potential environmental effects through careful design.

Site surveys and the identification of various environmental considerations alongside consultation with the local community and stakeholders has allowed the design to be shaped accordingly to feedback received.

This process and how feedback received has shaped the design is summarised in the accompanying Pre-Application Consultation (PAC) Report submitted alongside the planning application.

There were numerous design changes that were made to the Proposed Development from the initial layout proposed at the Public Exhibition following the feedback from the local community and also as a result of the technical and environmental assessments on site. These are as follows:

- The compound and tracks (actual Proposed Development) cover no more than 4-hectares.
- No trees are required to be removed as part of the Proposed Development as this has been designed to avoid the requirement for this. A small section of hedgerow to the west is required to be removed for the emergency access point (approximately 13m of hedgerow) however a BNG value of 10.11% has been achieved for hedgerow units with the proposed landscape mitigation measures detailed in the ILMP.
- All equipment deliveries will travel along the A70 before turning north onto Creoch Road, avoiding any weak bridges in the area.
- As per the illustrative landscape masterplan (ILMP), the mitigation planting for the Proposed Development consists of proposed tree planting and native shrub planting around the northern edge and areas to the west and east and proposed smaller woodland blocks to form an extension to the sparse woodland area to the south.
- The Proposed Development is designed to be a minimum of 10m from all overhead lines as per health and safety guidelines.
- The Proposed Development has been situated greater than 250m from any residential dwelling to avoid significant noise levels.

Other factors that have informed the design and layout of the Proposed Development are considered in Section 5.0 below.

5. Design Solution

5.1 Design Policies

The Proposed Development needs to comply with the design policies in the East Ayrshire Local Development Plan 2 (2024)[8]. The relevant policies are as follows:

- Policy SS1: Climate Change; and
- Policy DES1: Development Design.

5.1.1 Climate Change

Policy SS1: Climate Change seeks to ensure proposals give significant weight to the Global Climate Emergency and that *"all development should support these aspirations, where possible, by:*

(i) Minimising carbon emissions;
(ii) Maximising carbon storage and sequestration;
(iii) Mitigating the impacts of climate change, including through the delivery of net zero and low carbon infrastructure;
(iv) Being designed to be adaptable to the future impacts of climate change."

The very nature of the Proposed Development as a BESS development is to reduce our reliance on fossil fuels by utilising renewable energy when it is required at a later time, in turn reducing our greenhouse gas emissions.

Regarding the Proposed Development's resilience to climate change and flooding, as discussed in Section 3.5 above, the FRA concluded that the Application Site is at low risk of flooding from all sources. Therefore, no site-specific mitigation measures are considered necessary.

5.1.2 Development Design

Policy DES1: Development Design seeks to achieve excellence in design outcomes, ensuring that development proposals demonstrate the six qualities of successful places defined in NPF4.

As illustrated in Section 6.5 of the Planning Statement, the way in which the Proposed Development accords with the six qualities of successful places has been discussed in detail.

[8] East Ayrshire Council: East Ayrshire Local Development Plan 2. Available online: Information about local development plan 2 · East Ayrshire Council

5.2 CABE Guidance

The Commission for Architecture and the Built Environment have published guidance on the preparation of Design and Access Statements which is supported by most planning departments. CABE Guidance identifies the following criteria in relation to design:

***"Use**: What buildings and spaces will be used for.*

***Amount**: How much would be built on the site.*

***Layout**: How the buildings and public and private spaces will be arranged on the site, and the relationship between them and the buildings and spaces around the site.*

***Scale**: How big the buildings and spaces would be (their height, width and length).*

***Landscaping**: How open spaces will be treated to enhance and protect the character of a place.*

***Appearance**: What the building and spaces will look like, for example, building materials and architectural details."*

Although this Guidance mainly pertains to traditional building development, the same principles apply to the design of the Proposed Development. This Section of the DAS considers the Proposed Development in relation to these criteria where relevant.

5.2.1 Use

It is proposed that the use of the Application Site would be for the development of a BESS and the associated infrastructure. Planning permission is being sought for a temporary period of 40-years, following which the Proposed Development would be decommissioned and the land restored.

The Proposed Development would store energy when there is an excess in energy generation and export this power back to the grid network when there is a decrease in energy generation and a requirement for power on the system. The Proposed Development would also provide voltage support services, known as reactive power. The local network can experience significant voltage depressions which, if left unmanaged, can lead to extensive blackouts. National Grid currently often manage these issues by calling upon fossil fuel sources of power, which is hugely expensive and unsustainable. Battery storage facilities can help manage these issues in a much cleaner, efficient and more cost-effective manner.

At the end of the 40-year operational period, should the Applicant wish to re-power the Proposed Development, this would be subject to a new planning application. The removal of all BESS and associated infrastructure would be conditioned by an appropriately worded condition on any consent.

5.2.2 Amount and Layout

The Applicant has undertaken a rigorous technical and environmental site assessment process to iterate the design and identify the most appropriate scale and layout to ensure that the Proposed Development is set sensitively into the surrounding environment. This process has included feedback from the local community as well as the results of site surveys which identified the environmental constraints of the site and surroundings. These aspects have been considered alongside the need to maximise the energy generation potential of the Application Site.

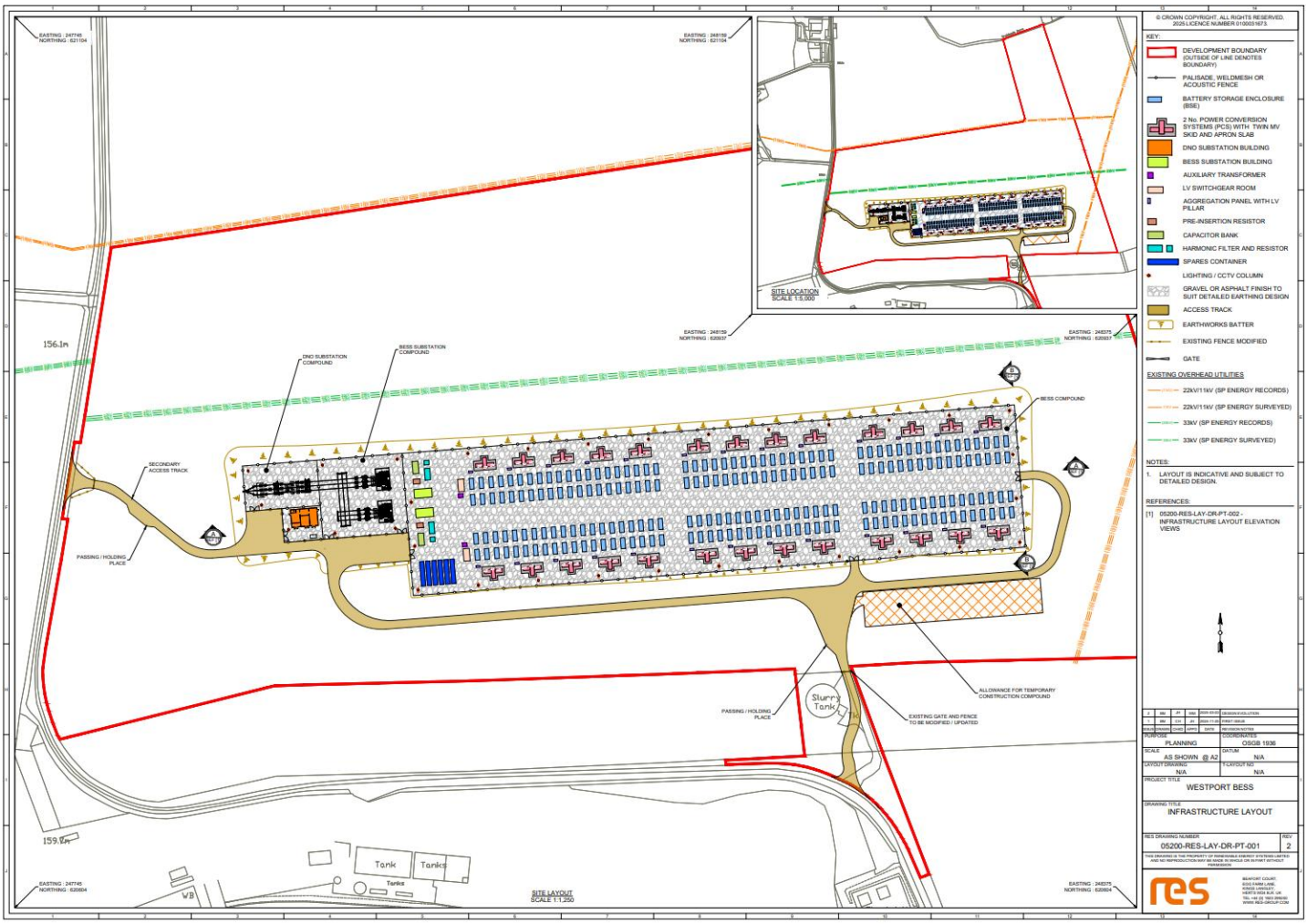
As discussed in Section 4.1 above and as per health and safety guidelines, the Proposed Development is designed to be a minimum of 10m from all overhead lines therefore the Proposed Development has been situated to the south of the 33kV overhead line crossing the Application Site. Furthermore, as discussed in the Outline Fire Risk Management Plan (OFRMP) submitted alongside the planning application, the Proposed Development has been developed to include adequate spacing between the battery storage enclosures (BSEs) to mitigate against the risk of fire spread in the event of a fire within one BSE. The layout allows for a minimum distance of 3m between battery enclosures and any other infrastructure therefore aligning with applicable NFPA 855 spacing criteria as well as the spacing recommendations outlined in FM Global Property Loss Prevention Datasheet 5-33 (Interim revision January 2024).

Furthermore, the location of the BESS facility has been selected in considering the distances from existing nearby premises, with the nearest being more than 250m in distance. Therefore, a distance of at least 6.1m has been achieved between BSEs and the Application Site boundary, in line with NFPA 855 (2023), and there are no existing or planned hedgerow or tree planting within 10m of any BSE.

Should the fire service need to attend the site, the fenced BESS compound has a wide access route through the west to east corridor, allowing the fire service to access the Application Site during an incident. Additionally, three site access points have been proposed to ensure that the fire services would have an alternative option for approaching the Application Site if the combination of wind direction and smoke made one direction particularly onerous.

The final layout of the Proposed Development is illustrated on Image 5.1 below.

Image 5.1: Infrastructure Layout Plan



5.2.3 Scale and Appearance

The Application Site covers an area of approximately 18.3-hectares of agricultural land used for pasture farming, however the compound and tracks (actual Proposed Development) cover no more than 4-hectares. As detailed throughout this DAS, the scale of the BESS development has been determined through the technical assessment process undertaken by the Applicant, as well as the environmental considerations.

The elevations of the built elements that make up the Proposed Development are illustrated in Figure 3: Infrastructure Layout Elevation Views (Drawing Number: 05200-RES-LAY-DR-PT-002).

Alongside this, the existing and proposed site elevations of the Proposed Development are shown in Figure 5: Existing and Proposed Site Elevation (Drawing Number: 05200-RES-ERW-DR-PT-001).

The dimensions of the individual built elements of the Proposed Development are discussed below.

5.2.3.1 Battery Storage Enclosures

Battery Energy Storage Systems (BESS) allows for an opportunity to store and distribute renewable energy at appropriate times. The energy that is stored in these containers can be drawn upon when needed to meet the demand for power.

Battery storage enclosures would be present on-site at a height of approximately 2.9m, length of approximately 6.1m and a width of approximately 2.4m (subject to detailed design). These containers would be sited upon areas of hardstanding. Please see Figure 6: Battery Storage Enclosure (Drawing Number: 05200-RES-BAT-DR-PT-001)).

5.2.3.2 Power Conversion System & Transformer

Transformers are required to control the voltage of the electricity generated by the Proposed Development, prior to reaching the substation. There would be power conversion systems (PCS) with twin MV skin and apron slabs for the Proposed Development sited on concrete foundation at a height of approximately 2.4m (please see Figure 17: Power Conversion System & Transformer (Drawing Number: 05200-RES-PCS-DR-PT-001)).

5.2.3.3 BESS Substation Building

There would be BESS substation buildings at the site at a height of approximately 4.5m, length of approximately 10m and a width of approximately 5m (subject to detailed design) (please see Figure 12: BESS Substation Building (Drawing Number: 05200-RES-SUB-DR-PT-005)).

5.2.3.4 Substation Compound

There would be a BESS substation compound located to the west of the Proposed Development where the DNO control building would be situated within (please see Figure 16: Substation Compound (Drawing Number: 05200-RES-SUB-DR-PT-009)) (subject to detailed design).

5.2.3.5 DNO Substation Building

There would be a DNO substation building located to the west of the Proposed Development situated at a height of 6.8m, length of 15m and width of 10m (subject to detailed design) (please see Figure 13: DNO Substation Building (Drawing Number: 05200-RES-SUB-DR-PT-006)).

5.2.3.6 LV Feeder Pillar & Aggregation Panel

There would be aggregation panels with LV pillars at the site at a height of approximately 2m, length of approximately 2.3m and a width of approximately 1.1m (subject to detailed design) (please see Figure 14: LV Feeder Pillar & Aggregation Panel Details (Drawing Number: 05200-RES-SUB-DR-PT-007)).

5.2.3.7 LV Switchgear Room

There would be LV switchgear rooms at the site at a height of approximately 3m, length of approximately 7m and a width of approximately 3.5m (subject to detailed design) (please see Figure 15: Typical LV Switchgear Room (Drawing Number: 05200-RES-SUB-DR-PT-008)).

5.2.3.8 Pre-Insertion Resistor

There would be pre-insertion resistors at the site at a height of approximately 2.7m, length of approximately 3.3m and a width of approximately 2.7m (subject to detailed design) (please see Figure 10: Pre-Insertion Resistor (Drawing Number: 05200-RES-SUB-DR-PT-003)).

5.2.3.9 Capacitor Bank

There would be capacitor banks at the site at a height of approximately 2.6m, length of approximately 6.4m and a width of approximately 2.8m (subject to detailed design) (please see Figure 11: Capacitor Bank (Drawing Number: 05200-RES-SUB-DR-PT-004)).

5.2.3.10 Harmonic Filter

There would be harmonic filters at the site consisting of 2no buildings respectively. The larger buildings of the harmonic filter would be sited at a height of approximately 2.7m, length of approximately 6m and a width of approximately 3m (subject to detailed design). The smaller buildings would be sited at a height of approximately 2m, length of approximately 2.7m and a width of approximately 2.2m (subject to detailed design) (please see Figure 9: Harmonic Filter (Drawing Number: 05200-RES-SUB-DR-PT-002)).

5.2.3.11 Auxiliary Transformer

There would be auxiliary transformers at the site subject to detailed design) (please see Figure 8: Auxiliary Transformer (Drawing Number: 05200-RES-SUB-DR-PT-001)).

5.2.3.12 Spares Containers

There would be spares containers at the site sited at a height of approximately 2.9m, length of approximately 12.2m and a width of approximately 2.4m (subject to detailed design) (please see Figure 7: Spares Storage Container (Drawing Number: 05200-RES-BLD-DR-PT-001)).

5.2.3.13Fencing & CCTV

Security fencing would be constructed for health, safety and security reasons, anticipated to comprise green wire mesh and to measure no more than 3m in height (subject to detailed design) (please see Figure 18: Typical Security Fence Details (Drawing Number: 05200-RES-SEC-DR-PT-001)).

In addition to this, lighting and CCTV columns on a galvanised steel post (or similar) would be positioned on fencing around the Proposed Development facing inwards at a height of approximately 4m (subject to detailed design) (please see Figure 20: Typical Lighting & CCTV Column (Drawing Number: 05200-RES-SEC-DR-PT-003)).

Acoustic fencing in the form of close board fencing would be constructed around the perimeter of the Proposed Development, measuring no more than 4m in height and would include the inclusion of a double vehicle gate and pedestrian gate (where required) (subject to detailed design) (please see Figure 19: Typical Acoustic Fence Detail (Drawing Number: 05200-RES-SEC-DR-PT-002)).

Stock proof fencing in the form of high tensile steel wire with hinge joints would also be constructed around the Proposed Development where required, measuring no more than 2.4m in height (subject to detailed design) (please see Figure 21: Typical Stock Proof Fence (Drawing Number: 05200-RES-SEC-DR-PT-004)).

5.2.3.14Temporary Construction Compound

A temporary construction compound would be located close to the site access point at the south to facilitate the construction of the Proposed Development. The compound would allow for the laydown of materials and vehicle parking throughout the duration of the construction phase.

5.2.4 Landscaping

The Application Site would undergo a change in character with the introduction of the BESS and associated infrastructure, increasing the manmade appearance of the site. Nonetheless, proposed native shrub and tree planting has been included in the Illustrative Landscape Masterplan (ILMP) submitted alongside the planning application in order to enhance the landscape character and provide natural screening to the Proposed Development from key viewpoints.

Landscape and biodiversity enhancement measures would be implemented at the Application Site which includes the following as per the Illustrative Landscape Masterplan (ILMP):

- To mitigate potential views from the north, a proposed belt of native shrub and tree planting is to be implemented along the northern boundary of the site and is to wrap around the eastern and western corners;
- Areas to be affected by earthworks to facilitate the development are to be reinstated with a wildflower grass seed mix to aid biodiversity;
- Pockets of woodland planting to be included between the existing woodland belt and the Proposed Development to filter potential views of the development from the adjacent road to the south.
- New native hedgerow to be planted along the western boundary with the local road where currently missing. All new and existing hedgerow along western boundary to be managed to a height of 3m for the duration of the development.

6. Access

6.1 Introduction

As outlined within the Planning Circular 3/2022: Development Management Procedures, Design and Access Statements must *"explain how the Applicant's policy/approach adopted in relation to access fits into the design process and how this has been informed by any development plan policies relating to access issues."*

6.1.1 Planning Policy

Compliance with national and local planning policy is set out in the Planning Statement. In respect of transport, the relevant Local Development Plan Policy is Policy T1: Transport Requirements in New Development.

In the case of the Planning Statement, during the operational phase, the Proposed Development would be largely autonomous and does not require resident staff.

For the construction phase, the important requirement is that the HGV delivery vehicles can access the site safely. This has been considered in the Construction Traffic Management Plan (CTMP) submitted alongside the planning application.

6.1.1.1 Site Access & Route to Site

Traffic generation during the operational phase will comprise routine maintenance activities and infrequent deliveries of components to the site. The operational stage will therefore not give rise to a significant number of vehicle trips and the effect of any generated traffic on the adjoining transport network will be negligible.

Vehicular access to and from the site be taken by means of a primary access within the southeast of the site footprint and a secondary "emergency vehicle only" access along the site's western perimeter.

The established track access at Creoch Road, to the south of the site will be subject to a minor realignment, straightening out the existing 'dog-leg' arrangement and better equipping the site access to cater for the proposed end use. Through this upgrade, junction visibility will be enhanced to meet with present-day design expectations.

Creoch Road is subject to a 60mph speed restriction. When viewed in the context of DMRB standards the upgraded junction would be expected demonstrate compliance with visibility splays of 215m in each direction. To inform the junction design process, vehicle speed surveys were undertaken in November 2024.

The speed surveys indicate that the 85th percentile observed speeds are 30mph and 29.7mph in the north-bound and south-bound directions, respectively. As such, it is considered that a reduced visibility splay of 90m, typically applicable for a design speed of 30mph, would be appropriate in this instance. Image 6.1 below demonstrates that visibility splays of 90m are achievable at the junction and no third-party land is required to achieve the splays.

Image 6.1: Creoch Road/Site Access Junction Visibility Splays

6.1.2 Public Access

In the interest of health and safety, and prior to and, during construction, heras fencing would be present around the perimeter of the Application Site.

6.2 Transport

A Transport Statement has been produced and is attached as part of the planning submission. Given the nature and location of the development, a high proportion of the construction stage trips are expected to be made by private vehicle. Once operational, the BESS would generate a very small number of vehicle trips for servicing and maintenance.

There are expected to be a total of approximately 6,700 two-way goods vehicle movements over the course of the 18-month construction period, arriving at a rate of around 43 per week on average depending on timescale.

The number of personnel on-site would vary during the construction process but typically, it would be expected that around 30 personnel would be present at any one time.

Construction at the site would be carried out Monday to Friday 08:00-18:00 and Saturday 08:00–13:00. No construction or deliveries will take place on Sundays or Bank Holidays (subject to Council approval). In order to be considerate to local residents and businesses, staff are expected to arrive on site by 08:00 and, depending on their role, will typically depart between 15:00 and 20:00. The arrival and departure of workers is unlikely to coincide with 'traditional' network AM and PM peak periods. Given the expected level of traffic generation, it is not anticipated that the construction phase of the development will lead to perceptible traffic impacts on the adjoining road network.

Given the nature of the proposed development, it is expected that the majority of trips to and from the site will be vehicle-based. These will comprise cars and vans associated with worker travel and larger vehicles necessary to deliver plans and equipment to the site.

The majority of vehicle trips will be generated during the construction stage. Once operational, only monthly maintenance visits will be required. An assessment of traffic generation reveals that activity associated with either the construction or operational phases can be accommodated without impact to the local road network.

The CTMP produced and submitted alongside the planning application sets out arrangements to minimise and manage the environmental / traffic impacts from the construction phase of the Proposed Development.

Overall, it is considered that the Proposed Development can be accommodated at the proposed location without any major impact on existing sustainable transport users or existing road users.

7. Conclusion

This DAS is an evidence-based submission prepared with reference to the Town and Country Planning (Development Management Procedure) (Scotland) Regulation 13. It includes a review of the current planning context surrounding the Application Site, existing site conditions, and the process carried out to design the Proposed Development.

This DAS contains high level details of the investigations and technical studies undertaken by the appointed consultant team, with the findings from the various appraisals contributing to design development. Further details can be found in the reports that are included in the planning application.

The conclusions of the reports demonstrate that the Proposed Development can be successfully delivered on the Application Site without leading to unacceptable levels of environmental effects. The resulting development proposals show how the Proposed Development can respond positively to the local landscape setting whilst additional mitigation measures have been incorporated to minimise any potentially adverse effects and thereby significantly enhancing the biodiversity value of the Application Site.

The Applicant has taken account of the feedback from the local community and the results of the technical and environmental surveys on site and have reflected these changes in the final layout of the site, ensuring that it sits sensitively in the local environment. The site is generally well screened, with additional planting proposed as part of the Proposed Development in order to greater maximise screening where required.

Overall, the Proposed Development is appropriate in terms of design and access and the development clearly represents a necessary step towards meeting the UK's legally binding climate change and renewable energy obligations.

For these reasons, and because the Proposed Development is temporary and the Application Site can be restored to its pre-development state with limited intervention after its 40-year life period, it is respectfully requested that the Scottish Ministers grant consent under Section 36 of the Electricity Act 1989 for the Proposed Development.