Agenda Item	**7.4**
Report No	**PLN/006/25**

HIGHLAND COUNCIL

Committee: North Planning Applications Committee

Date: 22nd January 2025

Report Title: 23/05999/FUL: Renewable Energy Systems Ltd.

Land 420M SW Of SSE Alness Grid Sub Station,

Mid Balnacraig, Alness

Report By: Area Planning Manager - North

Purpose/Executive Summary

Description: Battery energy storage facility comprising a compound of battery and electrical equipment, access track, landscaping and ancillary works

Ward: 06 – Cromarty Firth

Development category: Major

Reason referred to Committee: Major Development

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

Recommendation

Members are asked to agree the recommendation to **GRANT** the application as set out in section 11 of the report

1. PROPOSED DEVELOPMENT

1.1 The application is for installing a Battery Energy Storage System (BESS) capable of storing up to 45 megawatts (MW) of electricity, consisting of:

- Battery storage containers – 64no. battery units arranged in rows 6.1m in length, 2.4m wide, and 2.9m in height;
- 2no. substations (1no. BESS substation and 1no. Distribution Network Operator substation);
- 8no. combined Power Conversation Systems (PCS) and Transformers;
- Aggregation Panel with Low Voltage Pillars;
- Auxiliary Transformer;
- LV Distribution Equipment;
- Pre-Insertion Resistor;
- Capacitor Bank;
- Harmonic Filter and Resistor;
- Spares Container

1.2 The proposed BESS will collect and store energy from the electricity network and release energy to the network during times of peak demand. It is proposed to connect the BESS to the nearby Scottish & Southern Electricity Networks (SSEN) Alness Substation. The proposed battery technology for the development is anticipated to be lithium iron phosphate (LFP).

1.3 Major pre-application advice was given by the Planning Authority under application ref. 23/03585/PREMAJ. The response concluded that based on the information submitted, the Council would only be in a position to support the application only if the environmental considerations set out in the pre-application advice pack are satisfactorily addressed.

1.4 Supporting Information:

- Ecological Impact Assessment
- Landscape and Visual Impact Assessment
- BNG Calculations
- Fire Risk Management Statement
- Fire Risk Statement
- Briefing Note
- Emergency Access Statement
- Flood Risk Statement and Drainage Impact Assessment
- FRA and DIA Assessment Compliance Certificate
- Transport Statement
- Battery Storage Project
- Visual Information – Viewpoint Montage
- Pre-Application Consultation Report
- Major Pre-Application Response
- Contullich Energy Storage Project – Attenuation Basin Storage Calculation
- Greenfield Runoff Rates Estimations

- Rainfall Data
- Arboricultural Impact Assessment
- Land Capability Classification for Agriculture Desk Based Assessment
- Acoustic Impact Assessment
- Archaeological Desk Based Assessment
- Planning Design and Access Statement
- Construction Environmental Management Plan

1.5 There have been numerous variations to the submitted plans since submission regarding access, biodiversity, flood risk, drainage, in addition to compliance with evolving Fire Risk Guidance.

2. SITE DESCRIPTION

2.1 The site measures at approximately 6.3ha in size and is located on grazing land approximately 1km north-west of Alness. The Alness sub-station is situated 200m to the east, with areas of ancient and long-established woodland of Coulhill located in the distance to the southeast and arable land to the south and west. In the wider area lies a scattering of rural properties, Alness Golf Course, and Fyrish Monument located 3.5 km to the southwest. The site is located marginally below the level of the B9176 which is directly adjacent to the site, with ground levels falling gently down towards Coulhill woodland and Alness beyond. A scattering of trees is located along the southeastern site boundary, with the existing access track serving the nearby substation located directly to the north of the site. The Application Site comprises predominantly of 'in use' agricultural land and associated fringe and border vegetation.

2.2 Members will recall the area of land directly to the southeast of the proposal was subject to a previous planning application which was permitted by the North Planning Applications Committee in December 2023 under application ref. 22/05167/FUL for the siting of a separate BESS scheme, which has since moved to satisfaction of conditions stage.

3. PLANNING HISTORY (including relevant permissions adjacent to the site)

3.1	28 November 2007	07/01020/FULRC Formation of access road	PERMISSION GRANTED
3.2	14 September 2023	23/03641/PAN Contullich, Alness - The proposed development comprises the siting of approximately 64 battery storage enclosures, associated power conversion units and transformers, substations, hardstanding area, telecommunications equipment, fencing, vehicular access, grid connection and ancillary works.	CASE CLOSED
3.3	29 September 2023	23/04458/SCRE Installation of an energy storage facility including battery enclosures, power conversion units, transformers, substations, grid connection infrastructure,	SCREENING APPLICATION

		vehicular access, landscaping and associated works.	EIA NOT REQUIRED
3.4	11 December 2023	22/05167/FUL Battery energy storage facility comprising access track, compound of battery and electrical equipment, meter building, stores, fencing, security cameras and landscaping.	PERMISSION GRANTED

4. PUBLIC PARTICIPATION

4.1 Advertised: Schedule 3 development (14 days) & Unknown Neighbour (14 days)

Date Advertised: 26.01.2024

Representation deadline: 09.02.2024

Timeous representations: 0

Late representations: 0

5. CONSULTATIONS

5.1 **Ardross Community Council :** Have highlighted concerns in their the response and state that there is little support for a second battery storage facility being built adjacent to one already consented: 22/05167/FUL, advising that many in the community do not like the idea of a perfectly good field involved in arable food production being turned over to battery storage. The community council advises that the applicant's stated justification for the development were due to rising sea water levels through global warming which threaten food security, although the community has raised its discontent at a lack of evidence being provided by the applicant to back this up. The response iterates the community's concerns over the lack of evidence to support the implication that the specific proposed battery storage facility would influence global warming so much so as to prevent sea level rises that would save the equivalent hectarage of arable land. The statement notes community feeling that battery storage plants are a symptomatic failure in Scotland's choice of energy production, namely intermittent wind. Also, seeing them as an extremely resource heavy, in particular minerals and rare earth metals, and intensive way of smoothing out the intermittent variable wind power generation the Scottish Government have chosen. It is also states that mineral extraction, battery production and eventual recycling becomes a burden also on other countries and associated environments. Given the short-term use of the battery storage and the limited benefits, it is noted within the provided response that many do not believe this an environmental price worth paying, and therefore, the Ardross Community Council do not believe arable land used for wheat in 2023 is an appropriate site for a battery energy storage plant.

The community council advises that it does not believe the new access track from an existing field entrance is appropriate, stating that there is already an existing entrance and track to the north used by the substation and the already consented battery energy storage plant The community council also raised concerns about the environmental impact of building a new track. Road safety concerns were also noted by the community council as an additional reason why the existing substation access should be utilised. Further issues were also raised with regards to the potential for a fire as a result of the development and the consented energy facility to the rear,

detailing potential adverse impacts on the local community and environment. Also noted discontent that no compensatory arrangements for local residents could be found in the application should an incident occur at the Energy Storage Plant. Doo not share the applicants confidence in the limited measures in place to prevent fire, and as given the severity of a potential fire event, requested that the Planning Authority adopt a precautionary approach to the risk and seek advice from the relevant bodies.

5.2 **Transport Planning:** In the initial consultation response, requested the attachment of conditions, and raised a road safety concern regarding the line of access track once in the field. The initial route showed the access running parallel with and close to the existing B9176 Struie Road before heading towards the proposed battery storage facility. Transport Planning raised concerns that these arrangements could generate road safety issues by giving the impression to users of the public road that there is traffic heading towards them on their side of the road, which could be particularly acute during the hours of darkness. To avoid these issues, requested amendments.

Following amendments, Transport Planning stated that they have no objection. The access track has been realigned (as shown on drawing no. 05196-RES-LAY-DR-PT-001 REV-3) to alleviate the road safety concerns we raised in our previous response dated 14/5/24. The conditions attached to the initial response are advised to be attached to any consent granted.

5.3 **Flood Risk Management Team:** Initially objected to the proposals on the grounds of a lack of flood risk information and drainage information.

Following the upload of Version 2 of the FRA and DIA, flood team withdrew objection on flood risk grounds due to the suggestion any pluvial flooding may be unlikely to interact with the post development site in a significant way. Advised that the DIA demonstrates that a surface water drainage strategy supported by a SUDS Basin is appropriate, and overall, the Flood Team removes its objection on drainage grounds.

After further amendments to the layout of the application, the Applicant provided a revised FRA, Version 3 and updated other drawings to reflect revised access arrangements. The FRM Team still raised no objection to the latest proposals. FRM recommended that the new pipe/ culvert to convey the proposed land drainage under the new access route is a single, oversized pipe, to minimise the chance of blockage.

5.4 **Forestry Officer:** Initially objected to the proposals due to a lack of supporting information in order to demonstrate compliance with NPF4 policies 3 and 6.

Stated that the proposed development involves the formation of an energy storage facility and access road within an area currently used for agricultural production. To the eastern boundary is a narrow strip of woodland which is listed in SNHs Inventory of Ancient Woodland as 2a Ancient Woodland of Semi Natural Origin. Therefore, advised that it appears as woodland on the first edition Ordnance Survey maps dating back to the 1860s. Beyond this strip of woodland is the recently approved Balnacraig Energy Storage facility (22/05167/FUL). Stated that the Arboricultural Impact Assessment prepared by Scottish Arboricultural Services confirms that there will be no adverse impact on ancient woodland, subject to specified tree protection measures. The Landscape Masterplan prepared by Pegasus Group relies on a narrow strip of 2-3m feathered trees and 4-4.5m heavy standards to provide

screening of this prominent site from the public road. In response the Forestry Officer advised that predicted photomontages give an optimistic establishment rate for such large planting stock and advised that whilst an element of larger planting stock could be used to try and provide an early screen, raised concerns that they may struggle to establish successfully in a relatively exposed location. As a result, suggested that planting is extended up to the public road using a more conventional native woodland planting specification (40-60cm stock planted at 1,600 stems/ha) in order to create a more robust screen, with greater biodiversity benefits. It was also advised that more detailed planting and maintenance specification is required to include measures for deer and rabbit/hare protection.

Following the submission of revised information, the Forestry Officer stated that the revised Landscape Plan (P23-1582_EN_002_E) is now acceptable. Therefore, the holding objection is withdrawn subject to conditions to secure prior approval of a landscape masterplan to be implemented under the supervision of a qualified landscape consultant.

5.5 **Environmental Health:** No objection subject to conditions.

5.6 **Historic Environment Team – Archaeology:** No objection subject to conditions.

5.7 **Development Plans:** does not object to the application. Advises on the policy context and conformity with the Development Plan, as well as on community benefits and community wealth building.

5.8 **Access Officer:** Stated that the proposal is immediately north of 22/05167/FUL. Although advised that as the proposed development uses a different entry point and access road and has no existing public access on the site as it was cultivated field rather than scrubland. Therefore, the access officer concluded that if the access roads are combined with the previous application, then comments made then would apply, however as this is not the case they have no comments to make on this application regarding public access.

5.9 **Ecology:** No formal response but advised they were satisfied with the Biodiversity Net Gain set out in the submission.

5.10 **SEPA:** No fluvial or coastal flood risk to the application site identified. Raised no objection to the proposed development.

5.11 **Scottish Forestry:** The Pre–application Consultation Report confirms that no tree felling will occur to facilitate the proposed development, therefore stated that comments focus on the proposed tree planting. Advised all tree planting proposals must be compliant with the UK Forestry Standard, and that the applicant should be aware that any tree planting delivered as a result of the proposed development, may need to be considered under The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017.

5.12 **Historic Environment Scotland:** Considered the information received and do not have any comments to make on the proposals.

5.13 **Scottish Water:** No objection stated that the proposed development will be served by the public fresh water supply however with no public foul drainage infrastructure in the vicinity of the application site, private treatment options are required.

5.14 **Transport Scotland:** Advised the attachment of conditions. Also stated that the applicant should be informed that the granting of planning consent does not carry with it the right to carry out works within the trunk road boundary and that permission must be granted by Transport Scotland Roads Directorate. Where any works are required on the trunk road, contact details are provided on Transport Scotland's response to the planning authority which is available on the Council's planning portal. Also advised that Trunk Road modification works shall, in all respects, comply with the Design Manual for Roads and Bridges and the Specification for Highway Works published by HMSO. Transport Scotland stated that the developer shall issue a certificate to that effect, signed by the design organisation, whilst making the applicant aware that Trunk Road modifications shall, in all respects, be designed and constructed to arrangements that comply with the Disability Discrimination Act: Good Practice Guide for Roads published by Transport Scotland. Finally, it is advised that the applicant notes that they are required to provide written confirmation of this, signed by the design organisation, and any trunk road works will necessitate a Minute of Agreement with the Trunk Roads Authority prior to commencement.

5.15 **NatureScot:** did not respond to the consultation.

5.16 **Scottish Fire and Rescue Service:** has not responded to the consultation request at this time.

6. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

6.1 National Planning Framework 4 (2023) (NPF4)

Policy 1 - Tackling the Climate and Nature Crises
Policy 2 - Climate Mitigation and Adaptation
Policy 3 - Biodiversity
Policy 4 - Natural Places
Policy 5 - Soils
Policy 6 - Forestry, Woodland and Trees
Policy 7 - Historic Assets and Places
Policy 11 - Energy
Policy 14 - Design Quality and Place
Policy 20 - Blue and Green Infrastructure
Policy 22 - Flood Risk and Water Management
Policy 23 - Health and Safety
Policy 25 - Community Wealth Building

6.2 Highland Wide Local Development Plan 2012 (HwLDP)

28 - Sustainable Design
29 - Design Quality and Place-making

30 - Physical Constraints
31 - Developer Contributions
36 - Development in the Wider Countryside
51 - Trees and Development
56 - Travel
57 - Natural, Built and Cultural Heritage
58 - Protected Species
59 - Other important Species
60 - Other Importance Habitats
61 - Landscape
64 - Flood Risk
65 - Waste Water Treatment
66 - Surface Water Drainage
67 - Renewable Energy Developments
69 - Electricity Transmission Infrastructure
72 - Pollution

6.3 **Inner Moray Firth Local Development Plan 2 (2024) (IMFLDP2)**

1 – Low Carbon Development

2 – Nature Protection, Preservation and Enhancement

8 – Placemaking

6.4 **Highland Council Supplementary Planning Policy Guidance**

Biodiversity Enhancement Planning Guidance (May 2024)
Construction Environmental Management Process for Large Scale Projects (Aug 2010)
Developer Contributions (Mar 2018)
Flood Risk and Drainage Impact Assessment (Jan 2013)
Highland's Statutorily Protected Species (Mar 2013)
Highland Renewable Energy Strategy and Planning Guidelines (May 2006)
Managing Waste in New Developments (Mar 2013)
Physical Constraints (Mar 2013)
Public Art Strategy (Mar 2013)
Sustainable Design Guide (Jan 2013)
Trees, Woodlands and Development (Jan 2013)

7. OTHER MATERIAL POLICY CONSIDERATIONS

7.1 **Scottish and UK Government Planning Policy and Other Guidance**

Control of Woodland Removal (2009)

Onshore Wind Policy Statement (Dec 2022)

Scottish Energy Strategy (2017)

Draft Energy Strategy and Just Transition Plan (2023)

2020 Routemap for Renewable Energy (Jun 2011)

Energy Efficient Scotland Route Map (May 2018)

PAN 1/2021 – Planning and Noise (Mar 2011)

PAN 68 – Design Statements (Aug 2003)

Health and Safety Guidance for Grid Scale Electrical Energy Storage Systems' (UK Government, Mar 2024)

Grid Scale Battery Energy Storage System Planning – Guidance for Fire and

Rescue Service (2023)

8. PLANNING APPRAISAL

8.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

Determining Issues

8.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

Planning Considerations

8.3 The key considerations in this case are:

a) Compliance with the Development Plan and other Planning Policy;
b) Energy and Carbon Saving;
c) Socio-Economic Impacts;
d) Siting, Design, Landscape and Visual Impacts;
e) Natural Heritage;
f) Habitats
g) Trees, Protected Species and Biodiversity
h) Built and Cultural Heritage
i) Amenity;
j) Health and Safety;
k) Traffic and Transport;
l) Flood Risk and Drainage;
m) Public Access
n) Decommissioning and Reinstatement;
o) Extension of Permission, and,
p) Any Other Material Considerations.

Development plan/other planning policy

8.4 The Development Plan comprises National Planning Framework 4 (NPF4), the adopted Highland-wide Local Development Plan (HwLDP), the Inner Moray Firth Local Development Plan 2 (IMFLDP2), and all statutorily adopted supplementary guidance.

8.5 At the high level, NPF4 considers that Strategic Renewable Electricity Generation and Transmission Infrastructure will assist in the delivery of the Spatial Strategy and Spatial Priorities for the north of Scotland, and, that Highland can continue to make a strong contribution toward meeting Scotland's ambition for net zero. Alongside these ambitions, the strategy for Highland aims to protect environmental assets as well as to stimulate investment in natural and engineered solutions to address climate change (NPF4 page 26).

8.6 Since its adoption, NPF4 Policies 1, 2, and 3 now apply to all development proposals Scotland-wide, which means that significant weight must be given to the global climate and nature crises when considering all development proposals, as required by NPF4 Policy 1. To that end, development proposals must be sited and designed to minimise lifecycle greenhouse gas emissions as far as is practicably possible in accordance with NPF4 Policy 2, while proposals for major developments must conserve, restore, and enhance biodiversity, including nature networks, so they are in a demonstrably better state than without intervention, as required by NPF4 Policy 3 b).

8.7 NPF4 Policy 4 compliments the above policies by setting out the developer and officer requirements for ensuring that protected species are given adequate consideration prior to an application's determination. NPF4 Policy 5 for Soils seeks to protect carbon-rich soils, and restore peatlands, and minimise disturbance to soils from development. To that end, the application requires to demonstrate that the mitigation hierarchy has been followed in siting the facility. In other words, that the proposal has sought to avoid carbon-rich soils and peat, and/or prime agricultural land in the first instance, and then minimise disturbance where this is unavoidable, and to include adequate mitigation, compensation, and enhancement measures for any disturbance. Similarly, NPF4 Policy 6 for Forestry, woodland and trees aims to protect and expand forests, woodland and tree coverage including individual trees of high biodiversity value, or identified for protection in the Forestry and Woodland Strategy. The proposal will not impact woodland however.

8.8 NPF4 Policy 20 for Blue and Green Infrastructure supports facilities that design protect and enhance blue and green infrastructure and their networks by making climate mitigation, nature restoration, biodiversity enhancement, flood prevention and water management integral to design. In this instance there are pockets of known pluvial flood risk within the proposal site that will require to be managed through a sustainable urban drainage systems (SUDS), which should seek to minimise the area of impermeable surfaces pursuant to Policy 22 for Flood risk and water management. Policy 23 for Health and safety is also relevant to the assessment as it seeks to protect people and places from environmental harm, mitigate risks arising from safety hazards, and encourage, promote, and facilitate development that improves health and wellbeing. Furthermore, NPF4 Policy 25 for

Community Wealth Building sets out at Part a) that development proposals should contribute to local or regional community wealth building strategies and be consistent with local economic priorities.

8.9 While the above proposals are salient to the proposal's assessment, the principal policy for assessing energy developments is NPF4 Policy 11 for Energy. The policy sets out the Development Plan's in-principle support for all forms of renewable, low-carbon, and zero emission technologies, including BESS facilities. Part c) of the policy qualifies this position by stating that energy proposals should only be supported where they maximise net economic impact including local and community socio-economic benefits such as employment, associated business, and supply chain opportunities. The policy goes on to state at part e) that while significant weight will be placed on the contribution of the proposal to renewable energy generation targets and on reduction of greenhouse gas emissions targets, the development's impacts, including cumulative impacts, must be suitably addressed and mitigated against. These considerations are not a policy test and relate to matters of: impacts on communities and individual dwellings in relation to amenity; landscape and visual impacts; public access; aviation and defence interests; telecommunications; traffic; historic environment; ecology and biodiversity (including birds); impacts on trees; and decommissioning and site restoration.

8.10 The principal policy for assessing renewable energy developments within the Local Development Plan is HwLDP Policy 67, which sets out that renewable energy development should be well related to the source of the primary renewable resource needed for its operation. However, for BESS technology, the source is considered to be the national grid rather than wind or watercourses given that the energy is already generated; with the purpose of the BESS being to provide support for a balanced grid. The policy requires an assessment of the proposal's contribution in meeting renewable energy targets as well as its positive and negative effects on the local and national economy, and, its compliance with all other relevant policies of the Development Plan. The policy is supportive of renewable energy developments that are located, sited, and designed such that they will not be significantly detrimental overall, either individually or cumulatively with other similar developments, having regard to the 11 specified criteria. Such an approach is considered consistent with the concept of HwLDP Policy 28 Sustainable Design along with the concept of achieving the right development in the right place and not to allow development at any cost.

8.11 The Inner Moray Firth Local Development Plan 2 (IMFLDP2) is the Area Local Development Plan covering the application site. Area LDPs, including the IMFLDP2 itself, do not contain any specific land allocations related to the proposed type of development. However, in terms of policy considerations, policies 1 – Low Carbon Development, 2 – Nature Protection, Preservation and Enhancement, and 8 – Placemaking, are of relevance to this application. These policies aim to reduce carbon emissions, enhance biodiversity and create successful place to live, work and relax which are energy, infrastructure and land-take efficient, whilst protecting and enhancing the built and natural environment.

8.12 While not directly relevant to the proposal, the Onshore Wind Energy Policy Statement (OWEPS) recognises that balance is required and that no one technology can allow Scotland to reach its net zero targets. As such, the document sets out the

Scottish Government's support for the co-locating of BESS facilities with onshore wind to help balance electricity demand and supply and add resilience to the energy system while acknowledging that on-site battery storage not only reduces pressures from the grid but enables more locally focussed energy provision while reducing costs to consumers.

8.13 In a similar vein, the Draft Energy Strategy and Just Transition Plan acknowledges that BESS can increase flexibility to our electricity system and provide wider benefits for consumers and society. The draft sets out that by September 2021, Scotland had approximately 864MW of installed electricity storage capacity with 2.2GW of battery storage approved through the planning system, but that Scotland requires to increase its storage capacity significantly. Since that publication, the published Quarter 2 2024 Energy Statistics for Scotland show that there is currently an estimated 12 BESS facilities under construction across Scotland, which will increase battery storage capacity by 1.4GW and that there is a total of 18.6GW of BESS projects in the pipeline, that is schemes that are in planning, awaiting construction or undergoing construction, of which this application is only one.

8.14 The draft energy strategy, along with the OWEPS and the policies set out within NPF4 confirm the Scottish Government's commitment to renewable energy and associated enabling transmission infrastructure as being crucial to addressing the climate crisis.

8.15 The Development Plan, which now includes NPF4, must be considered in the round. While there is clear in principle support for renewable energy proposals that contribute to reaching net zero, of which BESS technology is one, this is not unqualified. It needs to be demonstrated that the impact on factors such as community amenity, biodiversity, landscape and visual matters, heritage, and infrastructure, to name but a few, are addressed and/or adequately and appropriately mitigated and as such, several policy considerations will apply. The extent to which the proposal's energy, economic and other benefits outweigh, or otherwise, other policy considerations are assessed in the following sections, which set out that the proposal is generally in conformity with the provisions of the development plan.

Energy and Carbon Saving

8.16 The proposal would be interconnected to the grid's transmission / distribution network and not co-located with an electrical generating station. The development will, however, collect energy from the grid when the supply outstrips demand. Such facilities make a commercial return by buying electricity from the grid when rates are cheaper and selling it back to the grid when rates are more expensive. However, the development will also provide electricity or other grid services when needed. Depending on the mix of electricity at the time of collection, the BESS facility may or may not be storing and then releasing renewable energy. That said all electricity generation in the region comes from renewable sources and therefore this the proposal is considered to 'regenerate' renewable energy.

8.17 The benefit of BESS is that it stores excess energy being generated by renewable generating stations such as wind farms when the grid has reached full capacity, much of which would otherwise be lost. BESS, therefore, allows renewable generating stations to operate for longer periods and provides flexibility to the grid to

respond to peaks and troughs in energy demand. As a result, the technology is considered to support government policy that seeks to end a reliance on backup electricity generation from fossil fuel reliant generators and allow the full benefits of renewables, which is where the development's intrinsic carbon saving benefits are to be realised.

Socio- Economic Impacts

8.18 Energy storage facilities are an emergent technology and are expected to be a significant component of national energy infrastructure in the coming years and are therefore expected to support jobs and economic development. The Council is in the process of working with public, private, and community partners to develop its priorities through the Highland Outcome Improvement Plan, while the production of a Community Wealth Building Strategy is also currently under way. The ongoing Local Place Plans initiative will likely identify other local opportunities too. The Council's position on Community Benefits has recently been updated with the approval of a new 'Social Values Charter for Renewables Investment' (June 2024). The charter sets out The Council's expectations from developers wishing to invest in renewables related projects in the Highland area and what the Highland partnership will do to support and enable this contribution, namely:

- embed an approach to community wealth building into Highland;
- maximise economic benefits from our natural environment and resources;
- engage and involve relevant stakeholders to understand how we can continually improve our impact; and,
- unlock economic opportunities for the area.

8.19 The submission includes a Community Wealth Building Plan, that sets out how the applicants' approach on local, regional and Scotland wise community wealth could be delivered. The submitted plan does not indicate definitive commitments from the applicant with regards to this development however the plan details previous commitments from the applicants to note how these could be delivered with regards to the current submission, all to ensure the proposal will result in long-lasting socio-economic benefits for the local community. While the proposal is expected to be consistent with the socio-economic and community wealth building requirements of NPF4, limited weight can be applied to these considerations in this instance given the lack of information submitted in that regard. Nevertheless, the Council's Community Wealth Building Team are aware of the proposal and will conduct their own discussions with the developer directly.

Siting, Design, Landscape and Visual Impacts

8.20 The site mainly comprises former grazing land, which is mapped as being prime agricultural land of Class 3.1. The applicant has submitted a desk based assessment of the land's capability for agriculture based on considerations of the site's general characteristics including topography, climate, susceptibility to flooding events, underlying geology and soil types as provided by available data in the Land Capability Classification for Agriculture (LCA), as well as historic agricultural uses, The conclusion of the study is that the site's LCA is unlikely to reach the threshold of Class 3.2 in reality due to the above characteristics limiting its capacity for crop production. However as the submission concedes, this conclusion is only

'anticipated' and is not substantiated by ground investigations including a soil survey and therefore cannot be wholly accepted. Nevertheless, NPF4 Policy 5 b) states that development on prime agricultural land for the purposes of essential infrastructure and/or renewable energy generation may be supported. Given that BESS facilities are considered generating stations for planning purposes, while the proposal will 'help Scotland mitigate and adapt to climate change' and provide biodiversity enhancement, the proposal can be considered to be consistent with this policy.

8.21 The site has been selected for its relative proximity to the national grid substation to which the facility would be connected by buried cable. The applicants have a grid agreement of up to 45MW where the proposed project will connect to the Alness Substation. A cable route will be subject to further consideration by SSEN and will either be permitted development or subject to a separate application depending on the undertaker and connection method; i.e., underground cabling or overhead line. Being adjacent to the substation improves energy efficiency, minimises the connection cost and materials required. In addition, the site selection process requires to identify an area of land of a suitable size to accommodate the batteries and supporting electrical infrastructure. Additional space for drainage, landscaping and access is also required. The site selection also considers maintaining good distance from dwellings, the closest of which is approximately 210m to the north of the proposed Battery Storage Units, as well as proximity from overhead lines, suitability of ground conditions and any flood risk status. The chosen site uses an existing field access onto the adjacent B9176. Energy storage facilities, where possible, shall also avoid being sited on land allocated for incompatible development types within any Local Development Plan, and which are designated for landscape, heritage, ecological or other environmental protections. This particular site is noted to be located out with any statutory designated areas.

8.22 The proposed development sits on sloped land which declines from the B9176, with the site being setback from the road and being backdropped by woodland in the distance, which helps to screen the development and provide a suitable backcloth to aid visual integration with the existing landscape. Nevertheless, the proposed development is a functional design. The height of containers, power converters and transformers, meter building and security fence will be minimal at around 4 meters. The meter building and steel battery container units would prefabricated and finishes can be agreed with the applicant prior to installation. All of the site tracks are proposed to consist of a gravel stone finish, with the areas of hardstanding surface material to be confirmed at detailed design stage. The finalised colour, finish and materials proposed can be secured by condition.

8.23 The cross-section plans show that the proposed development may be visible from the tourist route B9176. Landscape and visual effects are noted as not significant by the applicants, being limited to the immediate surroundings of the site, with proposed landscaping to mitigate against any identified area of visual sensitivity. It is considered by the Planning Authority that the battery storage enclosures are relatively low in height, with the installed units and surrounding acoustic fencing external colour to be determined at detailed design stage, with the chosen colour to be in relation to the local landscape. The application proposes the creation of new native tree and shrub planting to the north, south and west of the proposed compound to provide visual enclosure to the development. The topographical nature

of the site means the land slopes downwards from the adjacent public road, and it is therefore considered that given the scale of the proposed battery storage infrastructure, in the short term this will be predominantly screened by the proposed acoustic fencing however in the long terms following maturity of the proposed landscaping, any adverse effects would be significantly reduced. It is worth noting by the battery storage infrastructure being located below the B9176, the primary view for road users will be over and beyond the proposed development. The proposed access track will be visible in the short term from passers-by along the public road, however by utilising an existing field opening as well as the provision of anti-glare fencing and the chosen gravel finish, similar to that of rural track common in the wider area, it is considered the degree of visual change is not adversely significant. The submitted Landscape and Visual Impact Assessment concludes that as proposed landscaping matures the Proposed Development would be further integrated within the local landscape with some additional biodiversity opportunities. Overall, the total extent of the landscape and visual effects would be comparatively localised and limited in nature.

8.24 Given there is a consented BESS to be sited immediately to the southeast of the site, a cumulative impact assessment of both BESS developments requires to be undertaken. It is considered that the introduction of the Proposed Development into a scenario where application 22/05167/FUL forms part of the existing baseline would marginally extend the presence of electricity infrastructure southwest of the existing Alness Substation. Accounting for the proposed mitigation measures around both the Proposed Development and screening by existing vegetation it is considered unlikely that the perceptual qualities of the surrounding landscape would be notably affected in the long term, however there will be a loss of agricultural land common to the wider area. In terms of cumulative visual impact, the installation of both BESS developments would result in the proposal being viewed in front of application 22/05167/FUL and would read as one development, particularly when viewed from the B9176. Both developments would be partly screened by the existing landform and respective mitigation measures, and on balance the cumulative visual impact is considered to be limited in the short term and significantly reduced in the long term following planting growth. It should be noted that it is possible that the construction phase of the Proposed Development and application 22/05167/FUL could occur at a similar time which would result in a higher temporary and short-term magnitude of cumulative landscape and visual change.

Natural Heritage

8.25 The information included with the application includes ecological assessments of the development's likely impacts on designated sites, habitats, protected species, and birds. The development is not situated within any sites designated for ecological interests, with the closest designated sites consisting of the Novar Special Protection Area (SPA), situated approximately 900m west of the site and the Alness River Valley Site of Special Scientific Interest (SSSI) which is approximately 300m northeast of the site. While the site is in proximity to the Novar SPA, designated for Capercaillie, the submitted assessments note that there is no such habitat common to the protected bird species (pine forest) within or adjacent to the Application Site. Therefore, this species is unlikely to be present within or close to the Application Site and the habitats within the Application Site are unlikely to be functionally linked to

the SPA as they consist almost entirely of arable land unsuitable for capercaillie, which is agreed. NatureScot guidance distinguishes that breeding female capercaillie can be disturbed at distances up to 100m, and lekking males can be disturbed at distances of 500m-1000m. The provided assessments conclude that the construction works would be at the very outer limits of these distances for lekking males, and given that any leks present within the SPA are going to be deep within the forest rather than on its outer extents, disturbance of any capercaillie is noted to be very unlikely to happen and no mitigation is proposed to reduce this any further as it has been deemed not necessary, which is agreed. Regarding the Alness River Valley SSSI, as the scheme is small in footprint and is located over 300m from the SSSI, impacts are very unlikely to occur because of any construction activities. To further reduce this risk, standard methods to reduce pollution because of dust, contaminants or spills would be instigated during construction. These would be detailed within a Construction Environmental Management Plan (CEMP) for the scheme which will be secured by condition.

Habitats

8.26 The development site consists of predominately cultivated/disturbed arable land, with areas of scrub and grassland also present in bordering areas. The construction of the scheme would result in the loss of arable farmland; however, the proposed landscaping includes native pine/birch woodland, scrub and meadow grassland. This habitat creation would improve the quality and variety of habitats within the application site and would provide habitat for a range of biodiversity. It is concluded that there will be no adverse operational impact on existing habitats, with the landscaping proposed resulting in a positive effect on habitats at site level discussed below.

Trees, Protected Species and Biodiversity

8.27 To the eastern boundary of the proposed Battery Storage Facility is a narrow strip of woodland which is listed in SNHs Inventory of Ancient Woodland as 2a Ancient Woodland of Semi Natural Origin. Beyond this strip of woodland is the recently approved Balnacraig Energy Storage facility (22/05167/FUL). The Arboricultural Impact Assessment submitted in support of the application confirms that there will be no adverse impact on ancient woodland, subject to specified tree protection measures which can be secured by condition. In consultation with the councils Forestry Officer, following requests for landscaping amendments to the initial proposals, with increased scale and density of woodland planting, a more robust screen, with greater biodiversity benefits is proposed. As such, a condition regarding the implementation of the landscape masterplan by a suitably qualified landscape consultant will be secured by condition as requested by Forestry.

8.28 In terms of Protected Species, the submitted Ecological Impact Assessment notes that following the undertaking of both desk surveys and field surveys, there is limited potential for protected species to be present within the application site given its arable cultivation existing woodland situated nearby to the site, there remains the potential for low numbers of bats, red squirrel, pine martens and various bird species to be present. In terms of adverse impact on Protected Species and need for mitigation, the Ecological Impact Assessments summarises that given the distance between the proposed infrastructure and the nearby woodland, approximately 100m,

as well as appropriate lighting arrangements and a lack of suitable habitats within the site due to the poor quality of the arable land, there is not perceived to be any adverse effect on protected species and no further mitigation is required to be secured. Habitats within the Application Site are unlikely to support any notable or protected bird species. There is still a risk that commoner bird species nest may be present within the Application Site during construction. As the construction period would last approximately 12 months it is not possible to avoid working during the bird nesting season, which is typically March to August with some species and seasonal variations. Therefore, immediately prior to clearance of any habitat, a check for nests would require to be undertaken by an appropriately experienced ecologist. If any nests were found, they would be required to remain in situ until the nest is no longer active or the chicks have fledged, with an appropriate buffer of vegetation to be left around the nest, the extent of which would be determined by the ecologist on site. The construction footprint is situated over 100 m from the woodland adjacent to the Application Site, therefore impacts to any birds through disturbance is unlikely and no further mitigation is required. The habitat creation provided from the proposed landscaping is noted to establish a positive effect on birds in the long term.

8.29 In order to comply with NPF4 Policy 3, the application includes provision for biodiversity enhancement, where poor-quality arable land is lost as part of the scheme, and the creation of pine/birch woodland, scrub and meadow grassland, all of which will enhance the Application Site and deliver a net gain for biodiversity. A Biodiversity Impact Assessment utilising the DEFRA Biodiversity Metric is included within the application, and sets out that the finished development will result in biodiversity net gains well in excess of the 10% required by the Council's Biodiversity Enhancement Planning Guidance. The councils Ecology Team has also reviewed the submitted details regarding the provision of Biodiversity Net Gain by the development and accepted the proposals. A condition to secure a Habitat Management Plan (HMP) is recommended, which should be approved by the Council before any development commences to ensure the delivery of biodiversity enhancement.

Built and Cultural Heritage

8.30 The site is not situated within any built heritage designation and there are no scheduled monuments or listed buildings within the boundary of the proposed development. Moultavie House, a category C listed building lies about 1 km northwest of the proposed site. Dalneich Bridge, a B-listed bridge, lies around 600 meters to its north. Millcraig chambered cairn scheduled monument is located 1.6 km east of the site, and Carn Na Croiche chambered cairn scheduled monument is also located 1.9 km northeast of the site. Owing to these separation distances and the limited scale of the proposal, no adverse impacts on the setting of these surrounding built heritage features would occur, with Historic Environment Scotland and the Council's Historic Environment Team not raising any concerns. A programme of work for the survey, evaluation, preservation and recording of any unknown archaeological and historic features affected by the proposed development has however been advised and this can be secured by condition.

Amenity

8.31 There are likely to be some adverse impacts caused by construction traffic and disruption, particularly during the anticipated construction phase when construction materials are being delivered to site and during works to connect the site to the substation.

8. 32 Developers and contractors must comply with reasonable operational practices with regard to construction noise so as not to cause nuisance in any case, as required by Section 60 of the Control of Pollution Act 1974, which is regulated by Environmental Health. Working hours on the construction site would usually be restricted to be 07.00 – 19.00 Monday to Friday, 08.00 – 13.00 on Saturday with no Sunday of Bank Holiday working. Construction activities that do not generate impacts beyond the site boundary are permissible outwith these hours. If the applicant intends to undertake noisy work out-with the aforementioned times, as advised by Environmental Health, the applicant will be required to submit a detailed construction noise assessment for the written approval of the Planning Authority.

8.33 The BESS facility employs inverters, switchgear, transformers and batteries, with the battery storage containers also fitted with air cooling units at low level on the sides of each container. As such, the operation of the facility will create a degree of noise with potential to impact residential amenity. The closest residential property, Mid Balnacraig, is located approximately 170m away and the applicant has provided an Acoustic Impact Assessment.

8.34 Environmental Health have reviewed the submitted noise assessment and advised that a noise survey of the existing and ambient background level has been undertaken at three noise sensitive properties (NSP). The outcome is that the predicted rating noise level from the development will be below the background noise level at each of the NSP. The submitted assessment concludes that the predicted noise impact from the proposed development for both daytime and night-time noise will be low to negligible. However, as another BESS development at Balnacraig has already been granted planning permission, 22/05167/FUL, Environmental Health advise that the cumulative noise from both developments requires to be considered. The consented Balnacraig BESS has an operational noise limit of a Rating level of 29 dB at the nearest NSP, whereas this application states that the operation of the proposed development would increase the noise levels by approximately 2dB. This would result in the cumulative rating level from both developments exceeding the night-time background level by 2dB at the NSP. Any increase above the background noise level, caused by the cumulative noise from both developments, indicates that there could be adverse impact depending on context. However, Environmental Health have noted that the provided Acoustic Impact Assessment has taken a conservative approach and has assumed the plant equipment will be operating at maximum output. In reality, Environmental Health advise that it is unlikely that the plant equipment will require to operate at maximum capacity, particularly at night when the temperatures are lower, so actual operating noise levels are expected to be less. In view of this Environmental Health have no objections subject to conditions.

8.35 In terms of dust arising from construction and operational activities, given the close location of the development site, there is noted to be potential for dust from the construction of the access track and any earth works, to adversely impact on neighbouring residential properties. Therefore, the applicant will require to submit a scheme of mitigation for construction dust, which is secured by condition. Lighting is provided for occasional operational and maintenance use in the hours of darkness. The lights are to be manually switched rather than automated. These lights will be directed/shielded to prevent glare and light spill onto public highways and nearby woodland. The operation and maintenance activities shall normally be limited to the hours of daylight to minimise use of artificial lighting. Lighting is only used for operational and maintenance activities.

Health and Safety

8.35 The submission includes a project-specific Fire Statement that sets out how the risk of fire will be managed on and off site. The document describes the roles and responsibilities for implementing the plan along with the specific design specifications of the BESS facility along with procedures to minimise the risk of fire, fire containment and firefighting. Each battery unit will have a dedicated fire and explosion protection system, comprising flammable gas detection and venting, fire detection and alarm, and an automatic fire suppression system. Additionally, key battery health and environment parameters will be continuously monitored with alarms sent to a control centre. The provided Fire Risk Statement also states that automatic electrical disconnection will be enacted by the Battery Management System should operational temperature, current or voltage limits be breached. There will be multiple levels of alarms prior to protection limits which warn the operator of proximity to safe operating limits. The site is also designed to include adequate spacing between the battery storage enclosure (BSE) to mitigate against the risk of fire spread in the event of a fire within one BSE. The layout shall allow minimum distance of 3m between batteries enclosures and any other infrastructure, aligning with applicable associated standards. Additional site security measures such as fencing and CCTV will also be in place to reduce the risk of fire sabotage and vandalism.

8.36 The location of the facility is noted to have been selected considering the distances from existing nearby premises. Although the submitted Fire Risk Statement establishes the nearest premises to be slightly further away than Planning Assessments would indicate, at a distance of approximately 210m, in addition to battery storage enclosures being setback from the perimeter fencing, and the land immediately surrounding this is allocated to earthworks, it is considered there is sufficient mitigation by site location to further offset any future fire risk receptors.

8.37 Following a review of the submitted Fire Risk Statement, clarification was sought on how polluted fire water would be captured through the site's drainage system, tested and disposed of, to ensure it will not enter the water environment and will be disposed of in an environmentally responsible manner. As such, a Fire Risk Management Statement has been further provided which details that as shown on the infrastructure layout drawing the compound surface material is to be confirmed during the detailed design phase of the project. A proposed solution to capture the firewater is detailed as the use of a high void ratio stone. This proposes a high void

ratio stone would be sealed within the compound area via the use of an impermeable membrane and a cut-off valve installed in the drainage network upstream of the attenuation basin. The valve would be left open to enable the site to drain during normal use and then closed prior to the application of fire water to capture run-off. The resulting stored water would then be tested and disposed of off-site. The applicant has also stated that during development of the detailed design and liaison with the local Fire and Rescue Service, it was determined that fire water would be used for cooling of battery enclosures (rather than simply boundary cooling to prevent spread), an appropriate bunding solution would be included within the design to ensure potentially polluted fire water is captured in the site drainage system. Although the supporting information suggests the aforementioned approach as a possible solution if required, given the capture and disposing of firewater is a key planning matter in order to prevent a future environmental pollution event, a condition is attached to secure full details prior to commencement of development.

8.38 Fully implementable Fire Management and Emergency Response Plans should be ready prior to the delivery of battery equipment to the site, which should be secured by condition. With these plans and procedures in place, the applicant has demonstrated that the proposal's significantly adverse impact on human health, safety, and the environment in the highly unlikely event of a battery fire have been duly considered and mitigated against. As such, the proposal complies with NPF4 Policy 23 for Health and Safety. It should be noted however that both plans will be working documents that will require updating from time to time in accordance with best practice and to take account of equipment and conditions on site. The regulation of fire safety, health, and other safety and environmental matters are not, however, matters for the planning service to regulate. Consequently, the ongoing currency of these documents will be the responsibility of the operator in consultation with the relevant agencies including the Scottish Fire and Rescue Service without the involvement of the Planning Authority.

8.39 With regards to Emergency Access, the fenced BESS compound has a wide access route allowing the fire service to access the site during an incident. In addition, two site access points have been proposed to ensure that fire services would have an alternative option for approaching site if the combination of wind direction and smoke made one direction particularly onerous. Turning locations are also available for emergency response vehicles within the site hardstanding's.

8.40 Given the fire risks associated with lithium battery facilities, the Council has consulted the Scottish Fire and Rescue Service (SFRS) who have not responded to the proposal at the time of this report's completion. We are aware that SRFS has indicated that it will not be responding to individual planning applications. At this present time, there is no formalised guidance available from SFRS on BESS site developments. In the absence of a national approach no regional office comment can be provided, however, general advice from NFCC has been passed on to help inform the Planning Authority's consideration of the application. This guidance suggests that consideration be given to the prevailing winds and emergency access, containment of contaminated water run-off from potential firefighting operations, and details to demonstrate the sources of water supplies for this development in the event of fire. This information would be required to be set out within a fire safety plan which can be secured via condition. This proposal is considered to be in general

accordance with the NFCC guidance. A condition is suggested to secure details of the final layout of the proposal, which will be required to reflect best practice in that regard.

Transport and Access

8.41 The application proposes to utilise an existing field access of the B9176 Struie Road, presently serving the site for the use of agricultural vehicles. The proposed access location serving the development is situated approximately 240m south of the existing substation access. Visibility splays of 215m with a 2.4m setback are proposed to be established, with the new access consisting of an asphalt apron for 10m setback from the public road with the remainder of the track finished in stone. The access junction with the B9176 splits in two, allowing access to the site itself to come from either the north or southern sides in the event of emergency, in line with the NFCC guidance. In consultation with the councils Transport Planning team, the route of the access track has been adjusted, now taking a more direct route to site, with anti-glare fencing added to the northern edge of the access track. The altered track route and anti-glare fencing will reduce the potential for traffic on the B9176 Struie road to interpret vehicles on the access track as oncoming traffic, all of which aids road safety.

8.42 There will be a higher level of traffic during construction along the road network. Construction will involve taking construction machinery to site, delivery of aggregate for the site track, delivery of site components including the battery containers and other equipment and materials, a mixture of light commercial and HGV loads. All construction traffic has been confirmed to follow A9 – B9176 to access the site. All parking, loading and unloading during the construction will be undertaken within the development site which is welcomed. Parking for maintenance vehicles when the facility is in operation is noted to be accommodated on site and will be secured by condition.

8.43 A Construction Traffic Management Plan (CTMP) is also to be conditioned to ensure that construction and ongoing operational access is effectively managed and controlled. The CTMP shall include measures to assuring the traffic will not obstruct the school bus operation, and methods to manage abnormal loads. Conditions will also be attached regarding the routes of abnormal loads to be agreed with all relevant parties, with the provision of additional signing or temporary traffic control measures to be undertaken by a recognised QA traffic management consultant. Traffic levels once the site is operational will be low. Transport Planning and Transport Scotland have no objections subject to conditions.

Flood Risk and Drainage

8.44 SEPAs online flood mapping denotes that the application site is outwith any area recognised as at risk of fluvial or coastal flooding, however an area of pluvial flooding is noted to be adjacent to and within the site during a 1 in 200year +Climate change storm event. This suggests that the site may be at medium to high flood risk from this source. Following initial concerns from the councils Flood Team regarding this flood source, the provision of further information notes that any pluvial flooding will be unlikely to interact with the post development site in a significant way, which is accepted by FRM. In terms of drainage, the submitted Drainage Impact Assessment

demonstrates that a surface water drainage strategy supported by a SUDS Basin is appropriate. The Applicant would collect land drainage from above the site and deposit it alongside attenuated surface water and then discharge to an area below the site. In principle, the pre-development water would be returned to the ground in a similar fashion to how it was encountered by the development. Appropriate maintenance information has been provided with regards to the drainage arrangements, all of which has been accepted by the councils Flood Team, with the advice that any existing field drains encountered during construction should be reconnected to avoid the creation of new surface water flow near the site. It is worth noting that following final amendments to the application to reflect access arrangements, the Flood Team are still content with the proposed arrangements, however they did advise that the new pipe/ culvert to convey the proposed land drainage under the new access route shall be a single, oversized pipe, to minimise the chance of blockage.

Public Access

8.45 In consultation with the councils Access Officer, although the development is sited immediately north of the previously consented 22/05167/FUL, this application utilises a different entry point and access road to the adjacent scheme and has no existing public access on the site given it was cultivated field rather than scrubland. Therefore, given there is no designated core paths or public access roads through the site, it is considered that the proposal will not adversely affect public access.

Decommissioning and Reinstatement

8.46 It is understood that BESS facilities have a limited operational lifetime, generally within the region of 50 years. While there is no suggestion to limit the lifetime of this development by condition, it is appropriate as well as required under NPF4 Policy 11 e) and HwLDP Policy 67 to condition an outline Decommissioning and Reinstatement Plan (DRP) prior to the commencement of development on site. The DRP shall inform measures to safeguard and guarantee finances, prior to the commencement of development, to effectively implement the DRP in the event the operator or owner is no longer solvent, which should also be secure by condition. The strategy and financial safeguard would also require to be reviewed at regular intervals.

Extension of Permission

Other material considerations

8.48 There are no other material considerations.

Matters to be secured by Legal Agreement / Upfront Payment

8.49 In order to mitigate the impact of the development on infrastructure and services the following matters require to be secured prior to planning permission being issued:

a) None

9. CONCLUSION

9.1 The proposed development has the potential to play a role in addressing supply and demand peaks and troughs within the electricity transmission network by virtue of storing excess energy produced by generating stations, including from renewable sources. In that way, the proposal is considered to contribute to national climate change and carbon net-zero targets. It is a technology that has strong support within National Planning Framework 4 Policy 11 Energy. Following the submission of additional information and amendments made to the proposal, including securing: further landscape mitigation, appropriate access arrangements, and fire risk mitigation it is considered that the proposed development is acceptable and will not be significantly detrimental overall. Although industrial in appearance, the proposal would be well sited, set back from the roadside and residential properties. In time it would also be relatively well screened, with the landscape and visual impact of the development being suitably mitigated.

9.2 All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

10. IMPLICATIONS

10.1 Resource: Not applicable

10.2 Legal: Not applicable

10.3 Community (Equality, Poverty and Rural): Not applicable

10.4 Climate Change/Carbon Clever: Not applicable

10.5 Risk: Not applicable

10.6 Gaelic: Not applicable

11. RECOMMENDATION

Action required before decision issued	N
Notification to Scottish Ministers	N
Conclusion of Section 75 Obligation	N
Revocation of previous permission	N

Subject to the above actions, it is recommended to **GRANT** the application subject to the following conditions and reasons:

1. **TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION**

The Highland Council hereby makes the following Direction under Section 58(2) of the Town and Country Planning (Scotland) Act 1997 (as amended).

The development to which this planning permission relates must commence within 5 YEARS of the date of this decision notice. If development has not commenced within this period, then this planning permission shall lapse.

Reason: In accordance with Section 58 of the Town and Country Planning (Scotland) Act 1997 (as amended).

2. **Accordance with the Provisions of the Application**

(1) Permission is hereby granted for the erection and operation of a Battery Energy Storage System (BESS) facility, with the following elements approved under this permission:

- Up to 64 battery storage units up to 3m in height each;
- Up to 2 Substations
- Power converters and transformers;
- Control building housing switching and electrical gear;
- Storage Buildings
- Fencing;
- CCTV;
- Landscaping and biodiversity enhancement;
- Area of hardstanding;
- Parking for maintenance vehicles;
- Access Junction with public road and access tracks.
- Water tank and pumphouse; and
- SuDS.

(2) Prior to the final commissioning of the development hereby approved, all elements of the development that relate to Part (1) above, and as approved in writing by the Planning Authority under Condition 3 below, along with site drainage and flood mitigation infrastructure, site security measures, and fire safety measures including the means of containment of fire suppressant materials shall be constructed and installed in full, made available for use, and thereafter maintained for this use for the lifetime of the development.

(3) In the event of the Development not storing and supplying electricity on a commercial basis to the grid network for a continuous period of 12 months from 50% or more batteries installed and commissioned from time to time, the Company shall immediately notify the Planning Authority in writing of that situation and shall, if the Planning Authority direct in writing, decommission the development and reinstate the site to the specification and satisfaction of the Planning Authority in accordance with an approved Decommissioning, Restoration, and Aftercare Plan, which shall be based on the principles of the Decommissioning, Restoration, and Aftercare Strategy approved under

Condition 4 of this permission and updated according with the relevant guidance and best practice at the time. The Planning Authority shall have due regard to the circumstances surrounding the failure to store electricity.

(4) At the time of the development's decommissioning, the development shall be decommissioned, the site restored, and aftercare undertaken in accordance with the approved Decommissioning, Restoration, and Aftercare Plan.

Reason: In order to clarify the terms of the planning permission and ensure the development proceeds as approved. To secure the decommissioning and removal of the development in an appropriate and environmentally responsible manner along with the restoration of the site in the interests of safety, amenity, and environmental protection.

3. **Final Layout, Design, and Specifications**

(1) No development shall commence unless and until full siting and design details of the development including all proposed battery cabinets, buildings, and ancillary infrastructure hereby permitted, have been submitted to, and approved in writing by, the Planning Authority. These details shall include:

a. the make, model, design, power rating, sound power level of the batteries, the dimensions of the battery storage cabinets and ancillary infrastructure, control building, storage and office facilities to be installed, and show separation distances between battery storage units which shall comply with the prevailing fire safety legislation and best practice guidelines at the time of installation; and,
b. the external colour and/or finish of the storage containers, buildings, and ancillary infrastructure on site, which shall have a dark-neutral, non-reflective, semi-matte finish.

(2) No element of the development shall have any text, sign or logo displayed on any external surface, save those required by law under other legislation.

(3) Thereafter, the storage cabinets, buildings, and ancillary infrastructure shall be installed and operated in accordance with these approved details and, with reference to part (b) above, the storage containers, buildings, and ancillary infrastructure shall be maintained in the approved colour, free from rust, staining or discolouration until such time as the development is decommissioned.

All cables between the storage containers, buildings, and ancillary infrastructure shall be installed and kept underground.

Reason: To ensure the Planning Authority is aware of the development details and to protect the visual amenity of the area.

4. **Decommissioning, Restoration, and Aftercare**

(1) No development shall commence unless and until a Decommissioning, Restoration, and Aftercare Strategy has been submitted to, and approved in writing by, the Planning Authority. The strategy shall outline measures for the decommissioning of the development along with the restoration and aftercare of the site, and shall include proposals for the removal of individual components of the development as well as the development as a whole as well as the treatment of ground surfaces, and, the management and timing of the works and environmental management provisions which shall include, but not be limited to, the following:

a) site waste management plan (dealing with all aspects of waste produced during the decommissioning, restoration and aftercare phases);
b) details of measures to be taken to prevent loose or deleterious material being deposited on the local road network, including wheel cleaning and lorry sheeting facilities, and measures to clean the site entrances and the adjacent local road network;
c) a pollution prevention and control method statement, including arrangements for the storage and management of oil and fuel on the site;
d) details of measures for soil storage and management;
e) a surface water and groundwater management and treatment plan, including details of the separation of clean and dirty water drains, and location of settlement lagoons for silt laden water;
f) temporary site illumination;
g) management and timing of the works; and
h) a traffic management plan to address any traffic impact issues during the decommissioning period.

Reason: To ensure the decommissioning and removal of the development, along with the site's restoration in an appropriate and environmentally responsible manner in the interests of safety, amenity, and environmental protection.

5. **Financial Guarantee**

No development shall commence until:

(1) Full details of a guarantee, bond or other financial provision to be put in place to cover all of the decommissioning and site restoration measures outlined in the Decommissioning and Restoration Plan approved under Condition 4 of this permission have been submitted to, and approved in writing by, the Planning Authority. For the avoidance of doubt the bond must be able to be called upon by The Highland Council and be enforceable against the operator and landowner and/ or leaseholder; and

(2) Confirmation in writing by a suitably qualified independent professional that the amount of financial provision proposed under part (1) above is sufficient to meet the full estimated costs of all decommissioning, dismantling, removal, disposal / recycling, site restoration, remediation and incidental work, as well as associated professional costs, has been submitted to, and approved in writing by, the Planning Authority; and

(3) Documentary evidence that the guarantee, bond or other financial provision approved under parts (1) and (2) above is in place has been submitted to, and confirmation in writing that the financial provision is satisfactory has been issued by, the Planning Authority.

(4) Thereafter, the Operator, and Leaseholder and/or Landowner, shall:
   a) Ensure that the guarantee, bond or other financial provision is maintained throughout the duration of this permission; and
   b) Pay for the guarantee, bond or other financial provision to be subject to a review five years after the commencement of development and every five years thereafter until such time as the development is decommissioned and the site restored.

(5) Each review shall be:
   a) conducted by a suitably qualified independent professional; and
   b) published within three months of each five year period ending, with a copy submitted upon its publication to both the landowner(s) and the Planning Authority; and
   c) approved in writing by the Planning Authority without amendment or, as the case may be, approved in writing by the Planning Authority following amendment to their reasonable satisfaction.

Where a review approved under part (c) above recommends that the amount of the guarantee, bond or other financial provision should be altered (be that an increase or decrease) or the framework governing the bond or other financial provision requires to be amended, the Operator, and Leaseholder and/or Landowner shall do so within one month of receiving that written approval, or another timescale as may be agreed in writing by the Planning Authority, and in accordance with the recommendations contained therein.

Reason: To ensure that there are sufficient funds to secure the implementation of the Decommissioning, Restoration, and Aftercare Plan at the time of the development's decommissioning.

6. **Drainage**

No development shall commence until details of the final drainage design have been submitted to, and approved in writing by, the Planning Authority, which shall include measures for the testing of a spent fire suppressant water and where necessary its containment and disposal, as well as calculations to demonstrate that all storm events up to the 1 in 200 year plus climate change storm event shall be managed from within the application site boundary. Thereafter, the development shall be constructed in accordance with the approved details, which shall be made available for use prior to the development's first occupation and maintained in perpetuity.

Reason: In order to ensure the site is adequately drained in accordance with the principles of Sustainable Urban Drainage Systems.

7. **External Lighting**

No development shall commence until full details of any external lighting to be used within the site and/or along its boundaries and/or access have been submitted to, and approved in writing by, the Planning Authority. Such details shall include full details of the location, type, angle of direction and wattage of each light which shall be so positioned and angled to prevent any direct illumination, glare or light spillage outwith the site boundary. Thereafter only the approved details shall be implemented.

Reason: In the interests of visual amenity, to prevent permanent lighting and minimise light pollution and to ensure the development does not have an adverse impact on residents and nocturnal animals.

8. **Construction Noise and Vibration**

Prior to construction commencing the applicant shall submit, for the written approval of the planning authority, a construction noise/vibration mitigation scheme which demonstrates how the applicant/contractor will ensure the best practicable measures are implemented in order to reduce the impact of construction noise and vibration. The assessment should include but is not limited to the following: -

- A description of the most significant noise sources in terms of equipment; Flare 196391/ZS02208 processes or phases of construction.
- The proposed operating hours and the estimated duration of the works for each phase.
- A detailed plan showing the location of noise sources, noise sensitive premises and any survey measurement locations (if required).
- A description of noise mitigation methods that will be put in place including any proposals for community liaison. The best practice found in BS5228 Code of practice for noise and vibration control on construction and open sites should be followed. Any divergence requires to be justified.

Thereafter the development shall progress in accordance with the approved Noise and Vibration Mitigation Scheme and all approved mitigation measures shall be in place prior to construction commencing or as otherwise may be agreed in writing by the Planning Authority.

Reason: In order to safeguard the amenity of neighbouring properties and occupants.

9. **Dust Mitigation**

Prior to the development commencing, the applicant shall submit, for the written approval of the planning authority, details of a dust mitigation scheme designed to protect neighbouring properties from dust arising from the construction of this development. Thereafter the development shall progress in accordance with the approved dust suppression scheme and all approved mitigation measures shall be in place prior to the commencement of operations or as otherwise may be agreed in writing by the Planning Authority.

Reason: In order to safeguard the amenity of neighbouring properties and occupants.

10. **Landscaping**

No development, site excavation or groundwork shall commence until a suitably qualified Landscape Consultant has been appointed by the developer. Their appointment and remit shall first be approved in writing by the Planning Authority. For the avoidance of doubt, all landscaping works approved under the Landscape Masterplan shall be undertaken under the supervision of the landscape consultant who shall be employed at the developer's expense. The Landscape Consultant shall be appointed as a minimum for the period from the commencement of the development until the completion of the approved landscaping work and their remit shall include:

(a) Ensuring that the approved Landscape Masterplan (ref. P23-1582_EN_002 REV E) is implemented to the agreed standard; and

(b) The preparation of Certificates of Compliance for each stage of work involved in the development, which shall be submitted to the Planning Authority upon completion of the stage to which they relate. Prior to the commencement of development, site excavation or groundwork commencing, details of each stage of work (including a general description of the type and extent of work to be carried out within that stage) shall be submitted to, and approved in writing by the Planning Authority.

All other tree/shrub planting and landscape works shall be completed to the satisfaction of the Planning Authority prior to first commissioning of the energy storage facility.

Reason: To secure the successful implementation and future maintenance of the approved Landscape Plan.

11. Other than the construction of the site access, no other development shall commence until the perimeter deer fence has been installed to the satisfaction of the Planning Authority.

Reason: In the interests of deer management.

12. **Tree Protection**

No development, site excavation or groundwork shall commence until all retained trees have been protected against construction damage using protective barriers located beyond the Root Protection Area (in accordance with BS5837:2012 Trees in Relation to Design, Demolition & Construction, or any superseding guidance prevailing at that time). These barriers shall remain in place throughout the construction period and must not be moved or removed during the construction period without the prior written approval of the Planning Authority.

Reason: To secure the protection of trees.

13. **Archaeology**

No works in connection with the development hereby approved shall commence unless an archaeological Written Scheme of Investigation (WSI) has been submitted to and approved in writing by the planning authority and a programme of archaeological works has been carried out in accordance with the approved WSI. The WSI shall include details of how the recording and recovery of archaeological resources found within the application site shall be undertaken, and how any updates, if required, to the written scheme of investigation will be provided throughout the implementation of the programme of archaeological works. Should the archaeological works reveal the need for post excavation analysis the development hereby approved shall not be occupied or brought into use unless a Post-Excavation Research Design (PERD) for the analysis, publication and dissemination of results and archive deposition has been submitted to and approved in writing by the planning authority. The PERD shall be carried out in complete accordance with the approved details.

Reason: In order to protect the archaeological and historic interest of the site.

14. **Abnormal Loads**

Prior to commencement of deliveries to site, the proposed route for any abnormal loads on the trunk road and local road networks must be submitted to and approved by the Planning Authority, in consultation with The Roads Authority.

Reason: To ensure that the transportation of abnormal loads will not have any detrimental effect on the trunk road and local road networks.

15. **Trunk Road Movements**

Prior to the movement of any components and/or construction materials, any additional signing or temporary traffic control measures deemed necessary due to the size or length of any loads being transported must be undertaken by a recognised QA traffic management consultant, to be approved by Transport Scotland.

Reason: To ensure that the transportation of abnormal loads will not have any detrimental effect on the trunk road network.

16. **Access**

No development shall commence until full details including fully dimensioned and annotated plans of the site access junction with the B9176 public road have been submitted to, and approved in writing by, the Planning Authority, showing (but not limited to):

i. carriageway and verge widths;

ii. the location of gates (which shall have a minimum of 15 metres set back from the carriage way and open away from the public road) and bell mouths;

iii. any amendments to the public road drainage arrangements; and,

iv. visibility splays of 2.4m x 215m (the X dimension and Y dimension respectively) in each direction formed from the centre line of the junction, which at no time

shall anything obscure visibility between a driver's eye height of 1.05m positioned at the X dimension and an object height of 0.60m anywhere along the Y dimension.

Thereafter, the visibility splays shall be implemented prior to any other development commencing on site and the approved access arrangements shall be completed in full and made available for use prior to the first occupation of the development and maintained for this use in perpetuity.

Reason: To ensure that an adequate level of access is timeously provided for the development; in the interests of road safety and in order to comply with applicable standards.

17 **Noise**

(1) The development shall proceed in strict accordance with the approved Noise Impact Assessment. Mitigation measures identified in the assessment shall be in place prior to the commencement of operation and thereafter maintained in perpetuity.

(2) In the event that there are any changes to the equipment or noise mitigation measures that could result in the development resulting in increased noise levels prior to the development becoming operational, a revised noise impact assessment shall be submitted to, and approved in writing by, the Planning Authority. Thereafter the development shall proceed in accordance with the approved revised assessment

(3) Any noise originating from the operation of the development when measured and/or calculated as an LZeq, 5min, in the 100Hz one third octave frequency band, shall not exceed 30 dB, when measured and/or calculated as at the curtilage of any noise-sensitive premises.

(5) The Night Time Rating Level of noise arising from this development as determined in accordance with BS4142 ‘Methods for Rating and Assessing Industrial and Commercial Sound’ shall not exceed 23dB(A) at the curtilage of any noise-sensitive receptor unless the measured background level is higher.

(6) All plant, machinery and equipment associated with the development shall be so installed, maintained and operated such that any associated operating noise does not exceed NR20 when measured or calculated within any noise-sensitive premises with windows open for ventilation purposes throughout the lifetime of the development.

For the purposes of this condition, “noise-sensitive premises” includes, but is not necessarily limited to, any building, structure or other development the lawful use of which a) falls within Classes 7 (Hotels & Hostels), 8 (Residential Institutions), or 9 (Houses) of The Town and Country Planning (Use Classes) (Scotland) Order 1997 (as amended), or b) is as a flat or static residential caravan.

Reason: In order to safeguard the amenity of neighbouring properties and occupants.

18. **Compliance with Noise Limitation**

Within 21 days from receipt of a written request of the Planning Authority, following a complaint to it alleging noise disturbance at a noise sensitive location, the site operator shall, at its expense, employ an independent consultant to assess the level of noise in terms of compliance with consented noise limits.

The site operator shall submit the report of the independent consultant's assessment for the approval of the Planning Authority within 2 months of receiving the written request.

If the noise level exceeds the prescribed noise limits, the assessment report shall include a scheme of mitigation to be enacted, including timescales for implementation, to ensure compliance with consented noise limits.
Details of the proposed compliance monitoring must be agreed in writing beforehand with the Council's Environmental Health Service.

Reason: In order to safeguard the amenity of neighbouring properties and occupants.

19. **Construction Traffic Management Plan (CTMP)**

(1) No development shall commence on site until a finalised Construction Traffic Management Plan has been submitted to, and approved in writing by, The Council in consultation with Transport Scotland. The construction traffic management plan shall be based on the Outline CTMP and shall include:

a) Identification of the routes to site for general construction traffic and details of the number and type of vehicle movements anticipated on these routes during the construction period;

b) Scheduling and timing of movements, avoiding local school peak travel times, and any large public event taking place in the local area which would be unduly affected or disrupted by construction vehicles using the public road network;

c) Traffic management measures on the routes to site for construction traffic including details of traffic management proposals to prevent HGVs meeting on the private access to the site or at its junction with the public road. In addition, measures such as temporary speed limits, suitable temporary signage, road markings and the use of speed activated signs and banksman/escort details should be considered. During the delivery period of construction materials any additional signing or temporary traffic control measures deemed necessary due to the size or length of any loads being delivered or removed must be undertaken by a recognised Quality Assured traffic management consultant, to be approved by the Local Roads Authority before delivery commences;

d) Measures to mitigate the impact of general construction traffic on the routes to site following detailed assessment of the relevant roads;

e) A procedure for condition surveys of the site access and construction traffic routes along with the regular monitoring of road conditions and the implementation of any remedial works required during the construction period;

f) Measures to ensure that all affected public roads are kept free of mud and debris arising from the development;

g) Provisions for emergency vehicle access;

h) A timetable for implementation of the measures detailed in the CTMP; and

i) Identification of a nominated person to whom any road safety issues can be referred and measures for keeping the Community Council informed and dealing with queries and any complaints regarding construction traffic.

(2) In the event that Abnormal Indivisible Loads (AIL) are required, prior to the delivery of any AIL to the site, the CTMP shall be updated to include the proposed route for any AIL on the public road network along with any accommodation measures required, including the removal of street furniture, junction widening, and traffic management measures.

Thereafter the approved CTMP shall be implemented in full prior to development commencing and remain in place until the development is complete.

Reason: In the interest of road safety and to mitigate any impacts of construction traffic and the delivery of abnormal loads on the public road network.

20. **Construction Environment Management Plan (CEMP)**

No development shall commence until a Construction Environment Management Document (CEMD) has been submitted to and approved in writing by the Planning Authority. Thereafter the construction of the development shall only be carried out in accordance with the approved CEMD, subject to any variations approved in writing by the Planning Authority. The CEMD shall include:

a) details of the phasing of construction works;
b) details of any temporary site construction compound including temporary structures/buildings, fencing, parking and storage provision to be used in connection with the construction of the development;
c) details and implementation and a timetable for post construction restoration/reinstatement of the temporary working areas, and the construction compound;
d) details of the method of construction and erection of the structures and any underbuilding/platforms;
e) details of pollution control: protection of the water environment, bunding of fuel storage areas, surface water drainage, sewage disposal and discharge of foul drainage;
f) details of temporary site illumination during the construction period;
g) details of timing of works;
h) details of surface treatments and the construction of all hard surfaces and access tracks between each element of the proposed development This shall include details of the tracks in a dark, non-reflective finish with details of the chemical properties of any and all imported stone provided;
i) details of routeing of onsite cabling;
j) details of emergency procedures and pollution response plans;
k) siting and details of wheel washing facilities;
l) cleaning of site entrances, site tracks and the adjacent public highway and the sheeting of all HGVs taking spoil or construction materials to/from the site to prevent spillage or deposit of any materials on the highway;
m) details of working practices for protecting nearby residential dwellings, including general measures to control noise and vibration arising from on-site activities, to be adopted as set out in British Standard 5228 Part 1: 2009;
n) a Species Protection Plan;
o) details of areas on the site designated for the storage, loading, off-loading, parking and manoeuvring of heavy duty plant, equipment and vehicles; and,

p) details of how the best practicable measures will be implemented to reduce the impact of construction noise at noise sensitive locations.

Reason: To ensure that construction works are undertaken in accordance with the applicable standards in the interests of environmental protection, amenity and safety.

21. **Fire Risk Management and Emergency Response Procedures**

Prior to the first commissioning of the development hereby approved the following documents shall be submitted to, and approved in writing by, the Planning Authority in consultation with the Scottish Fire and Rescue Service:

i. a complete and fully implementable Fire Risk Management Plan; and,
ii. a complete and fully implementable Fire Emergency Response Plan.

The developer shall thereafter undertake any review and amendment to both documents as may be required from time to time, in consultation with the relevant agencies.

Reason: In order to provide the Planning Authority sight of onsite management practices and procedures as they relate to fire risk management and fire emergency response, and to ensure the ongoing currency of both plans in the interests of human health, safety, amenity, and environmental protection.

22. **Water Supply**

No development shall commence until full details of the water supply to serve the development for the suppression of fire have been submitted to, and approved in writing by, the Planning Authority. These details shall demonstrate:

a) confirmation from Scottish Water that sufficient capacity is reserved at its water treatment plant to serve the development;

Or,

b) that the development can be sufficiently served by a private water supply through an appraisal specifying the means by which a water supply shall be provided and thereafter maintained to the development. This appraisal, which shall be carried out by an appropriately qualified person(s), shall demonstrate that the sufficiency of any other supply in the vicinity of the development, or any other person utilising the same source or supply, will not be compromised by the proposed development. The development itself shall not be occupied until the supply has been installed in accordance with the approved specification.

Reason: To ensure that an adequate water supply can be provided to meet the requirements of the proposed development and, where relevant, without compromising the interests of other users of the same or nearby private water supplies.

23. **Record Keeping**

The Operator shall, at all times after the first commissioning of the development, record information regarding the details of power stored and generated, inclusive of dates and times of any failures, and retain the information in perpetuity. The information shall be made available to the Planning Authority within one month of any request by them.

Reason: To ensure adequate record keeping.

24. **Habitat Management Plan**

(1) No Development shall commence unless and until a Habitat Management Plan (HMP) has been submitted to, and approved in writing by, the Planning Authority. The HMP shall set out the proposed habitat management of the site including full details of biodiversity enhancement measures.

(2) The HMP shall provide for the maintenance, monitoring, and reporting of the habitat within the HMP area.

(3) The HMP shall include provision for regular monitoring and review to be undertaken against the HMP objectives and measures for securing amendments or additions to the HMP in the event that the HMP objectives are not being met.

(4) Unless and until otherwise agreed in advance in writing with the Planning Authority, the approved HMP (as amended from time to time with written approval of the Planning Authority) shall be implemented within 12 months of following ground works commencing on site and shall remain in place for a minimum of 30 years.

(5) GIS shapefiles of HMP areas shall be supplied with the HMP to the Planning Authority prior to the commencement of works.

Reason: To detail how all mitigation, compensation and enhancement measures of biodiversity for the site will be delivered.

25. **Socio-Economic Benefit**

Prior to the Commencement of Development, a Local Employment Scheme for the construction of the development shall be submitted to and agreed in writing by the Planning Authority. The submitted Scheme shall make reference to the supporting statement 'Note on Community Wealth Building, Resilience, and Safety' (not dated, received 05 October 2024)

The Scheme shall include the following:

a) details of how the initial staff/employment opportunities at the development will be advertised and how liaison with the Council and other local bodies will take place in relation to maximising the access of the local workforce to information about employment opportunities;

b) details of how sustainable training opportunities will be provided for those recruited to fulfil staff/employment requirements including the provision of apprenticeships or an agreed alternative;

c) a procedure setting out criteria for employment, and for matching of candidates to the vacancies;

d) measures to be taken to offer and provide college and/or work placement opportunities at the development to students within the locality;

e) details of the promotion of the Local Employment Scheme and liaison with contractors engaged in the construction of the development to ensure that they also apply the Local Employment Scheme so far as practicable having due regard to the need and availability for specialist skills and trades and the programme for constructing the development;
f) a procedure for monitoring the Local Employment Scheme and reporting the results of such monitoring to the Council; and
g) a timetable for the implementation of the Local Employment Scheme.

Thereafter, the development shall be implemented in accordance with the approved scheme.

Reason: In order to ensure compliance with NPF4 Policy 11c) and to maximise the local socio-economic benefits of the development to the wider community. To make provision for publicity and details relating to any local employment opportunities.

REASON FOR DECISION

All relevant matters have been taken into account when appraising this application. It is considered that, subject to the conditions suggested below, the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

INFORMATIVES

Initiation and Completion Notices
The Town and Country Planning (Scotland) Act 1997 (as amended) requires all developers to submit notices to the Planning Authority prior to, and upon completion of, development. These are in addition to any other similar requirements (such as Building Warrant completion notices) and failure to comply represents a breach of planning control and may result in formal enforcement action.

1. The developer must submit a Notice of Initiation of Development in accordance with Section 27A of the Act to the Planning Authority prior to work commencing on site.

2. On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Act to the Planning Authority.

Copies of the notices referred to are attached to this decision notice for your convenience.

Flood Risk
It is important to note that the granting of planning permission does not imply there is an unconditional absence of flood risk relating to (or emanating from) the application site. The granting of planning permission does not remove the liability position of developers or owners in relation to flood risk.

Scottish Water
You are advised that a supply and connection to Scottish Water infrastructure is dependent on sufficient spare capacity at the time of the application for connection to Scottish Water. The granting of planning permission does not guarantee a connection. Any enquiries with regards to sewerage connection and/or water supply should be directed to Scottish Water on 0845 601 8855.

Septic Tanks and Soakaways
Where a private foul drainage solution is proposed, you will require separate consent from the Scottish Environment Protection Agency (SEPA). Planning permission does not guarantee that approval will be given by SEPA and as such you are advised to contact them direct to discuss the matter (01349 862021).

Local Roads Authority Consent
In addition to planning permission, you may require one or more separate consents (such as road construction consent, dropped kerb consent, a road openings permit, occupation of the road permit etc.) from the Area Roads Team prior to work commencing. These consents may require additional work and/or introduce additional specifications and you are therefore advised to contact your local Area Roads office for further guidance at the earliest opportunity.

Failure to comply with access, parking and drainage infrastructure requirements may endanger road users, affect the safety and free-flow of traffic and is likely to result in enforcement action being taken against you under both the Town and Country Planning (Scotland) Act 1997 and the Roads (Scotland) Act 1984.

Further information on the Council's roads standards can be found at: http://www.highland.gov.uk/yourenvironment/roadsandtransport

Application forms and guidance notes for access-related consents can be downloaded from:
http://www.highland.gov.uk/info/20005/roads_and_pavements/101/permits_for_working_on_public_roads/2

Mud and Debris on Road
Please note that it an offence under Section 95 of the Roads (Scotland) Act 1984 to allow mud or any other material to be deposited, and thereafter remain, on a public road from any vehicle or development site. You must, therefore, put in place a strategy for dealing with any material deposited on the public road network and maintain this until development is complete.

Construction Hours and Noise-Generating Activities
You are advised that construction work associated with the approved development (incl. the loading/unloading of delivery vehicles, plant or other machinery), for which noise is audible at the boundary of the application site, should not normally take place outwith the hours of 08:00 and 19:00 Monday to Friday, 08:00 and 13:00 on Saturdays or at any time on a Sunday or Bank Holiday in Scotland, as prescribed in Schedule 1 of the Banking and Financial Dealings Act 1971 (as amended).

Work falling outwith these hours which gives rise to amenity concerns, or noise at any time which exceeds acceptable levels, may result in the service of a notice under Section 60 of the Control of Pollution Act 1974 (as amended). Breaching a Section 60 notice constitutes an offence and is likely to result in court action.

If you wish formal consent to work at specific times or on specific days, you may apply to the Council's Environmental Health Officer under Section 61 of the 1974 Act. Any such application should be submitted after you have obtained your Building Warrant, if required, and will be considered on its merits. Any decision taken will reflect the nature of the development, the site's location and the proximity of noise sensitive premises. Please contact env.health@highland.gov.uk for more information.

Protected Species – Halting of Work
You are advised that work on site must stop immediately, and NatureScot must be contacted, if evidence of any protected species or nesting/breeding sites, not previously detected during the course of the application and provided for in this permission, are found on site. For the avoidance of doubt, it is an offence to deliberately or recklessly kill, injure or disturb protected species or to damage or destroy the breeding site of a protected species. These sites are protected even if the animal is not there at the time of discovery. Further information regarding protected species and developer responsibilities is available from NatureScot: https://www.nature.scot/professional-advice/protected-areas-and-species/protected-species

Signature:

Designation: Area Planning Manager North

Author: Liam Burnside

Background Papers: Documents referred to in report and in case file.

Relevant Plans:

Plan 1 - 05196-RES-MAP-DR-XX-002 REV 1 Location/Site Layout Plan

Plan 2 - 5196-RES-LAY-DR-PT-001 REV 3 Site Layout Plan – Infrastructure Layout

Plan 3 - P23-1582_EN_002 REV E Landscaping Plan

Plan 4 - RSE_7216_BIAP_0624_V3R1 Site Layout Plan – Proposed BIA Baseline Habitat Plan

Plan 5 - 05196-RES-DRN-DR-PT-001 Drainage Construction Details

Plan 6 - 05196-RES-DRN-DR-PT-001 REV 2 Drainage Construction Details

Plan 7 - 05196-RES-DRN-DR-PT-002 REV 2 Drainage Construction Details

Plan 8 - 05196-RES-BAT-DR-PT-001 Elevations Battery Storage Enclosure

Plan 9 - 05196-RES-BLD-DR-PT-001 REV 1 Proposed Elevation Plan – Storage Container

Plan 10 - 05196-RES-PCS-DR-PT-001 REV 1 Proposed Elevation Plan – Power Conversion System

Plan 11 - 05196-RES-SEC-DR-PT-001 REV 1 Elevations – Security Fence

Plan 12 - 05196-RES-SEC-DR-PT-002 REV 1 Elevations – Acoustic Fence Detail

Plan 13 - 05196-RES-SEC-DR-PT-003 REV 1 Elevations – Lighting and CCTV Column

Plan 14 - 05196-RES-SUB-DR-PT-001 REV 1 Elevations – Auxiliary Transformer

Plan 15 - 05196-RES-SUB-DR-PT-002 REV 1 Proposed Elevation Plan – Harmonic Filter

Plan 16 - 05196-RES-SUB-DR-PT-003 REV 1 Proposed Elevation Plan – Pre Insertion Resistor

Plan 17 - 05196-RES-SUB-DR-PT-004 REV 1 Proposed Elevation Plan – Capacitor Bank

Plan 18 - 05196-RES-SUB-DR-PT-005 REV 1 Elevations – Bess Substation Building

Plan 19 - 05196-RES-SUB-DR-PT-006 REV 1 Proposed Elevation Plan – DNO Substation Building

Plan 20 - 05196-RES-SUB-DR-PT-007 REV 1 Proposed Elevation Plan – LV Feeder Pillar

Plan 21 - 05196-RES-STE-DR-PT-004 REV 1 – Site Section Plan For Contullich 2 of 2

Appendix 1 – Letters of Representation

USE LSTOBJ from Enterprise Print Screen

Appendix 2

	COMPLETE FOR LEGAL AGREEMENTS AND UPFRONT PAYMENTS				REQUIRED FOR LEGAL AGREMEENTS ONLY				
Type	**Contribution**	**Rate (per house)**	**Rate (per flat)**	**Total Amount*[1]**	**Index Linked[1]**	**Base Date*[2]**	**Payment Trigger*[3]**	**Accounting Dates*[4]**	**Clawback Period*[5]**
Schools[2]									
Primary – Build Costs	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS	Q2 2018	TOC/CC	Apr/Oct	15 or 20
Primary – Land Costs	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS	Q2 2018	TOC/CC	Apr/Oct	15 or 20
Secondary – Build Costs	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS	Q2 2018	TOC/CC	Apr/Oct	15 or 20
Secondary – Land Costs	Insert what contribution is for	£0.00	£0.00	£0.00	No		TOC/CC	Apr/Oct	15 or 20
Community Facilities	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS	Q2 2018	TOC/CC	Apr/Oct	15 or 20
Affordable Housing									
On-site provision[3]	X units. Insert details of unit size and timescale for delivery if agreed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Off-site provision[4]	X units. Insert details of location, unit size and timescale for delivery if agreed	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Commuted Sum[5]	£0.00 per affordable unit not delivered on/off site. Insert expected timescale for payment - can be in installments	N/A	N/A	£0.00	N/A	N/A	Insert specific payment date	N/A	5 Years
Agreement for Delivery Needed	Y/N. If delivery for affordable housing has not yet been agreed, enter Y and specify the date/timescale that the scheme for delivery is to be submitted for approval	N/A	N/A	N/A	N/A	N/A	Insert date for submission to Planning Authority	N/A	N/A

[1] If the contribution is to be used towards infrastructure projects involving building e.g. new school, new cycle route etc BCIS ALL IN TENDER will be the index, if it doesn't involve building then another appropriate index may need to be chosen with the agreement of Team Leader

[2] Indicate whether or not 1 bed houses/flats are exempt

[3] Indicate whether a penalty payment due for late delivery (and, if so, what it is based upon).

[4] As above

[5] Indicate whether a penalty payment is due for late payment of commuted sum (and, if so, what it is based upon)

	COMPLETE FOR LEGAL AGREEMENTS AND UPFRONT PAYMENTS				REQUIRED FOR LEGAL AGREMEENTS ONLY				
Type	**Contribution**	**Rate (per house)**	**Rate (per flat)**	**Total Amount*[1]**	**Index Linked[1]**	**Base Date*[2]**	**Payment Trigger*[3]**	**Accounting Dates*[4]**	**Clawback Period*[5]**
Transport									
Active Travel	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Safer Routes to Schools	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Public Realm	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Wayfinding	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Public Transport	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
School Transport	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Road Improvements	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Parking	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
EV Charging	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Traffic Signals	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Lighting	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Road Traffic Orders	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Cumulative Transport Contributions	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Green Infrastructure									
Open Space	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Green Network	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Built/Natural Heritage	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Water and Waste									
Catchment Improvement Works	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Strategic Flood Scheme	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Maintenance of SuDs	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Off Street Waste Storage	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Recycling Point Provision	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Glass Banks	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
		£0.00	£0.00	£0.00					
Public Art	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20
Other (Please Specify)	Insert what contribution is for	£0.00	£0.00	£0.00	BCIS		TOC/CC	Apr/Oct	15 or 20

*[1] Adjust total to take account of flat exemptions

*[2] Base Date – Set out in Supplementary Guidance on Developer Contributions

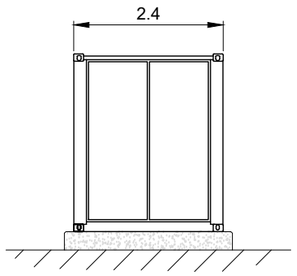
*[3] TOC/CC – The earlier of the issue of either a temporary occupation certificate or a completion certificate – or specify alternative time if appropriate

*4 Accounting dates - 1 April and 1 October each year of development (if the contribution is to be paid on a basis other than related to units completed in the preceding 6 months (e.g. lump sum on a specific date) then indicate this instead of the Apr/Oct payment dates)

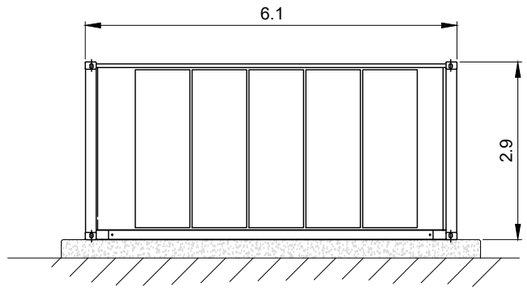
*5 Clawback – 15 years for Major development; 20 years for Local development

Other Legal Agreement requirements

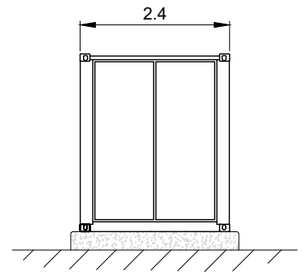
Type	Details
Bond	1. Describe the purpose of the Bond
	2. Specify the amount to be secured
	3. Restriction on Bond provider
	4. Set the review date and mechanism for review
	5. Describe the call on circumstances
	6. Any other relevant details
Habitat Management Plan	1. Describe what the Plan is to cover
	2. Describe the area the Plan is to cover (and provide a plan)
	3. Set the timetable for submission of the Plan
	4. Set the timescale for implementation of the Plan
	5. Describe requirements to consult third parties
	6. Specify the financial contribution (if any)
	7. Specify the clawback period (if any)
	8. Any other relevant details
Road Survey	1. Specify the timescale for the initial survey
	2. Describe which roads are to be surveyed (provide a plan)
	3. Specify an interim survey date (if required)
	4. Specify the final survey requirements and timescale
	5. Any other relevant details
Land and Asset Transfer	1. Describe the area of land / asset to be transferred (provide a plan)
	2. Describe the use of the land / asset
	3. Specify the cost of transfer
	4. Any other relevant details



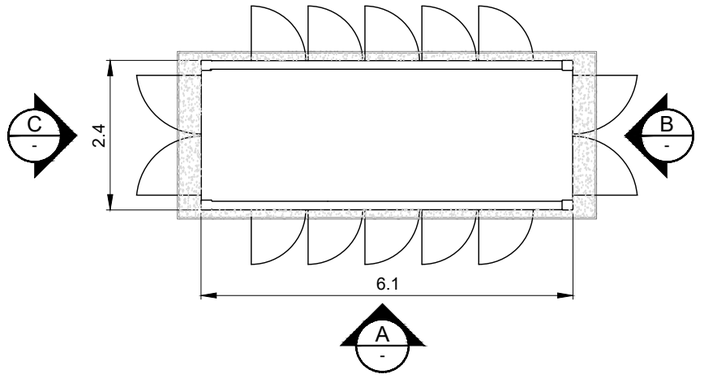
ELEVATION C
SCALE 1:100



ELEVATION A
SCALE 1:100



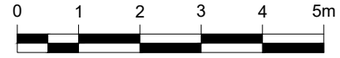
ELEVATION B
SCALE 1:100



PLAN
SCALE 1:100

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. LOCATION OF DOORS IS INDICATIVE ONLY. ACCESS TO BATTERIES MAY BE EXTERNAL FROM SIDE DOORS.
3. BATTERY CONTAINER FOUNDATIONS ARE INDICATIVE ONLY AND SUBJECT TO DETAILED DESIGN.



SCALE 1:100

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

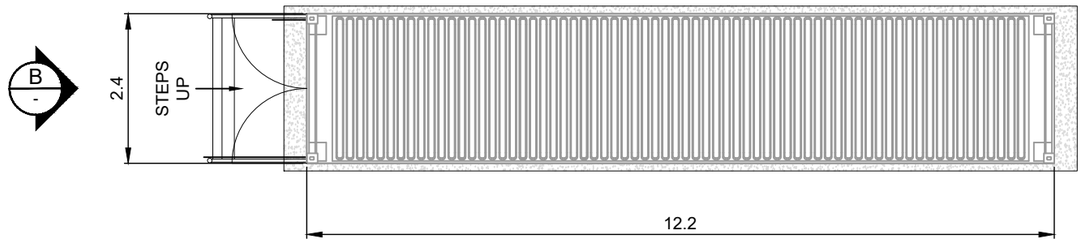
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:100 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

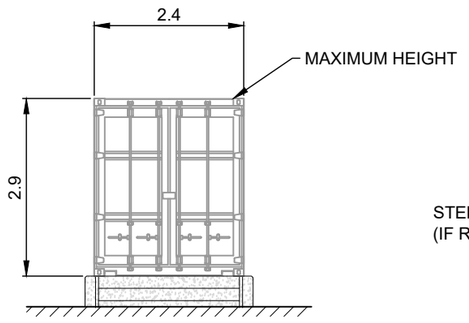
DRAWING TITLE
BATTERY STORAGE
ENCLOSURE

RES DRAWING NUMBER	REV
05196-RES-BAT-DR-PT-001	1

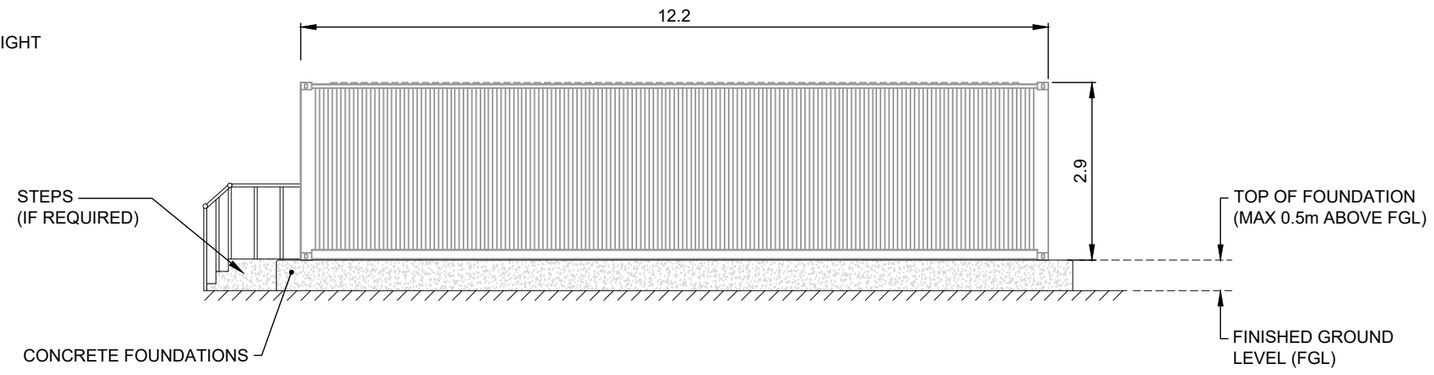
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



PLAN
SCALE 1:100



ELEVATION B
SCALE 1:100



ELEVATION A
SCALE 1:100

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. FOUNDATIONS ARE INDICATIVE ONLY AND SUBJECT TO DETAILED DESIGN.

0 1 2 3 4 5m

SCALE 1:100

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

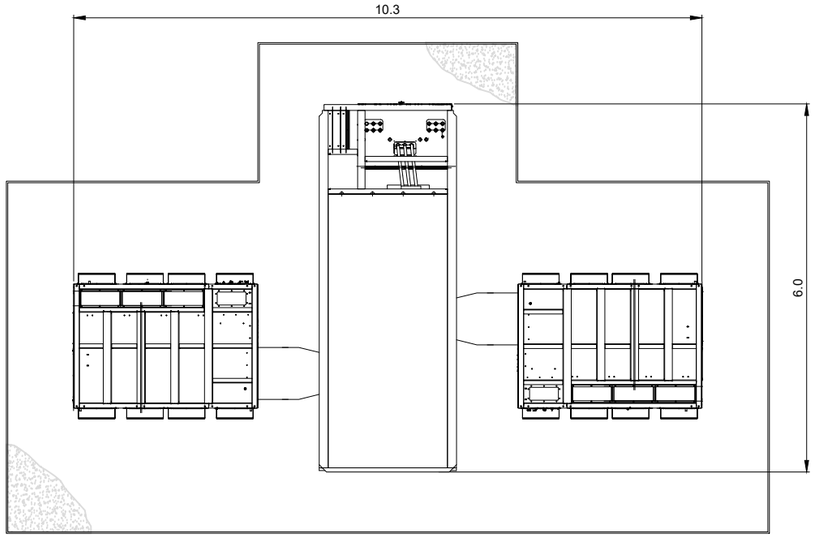
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:100 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

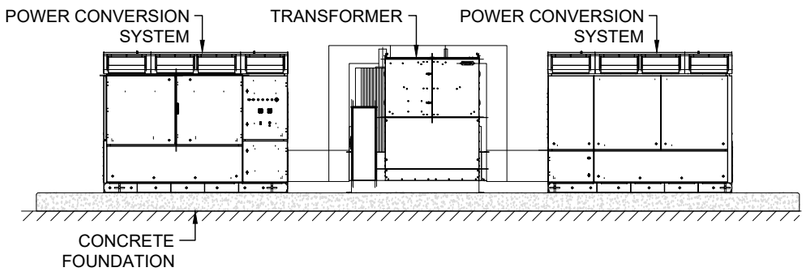
DRAWING TITLE
SPARES STORAGE CONTAINER

RES DRAWING NUMBER	REV
05196-RES-BLD-DR-PT-001	1

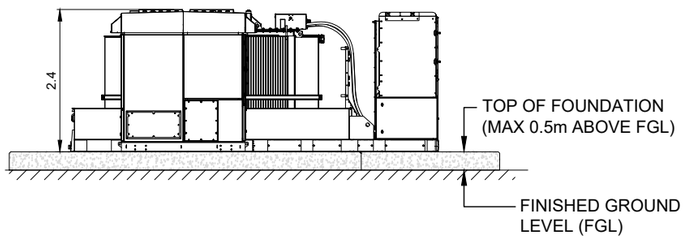
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



PLAN
SCALE 1:100



SIDE ELEVATION
SCALE 1:100



END ELEVATION
SCALE 1:100

NOTES:

1. ALL DIMENSIONS IN METRES UNLESS NOTED OTHERWISE.
2. DETAILS SHOWN ARE TYPICAL AND SUBJECT TO DETAILED DESIGN.
3. FOUNDATION SOLUTION, INCLUDING HEIGHTS IS INDICATIVE AND SUBJECT TO DETAILED DESIGN. DEPENDING ON FINAL FOUNDATION HEIGHT, A HANDRAIL AROUND THE FOUNDATION PLINTH AND AN ACCESS STEP MAY BE REQUIRED.

SCALE 1:100

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

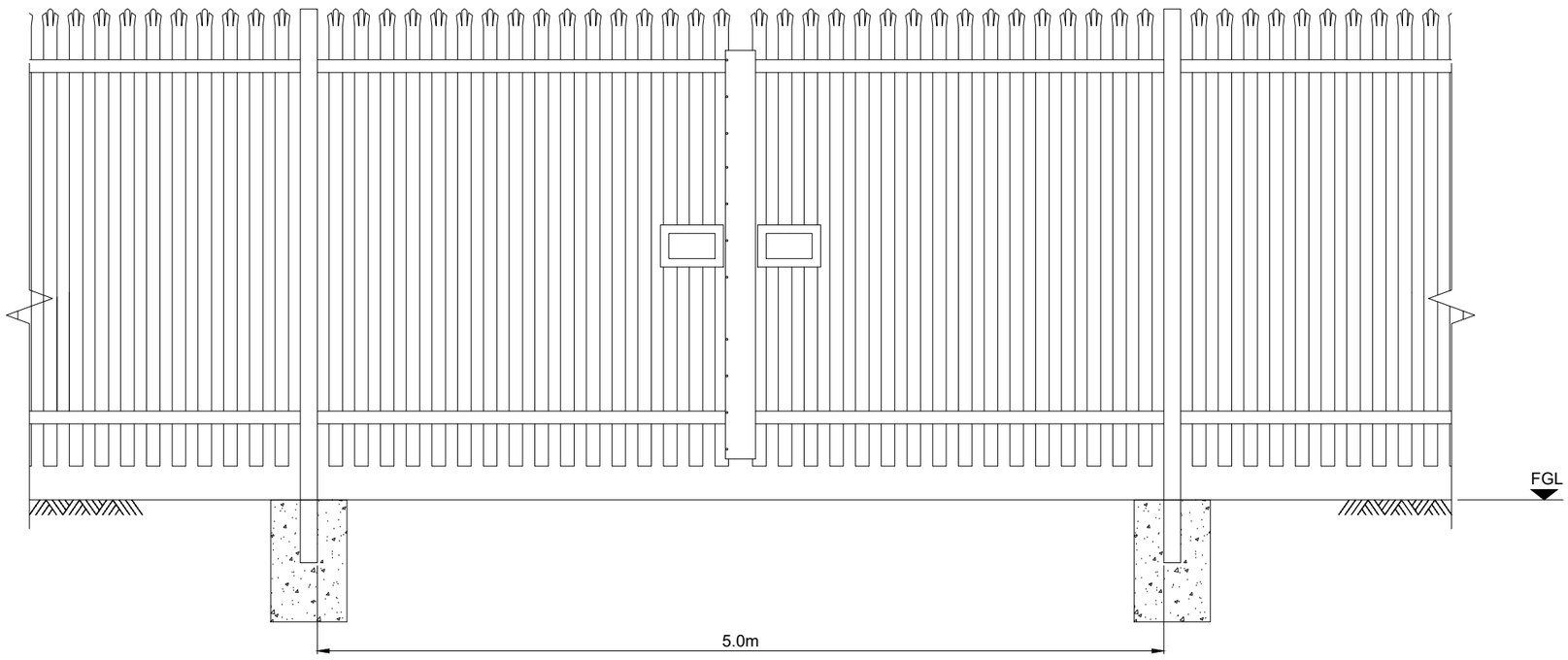
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:100 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

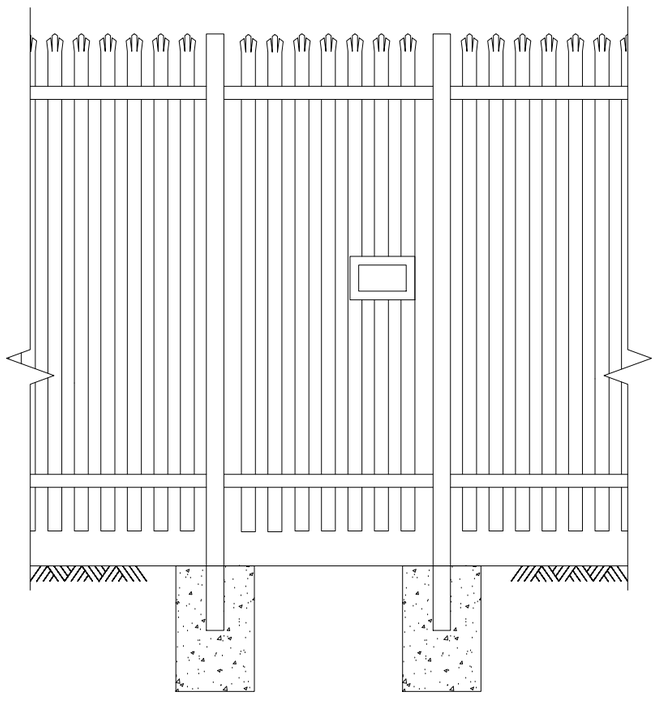
DRAWING TITLE
POWER CONVERSION SYSTEM
& TRANSFORMER - TWIN SKID

RES DRAWING NUMBER	REV
05196-RES-PCS-DR-PT-001	1

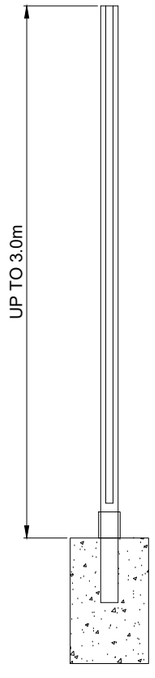
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



TYPICAL PALISADE FENCE ELEVATION
(DOUBLE VEHICLE GATE)



TYPICAL ELEVATION
(PEDESTRIAN GATE)



TYPICAL CROSS SECTION

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. SUITABLE SAFETY SIGNAGE TO BE INSTALLED ON GATES & FENCES
3. FOUNDATIONS SUBJECT TO DETAILED DESIGN.

SHEET 1 OF 2

0 0.5 1 2m

SCALE 1:35

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

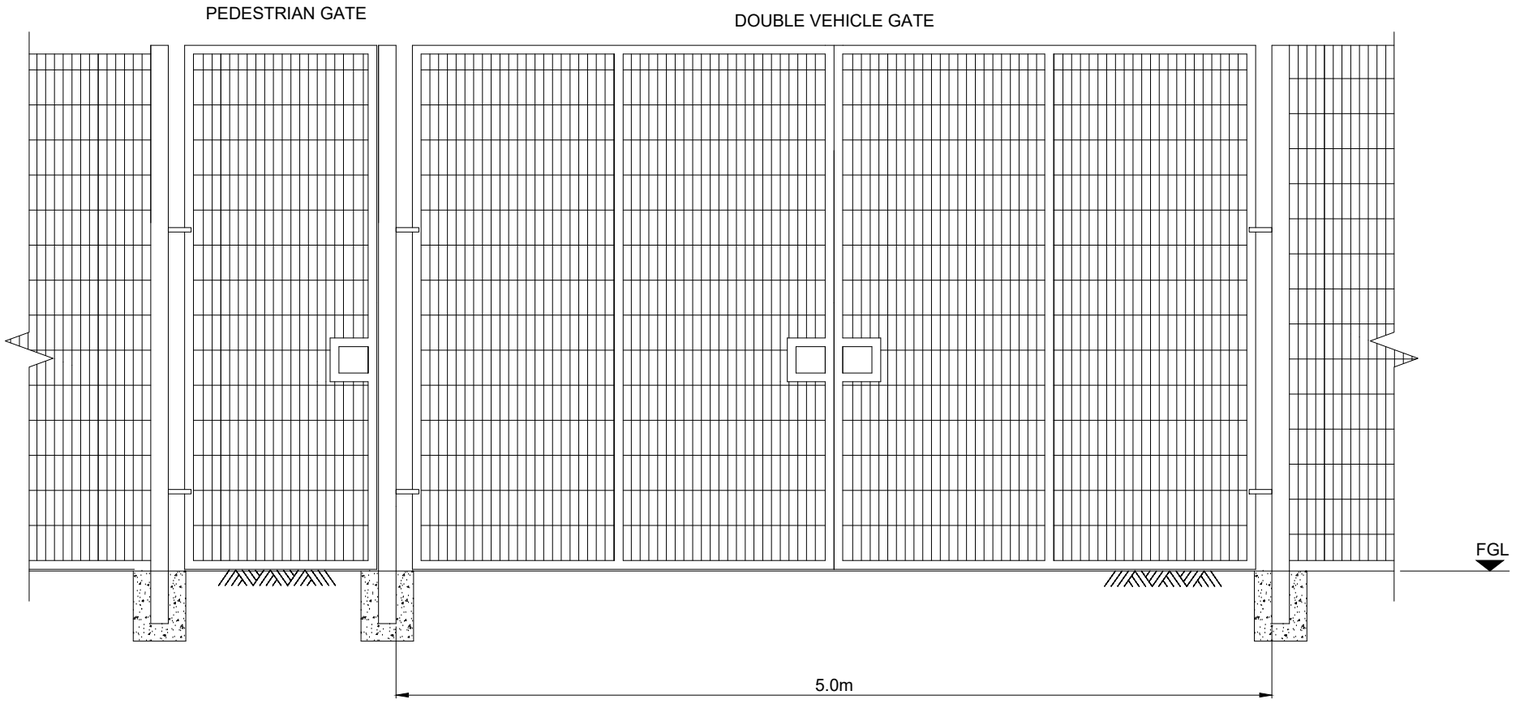
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:35 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

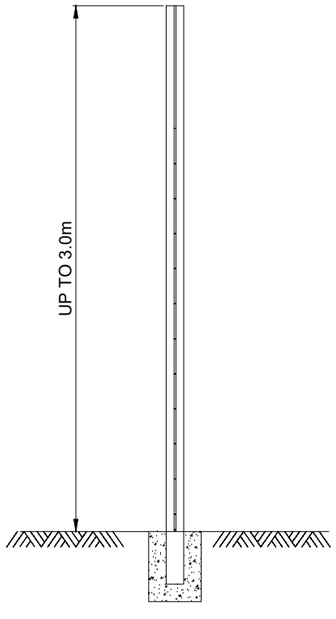
DRAWING TITLE
TYPICAL SECURITY
FENCE DETAILS

RES DRAWING NUMBER	REV
05196-RES-SEC-DR-PT-001	1

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



TYPICAL WELD MESH FENCE ELEVATION



TYPICAL CROSS SECTION

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. SUITABLE SAFETY SIGNAGE TO BE INSTALLED ON GATES & FENCES
3. FOUNDATIONS SUBJECT TO DETAILED DESIGN.

SHEET 2 OF 2

0 0.5 1 2m

SCALE 1:35

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

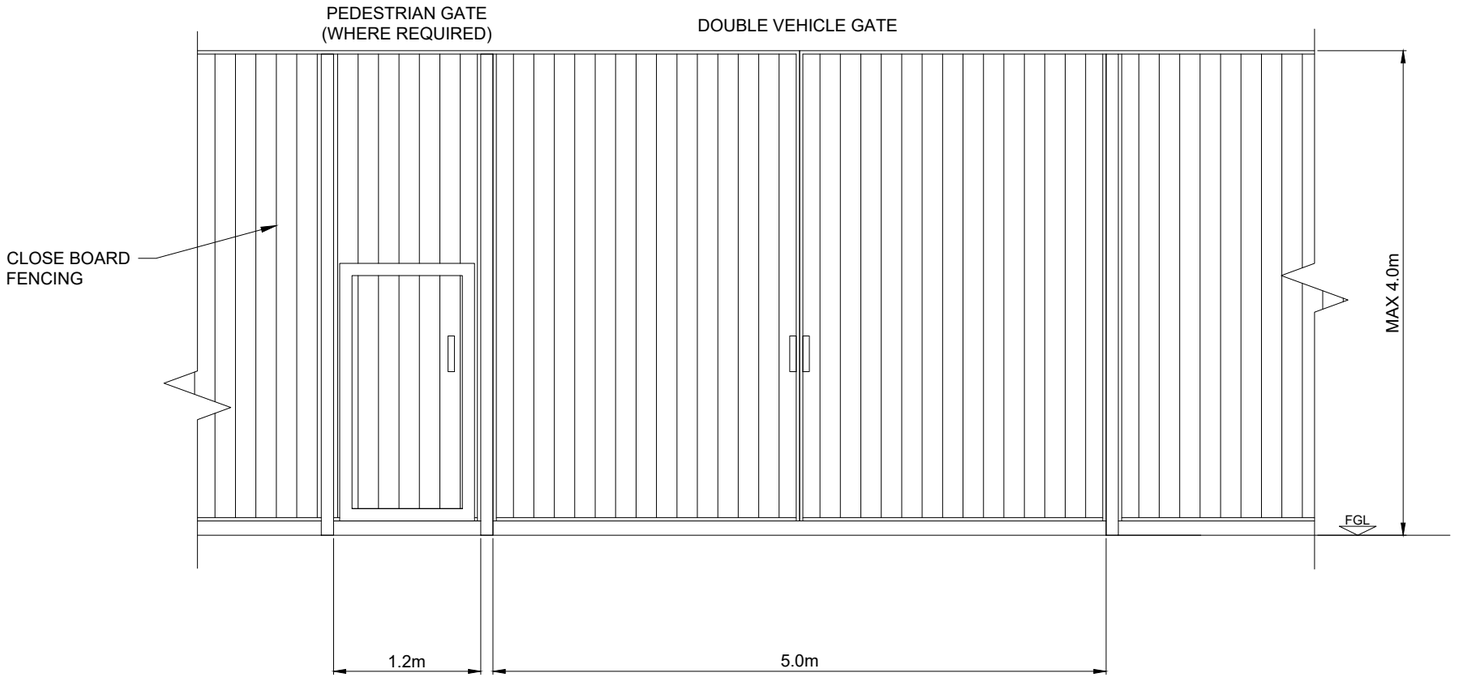
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:35 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

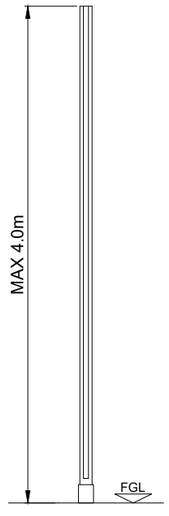
DRAWING TITLE
TYPICAL SECURITY
FENCE DETAILS

RES DRAWING NUMBER	REV
05196-RES-SEC-DR-PT-001	1

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



TYPICAL ELEVATION



TYPICAL CROSS SECTION

TYPICAL CLOSED
BOARD FENCE IMAGE

NOTES:

1. ALL DIMENSIONS ARE MAXIMUM ANTICIPATED AND SUBJECT TO DETAILED DESIGN.
2. SUITABLE SAFETY SIGNAGE TO BE INSTALLED ON GATES & FENCE

SCALE 1:50

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

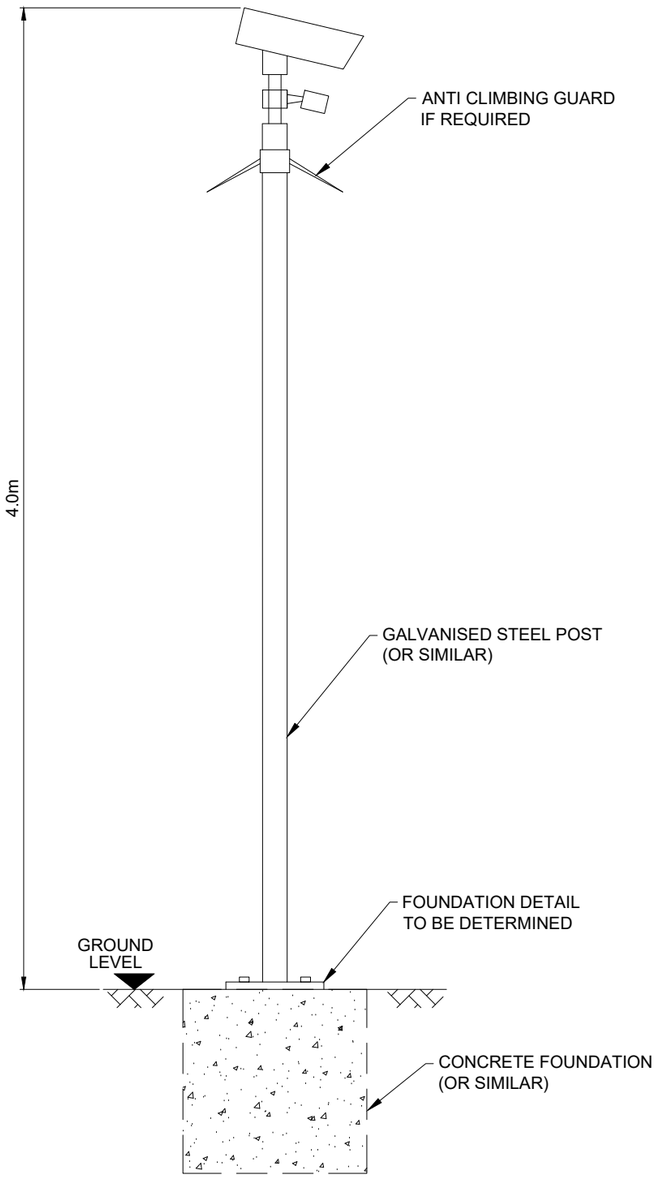
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:50 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

DRAWING TITLE
TYPICAL ACOUSTIC
FENCE DETAIL

RES DRAWING NUMBER	REV
05196-RES-SEC-DR-PT-002	1

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



ELEVATION

NOTES:

1. ALL DIMENSIONS ARE MAXIMUM ANTICIPATED AND SUBJECT TO DETAILED DESIGN.
2. CAMERAS MAY BE INSTALLED WITH PAN FUNCTION.
3. FOUNDATIONS SHOWN ARE INDICATIVE AND SUBJECT TO DETAILED DESIGN.

0 0.5 1m

SCALE 1:25

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

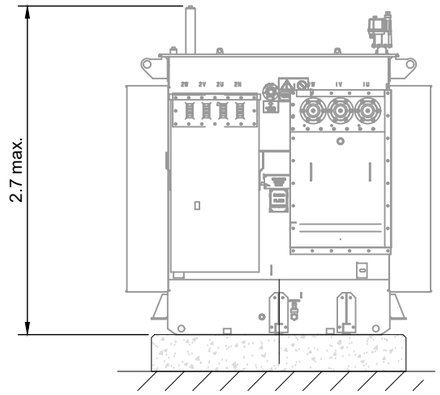
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:25 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

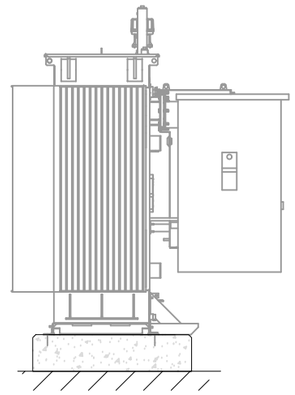
DRAWING TITLE
TYPICAL LIGHTING
& CCTV COLUMN

RES DRAWING NUMBER	REV
05196-RES-SEC-DR-PT-003	1

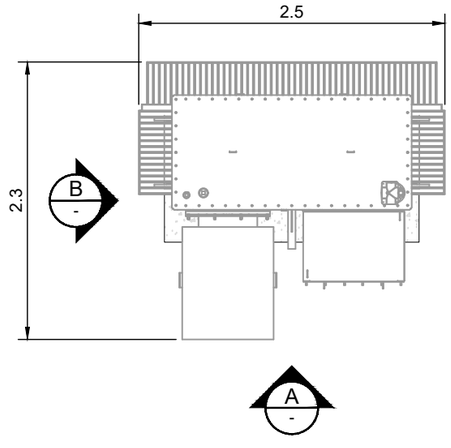
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



ELEVATION A
SCALE 1:50



ELEVATION B
SCALE 1:50



PLAN
SCALE 1:50

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DETAILS SHOWN ARE TYPICAL AND ARE SUBJECT TO DETAILED DESIGN.
3. ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN.

SCALE 1:50

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

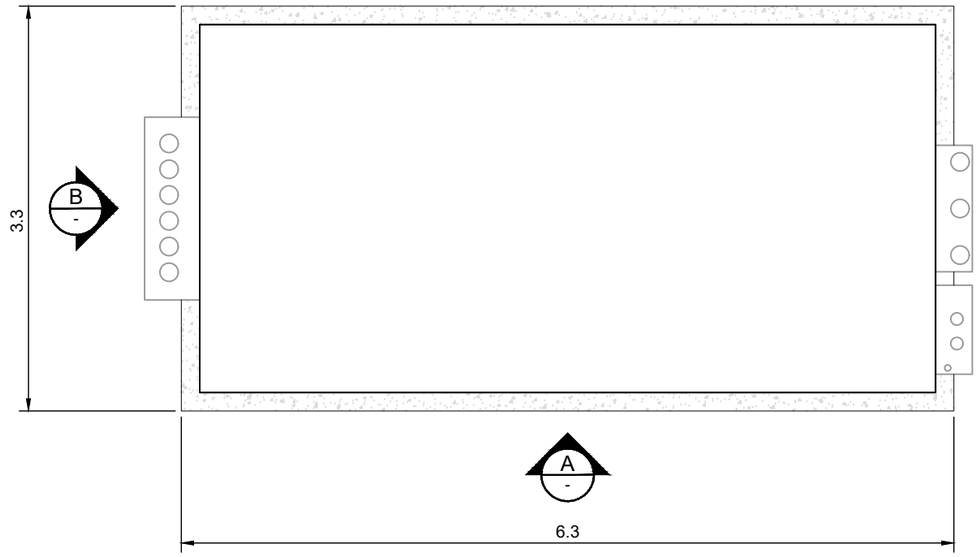
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:50 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

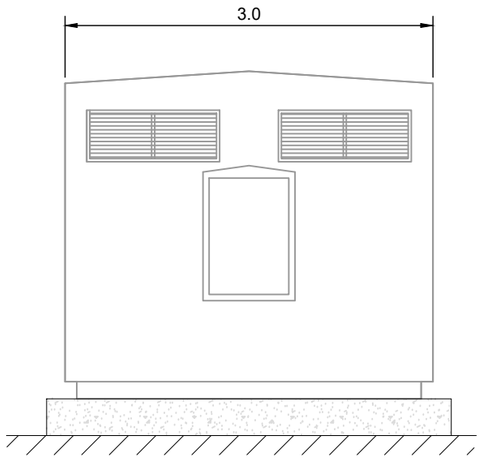
DRAWING TITLE
AUXILIARY TRANSFORMER

RES DRAWING NUMBER	REV
05196-RES-SUB-DR-PT-001	1

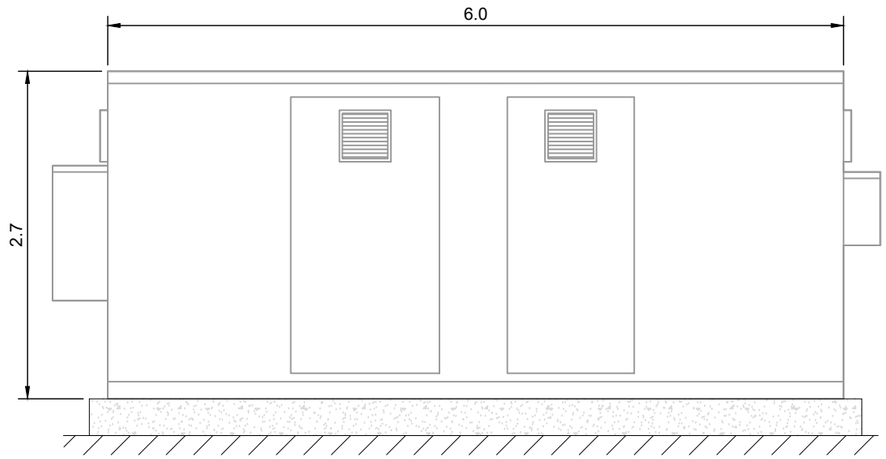
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



PLAN
SCALE 1:50



ELEVATION B
SCALE 1:50



ELEVATION A
SCALE 1:50

HARMONIC FILTER

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DETAILS SHOWN ARE TYPICAL AND ARE SUBJECT TO DETAILED DESIGN.
3. ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN.

SHEET 1 OF 2

0 1 2 3m

SCALE 1:50

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

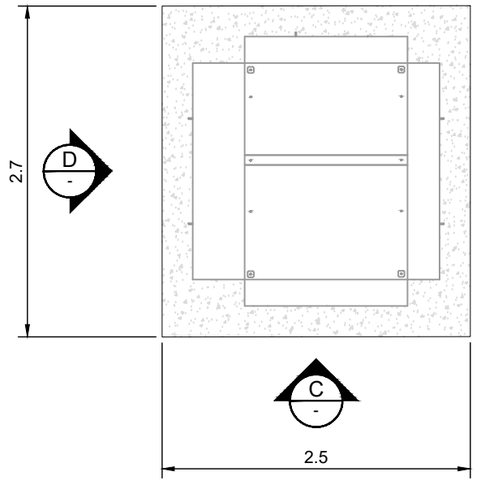
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:50 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

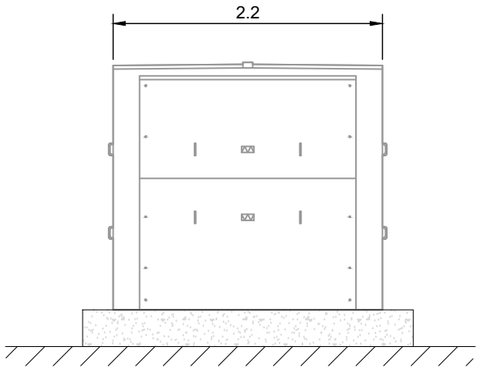
DRAWING TITLE
HARMONIC FILTER

RES DRAWING NUMBER	REV
05196-RES-SUB-DR-PT-002	1

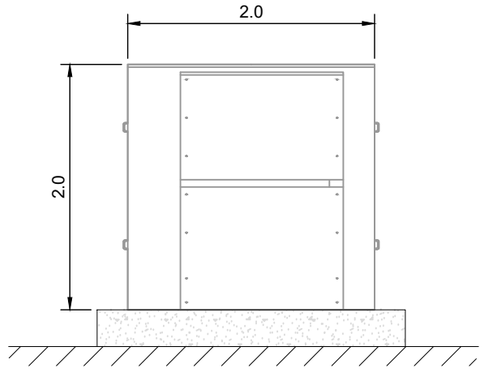
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



PLAN
SCALE 1:50



ELEVATION D
SCALE 1:50



ELEVATION C
SCALE 1:50

RESISTOR

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DETAILS SHOWN ARE TYPICAL AND ARE SUBJECT TO DETAILED DESIGN.
3. ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN.

SHEET 2 OF 2

0 1 2 3m

SCALE 1:50

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

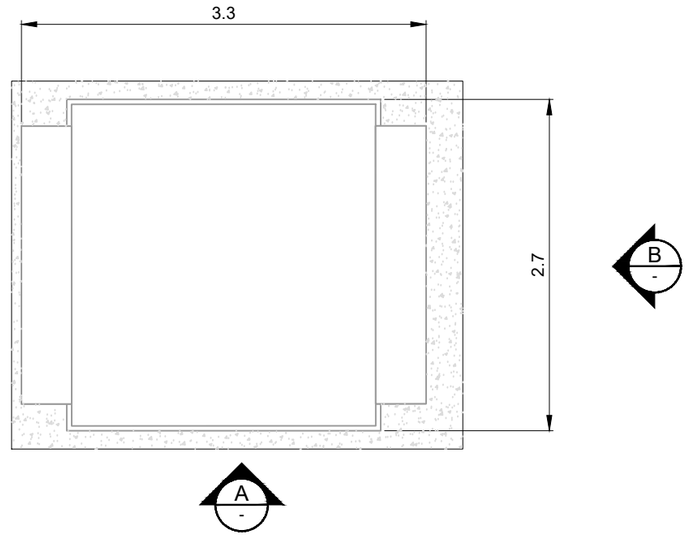
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:50 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

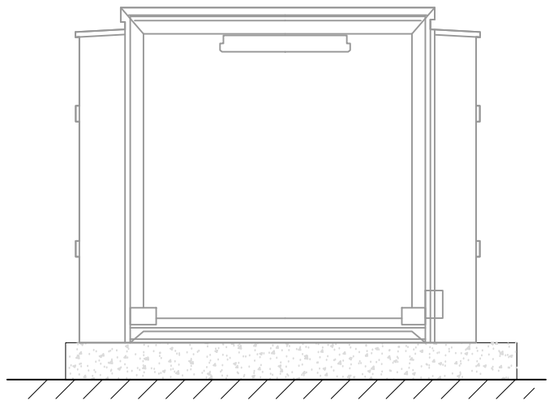
DRAWING TITLE
HARMONIC FILTER

RES DRAWING NUMBER	REV
05196-RES-SUB-DR-PT-002	1

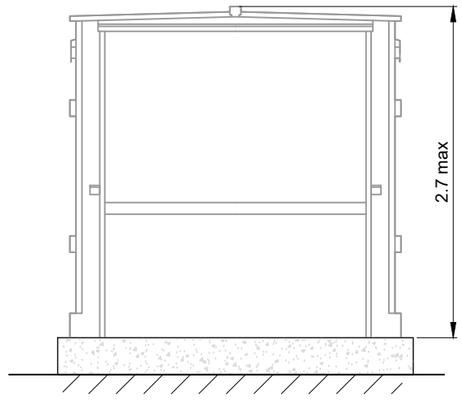
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



PLAN
SCALE 1:50



ELEVATION A
SCALE 1:50



ELEVATION B
SCALE 1:50

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DETAILS SHOWN ARE TYPICAL AND ARE SUBJECT TO DETAILED DESIGN.
3. ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN.

0 1 2 3m

SCALE 1:50

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

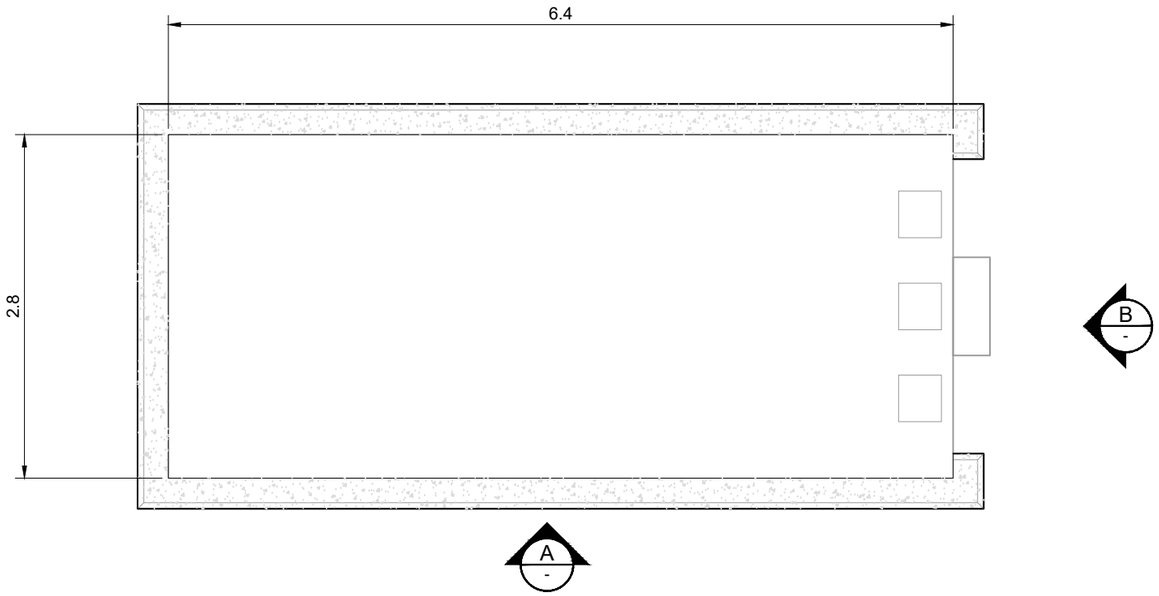
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:50 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

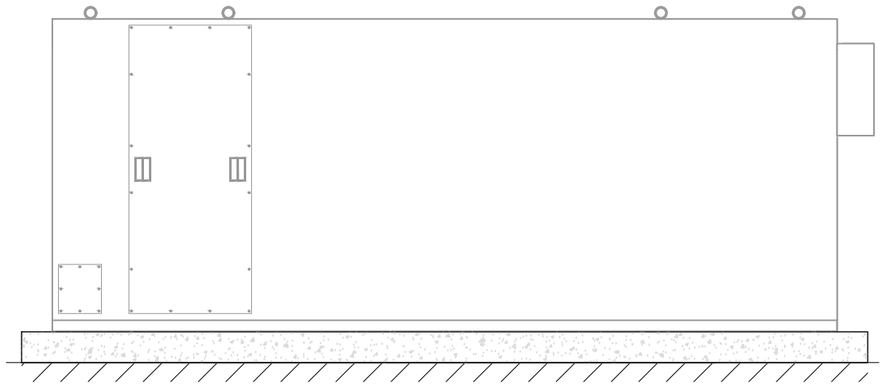
DRAWING TITLE
PRE INSERTION RESISTOR

RES DRAWING NUMBER	REV
05196-RES-SUB-DR-PT-003	1

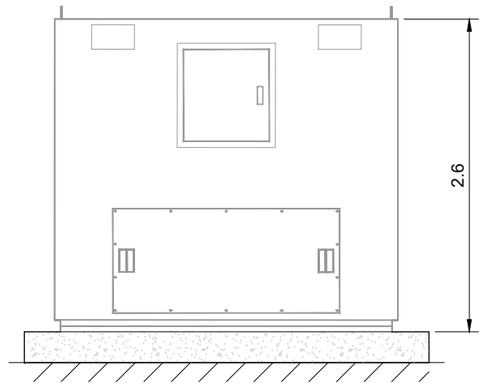
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



PLAN
SCALE 1:50



ELEVATION A
SCALE 1:50



ELEVATION B
SCALE 1:50

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DETAILS SHOWN ARE TYPICAL AND ARE SUBJECT TO DETAILED DESIGN.
3. ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN.

0 1 2 3m

SCALE 1:50

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

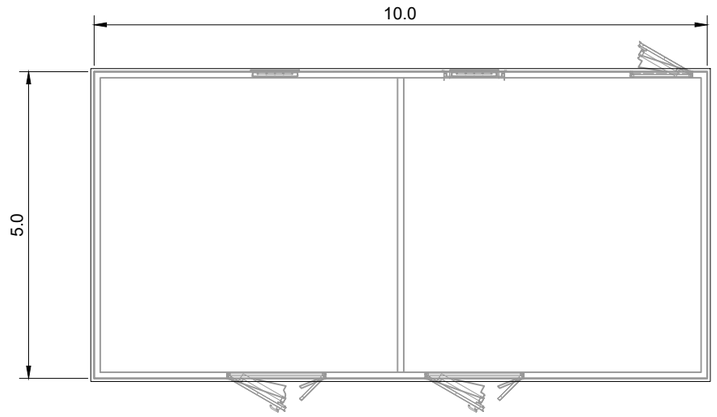
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:50 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

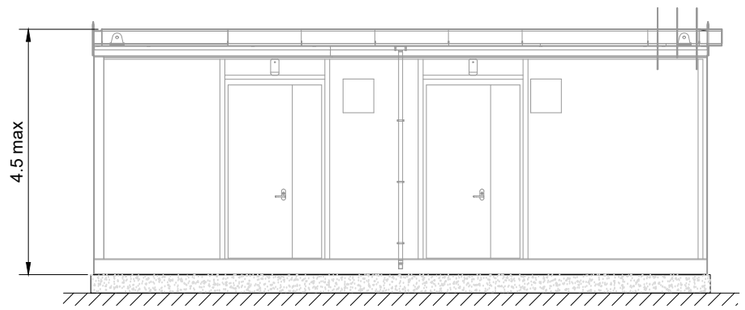
DRAWING TITLE
CAPACITOR BANK

RES DRAWING NUMBER	REV
05196-RES-SUB-DR-PT-004	1

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



PLAN
SCALE 1:100



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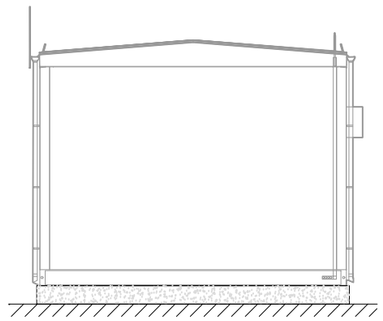
SCALE 1:100



ELEVATION B
SCALE 1:100

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DETAILS SHOWN ARE TYPICAL AND ARE SUBJECT TO DETAILED DESIGN.
3. ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN.

0 1 2 3 4 5m

SCALE 1:100

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

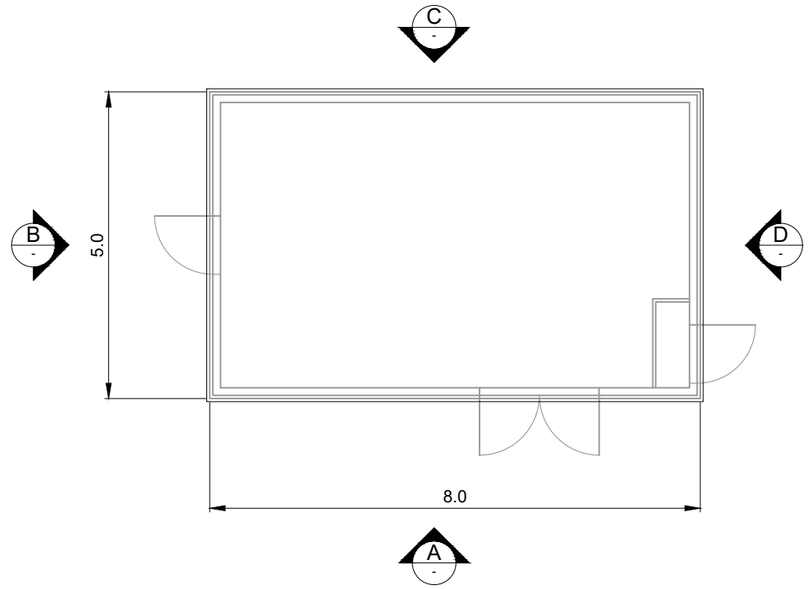
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:100 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

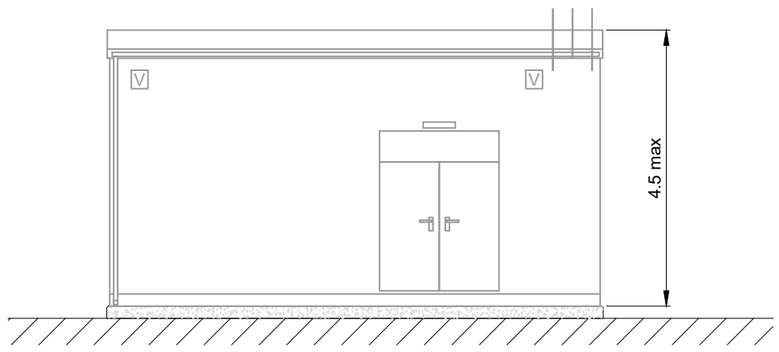
DRAWING TITLE
BESS SUBSTATION BUILDING

RES DRAWING NUMBER	REV
05196-RES-SUB-DR-PT-005	1

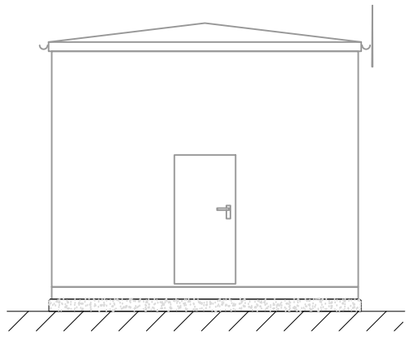
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



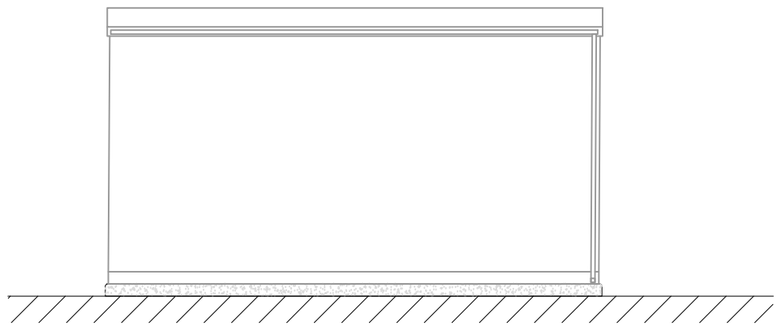
PLAN
SCALE 1:100



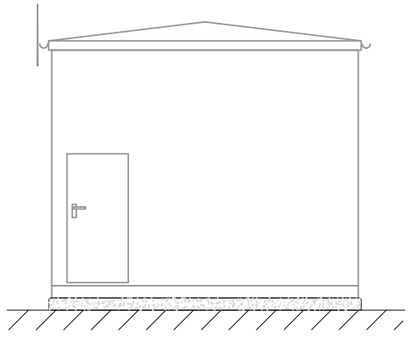
ELEVATION A
SCALE 1:100



ELEVATION B
SCALE 1:100



ELEVATION C
SCALE 1:100



ELEVATION D
SCALE 1:100

NOTES:

1. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.
2. EXACT LAYOUT AND DIMENSIONS ARE SUBJECT TO GRID COMPANY REQUIREMENTS.
3. SUITABLE SIGNAGE FOR HV ELECTRICAL INSTALLATION TO BE INSTALLED ON DOORS.
4. FOUNDATION HEIGHT AND EXTENTS SUBJECT TO DETAILED DESIGN.
5. NUMBER, SIZE AND LOCATION OF DOORS IS INDICATIVE ONLY.

0 1 2 3 4 5m

SCALE 1:100

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

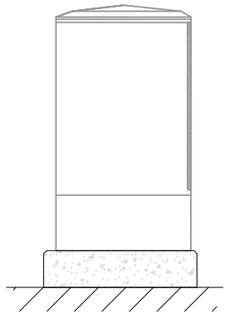
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:100 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

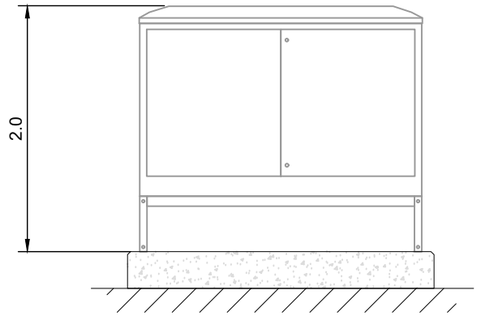
DRAWING TITLE
DNO SUBSTATION BUILDING

RES DRAWING NUMBER	REV
05196-RES-SUB-DR-PT-006	1

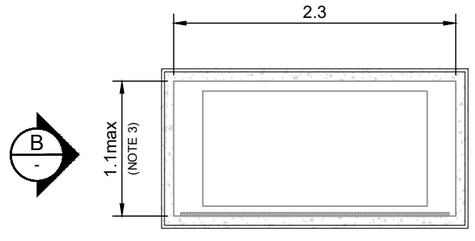
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



ELEVATION B
SCALE 1:50



ELEVATION A
SCALE 1:50



PLAN
SCALE 1:50

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED.
2. DETAILS SHOWN ARE TYPICAL AND ARE SUBJECT TO DETAILED DESIGN.
3. ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO DETAILED DESIGN. MAXIMUM PANEL DEPTH MAY BE REDUCED WHERE AGGREGATION PANEL IS NOT PRESENT.
4. FINAL DETAILS SUBJECT TO ACTUAL PRODUCTS SELECTED AND MAY COMPRISE MULTIPLE ENCLOSURES BACK-TO-BACK WITHIN THE MAXIMUM DIMENSIONS INDICATED.
5. FOUNDATION HEIGHTS SUBJECT TO DETAILED DESIGN.

SCALE 1:50

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	BM	VM	MA	2023-12-12	FIRST ISSUE

PURPOSE: PLANNING	COORDINATES: N/A
SCALE: 1:50 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

DRAWING TITLE
LV FEEDER PILLAR &
AGGREGATION PANEL
DETAILS

RES DRAWING NUMBER	REV
05196-RES-SUB-DR-PT-007	1

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM

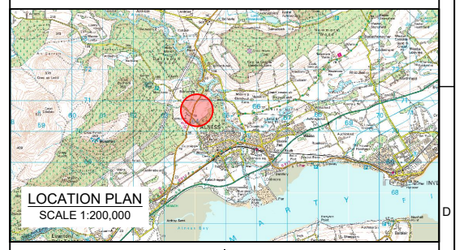
KEY:

LANDOWNER BOUNDARY
(INSIDE EDGE OF LINE DENOTES BOUNDARY)

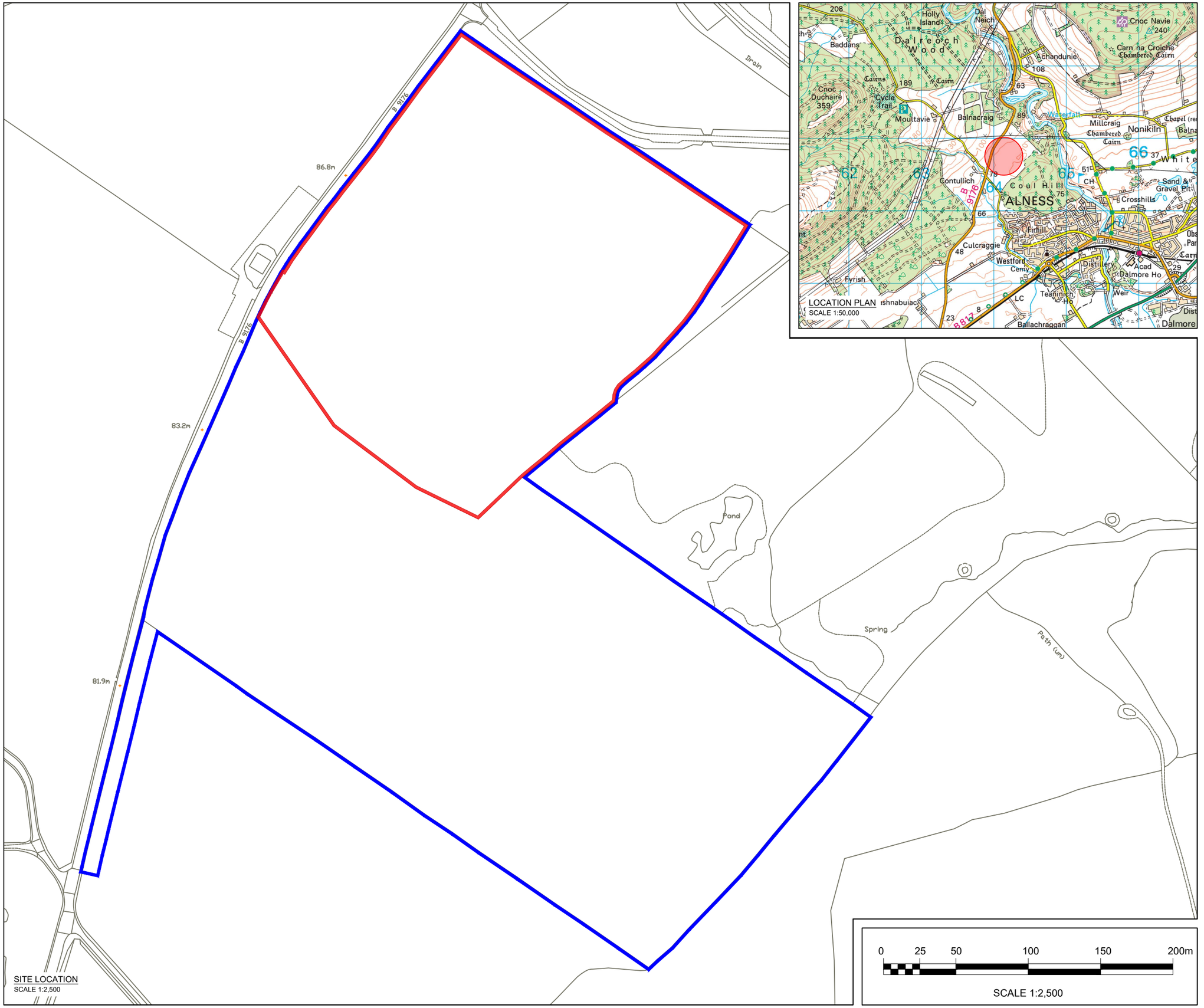
DEVELOPMENT BOUNDARY
(OUTSIDE OF LINE DENOTES BOUNDARY)

KEY PLAN

LOCATION PLAN
SCALE 1:50,000



LOCATION PLAN
SCALE 1:200,000



SITE LOCATION
SCALE 1:2,500

0 25 50 100 150 200m

SCALE 1:2,500

1	BM	VM	MA	2023-12-21	FIRST ISSUE
ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES

PURPOSE: PLANNING	COORDINATES: OSGB 1936
SCALE: AS SHOWN @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

DRAWING TITLE
LOCATION PLAN

RES DRAWING NUMBER	REV
05196-RES-MAP-DR-XX-002	1

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM

KEY CONTINUED:

- DRAINAGE CHANNEL (CHECK DAMS TO INSTALLED EVERY 10m-80m ALONG LENGTH)
- OVERLAND FLOW CONTROL
- EARTHWORKS BATTER
- TREE CANOPY SPREAD AREA
- TREE ROOT PROTECTION AREA
- ANTI-GLARE FENCE

B 9176

B 9176

Drain

FLOW CONTROL DEVICE

PIPE CROSSING

Pond

KEY:

- DEVELOPMENT BOUNDARY (OUTSIDE OF LINE DENOTES BOUNDARY)
- BATTERY STORAGE ENCLOSURE (BSE)
- 2 No. POWER CONVERSION SYSTEMS (PCS) WITH TWIN MV SKID AND APRON SLAB
- DNO SUBSTATION BUILDING
- BESS SUBSTATION BUILDING
- AUXILIARY TRANSFORMER
- LV DISTRIBUTION EQUIPMENT
- AGGREGATION PANEL WITH LV PILLAR
- PRE-INSERTION RESISTOR
- CAPACITOR BANK
- HARMONIC FILTER AND RESISTOR
- SPARES CONTAINER
- LIGHTING / CCTV COLUMN
- SECURITY FENCING
- ACOUSTIC FENCING (UP TO 4m IN HEIGHT)
- ACCESS TRACK - GRAVEL
- ACCESS TRACK - ASPHALT
- SURFACE FINISH TYPICALLY COMPRISING STONE OR ASPHALT
- LINEAR DRAINAGE CHANNEL
- ATTENUATION BASIN
- SURFACE WATER DRAINAGE PIPE

CONTINUED...

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
3	BM	WM	VM	2024-05-30	UPDATED ACCESS TRACK, COMPOUND FENCE AND ADDED ANTI-GLARE FENCE
2	BM	VM	MA	2023-12-22	REMOVED STORAGE AREA IN KEY
1	BM	VM	MA	2023-12-21	FIRST ISSUE

PURPOSE: PLANNING	COORDINATES: OSGB 1936
SCALE: 1:1,250 @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE

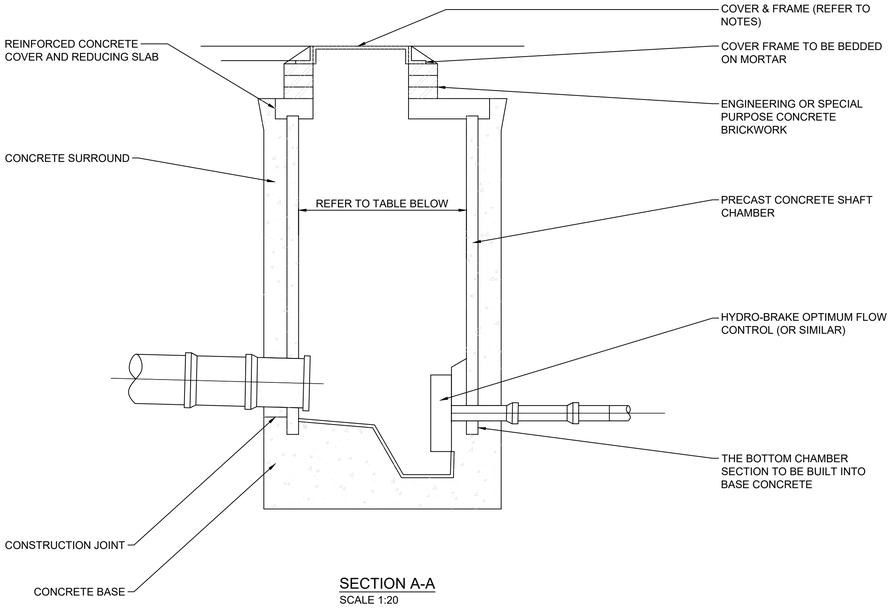
CONTULLICH ENERGY STORAGE FACILITY

DRAWING TITLE

INFRASTRUCTURE LAYOUT

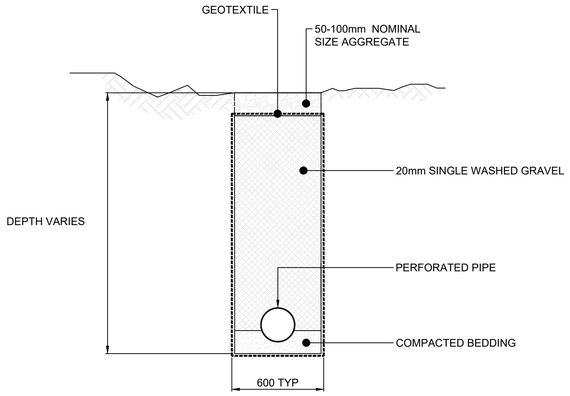
RES DRAWING NUMBER	REV
05196-RES-LAY-DR-PT-001	3

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM

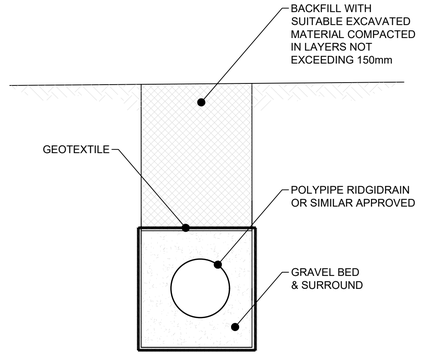


SECTION A-A
SCALE 1:20

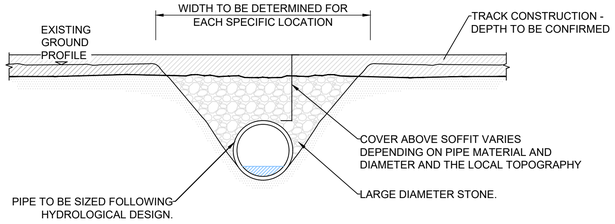
Ø OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 700	1500
750 - 900	1800



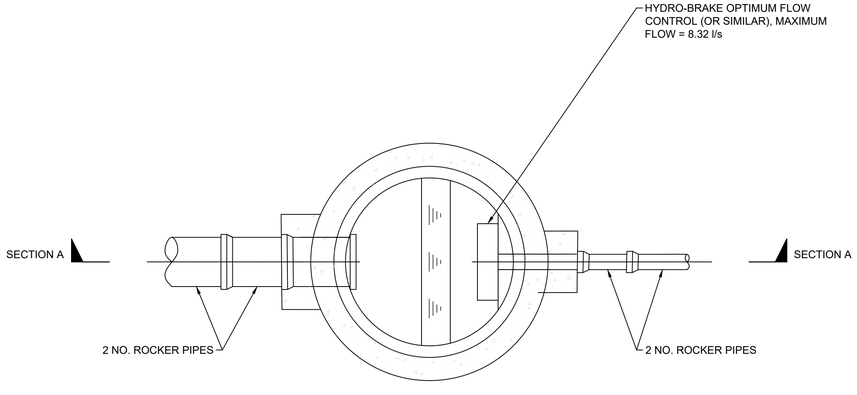
FILTER DRAIN DETAIL
SCALE 1:20



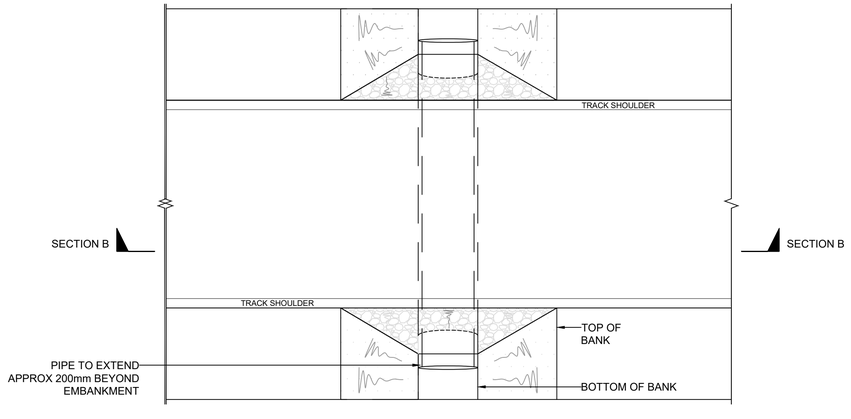
PIPE BEDDING DETAIL
SCALE 1:20



SECTION B-B
SCALE 1:20



MANHOLE DETAIL WITH FLOW CONTROL DEVICE
SCALE 1:20



TYPICAL PIPE CROSSING
SCALE 1:20

NOTES:

1. DO NOT SCALE, ANY DISCREPANCIES SHALL BE HIGHLIGHTED TO THE DESIGNER FOR CONFIRMATION.
2. SUDS SYSTEMS TO BE CONSTRUCTED PRIOR TO, OR AT THE SAME TIME AS THE ACCESS TRACK AND COMPOUND. INTERIM MEASURES SUCH AS THE PLACEMENT OF SILT FENCES TO BE USED AROUND WATERCOURSES AND RETAINED IN PLACE UNTIL SUDS ARE ESTABLISHED AND PROVIDING SUFFICIENT SILT REMOVAL.
3. WHERE RESEEDING IS REQUIRED, NATIVE SPECIES SEED MIX SHALL BE USED BASED UPON THE SURROUNDING HABITAT. THE PLANTING SHALL BE CAPABLE OF RESISTING DROUGHT CONDITIONS.
4. AREAS STRIPPED OF VEGETATION SHOULD BE KEPT TO A MINIMUM.
5. SILT LEVELS AT DETENTION BASIN TO BE VISUALLY INSPECTED AS PART OF AN ONGOING MAINTENANCE PROGRAMME DURING THE CONSTRUCTION PHASE. WHERE CHECK DAMS BECOME CLOGGED WITH SILT OR VEGETATION, STONE CHECK DAM TO BE REMOVED AND DISPOSED OF APPROPRIATELY.
6. SUDS DETAILS, DIMENSIONS AND LEVELS MAY BE MODIFIED DURING DETAILED DESIGN. CHANGES WILL ADHERE TO THE REQUIREMENTS AND PHILOSOPHY IN THE SURFACE WATER MANAGEMENT PLAN AND ADDENDUM.

SHEET 1 OF 3

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
2	BM	WM	MC	2024-06-03	ADDDED TYPICAL PIPE CROSSING
1	BM	WM	MC	2023-12-22	FIRST ISSUE

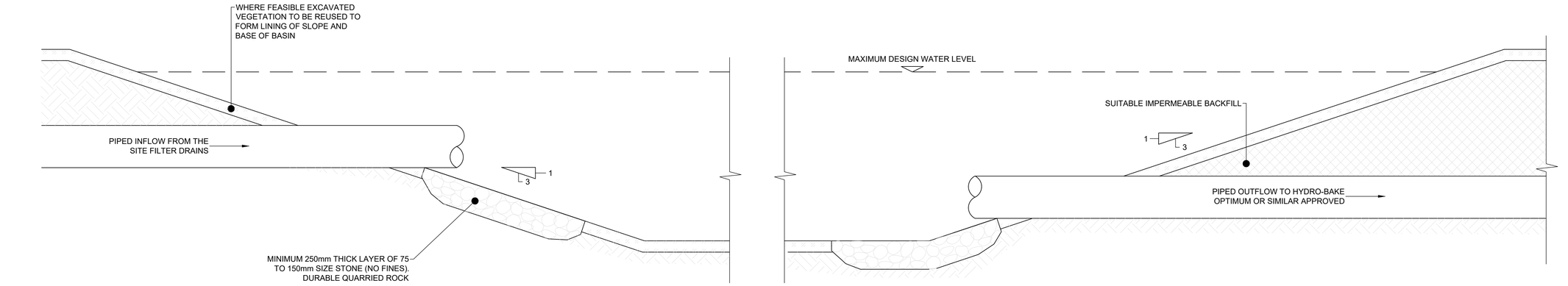
PURPOSE: PLANNING
COORDINATES: N/A
SCALE: AS SHOWN @ A1
DATUM: N/A
LAYOUT DWG: N/A
T-LAYOUT NO.: N/A

PROJECT TITLE
CONTULLICH
ENERGY STORAGE FACILITY

DRAWING TITLE
TYPICAL DRAINAGE DETAILS

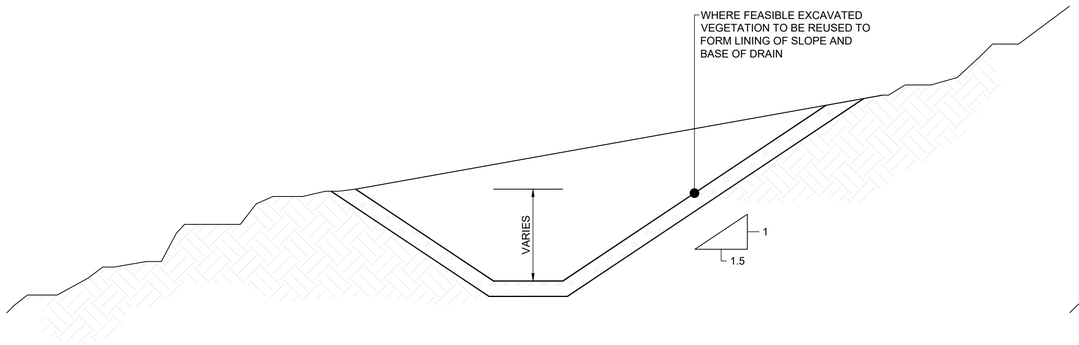
RES DRAWING NUMBER: 05196-RES-DRN-DR-PT-001
REV: 2

BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR, UK
TEL +44 (0) 1923 295200
WWW.RES-GROUP.COM



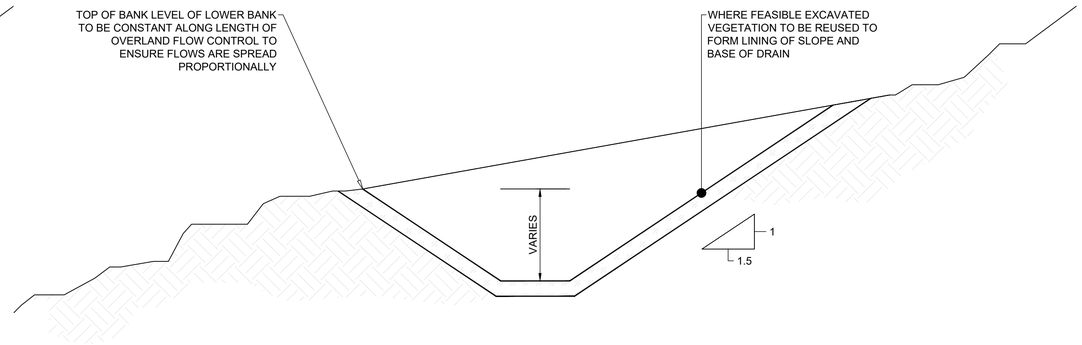
TYPICAL SECTION OF ATTENUATION BASIN

SCALE - 1:20



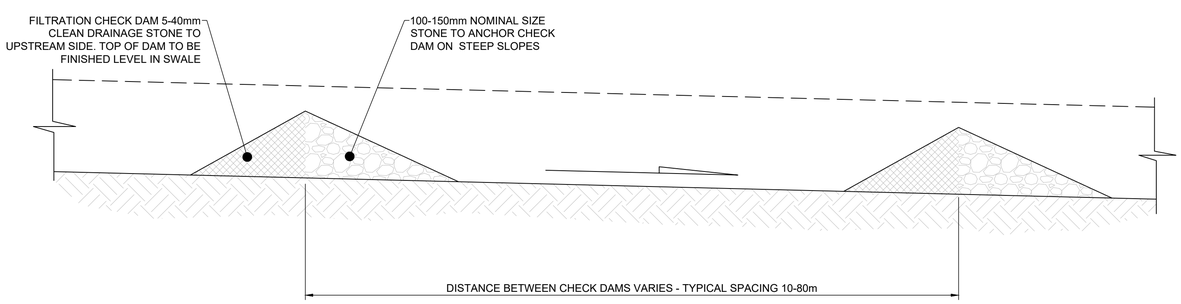
TYPICAL DRAINAGE CHANNEL

SCALE - 1:20



OVERLAND FLOW CONTROL

SCALE - 1:20



TYPICAL DRAINAGE CHANNEL - LONG SECTION

SCALE - 1:20

NOTES:

1. DO NOT SCALE, ANY DISCREPANCIES SHALL BE HIGHLIGHTED TO THE DESIGNER FOR CONFIRMATION.
2. SUDS SYSTEMS TO BE CONSTRUCTED PRIOR TO, OR AT THE SAME TIME AS THE ACCESS TRACK AND COMPOUND. INTERIM MEASURES SUCH AS THE PLACEMENT OF SILT FENCES TO BE USED AROUND WATERCOURSES AND RETAINED IN PLACE UNTIL SUDS ARE ESTABLISHED AND PROVIDING SUFFICIENT SILT REMOVAL.
3. WHERE RESEEDING IS REQUIRED, NATIVE SPECIES SEED MIX SHALL BE USED BASED UPON THE SURROUNDING HABITAT. THE PLANTING SHALL BE CAPABLE OF RESISTING DROUGHT CONDITIONS.
4. AREAS STRIPPED OF VEGETATION SHOULD BE KEPT TO A MINIMUM.
5. SILT LEVELS AT DETENTION BASIN TO BE VISUALLY INSPECTED AS PART OF AN ONGOING MAINTENANCE PROGRAMME DURING THE CONSTRUCTION PHASE. WHERE CHECK DAMS BECOME CLOGGED WITH SILT OR VEGETATION, STONE CHECK DAM TO BE REMOVED AND DISPOSED OF APPROPRIATELY.
6. SUDS DETAILS, DIMENSIONS AND LEVELS MAY BE MODIFIED DURING DETAILED DESIGN. CHANGES WILL ADHERE TO THE REQUIREMENTS AND PHILOSOPHY IN THE SURFACE WATER MANAGEMENT PLAN AND ADDENDUM.

SHEET 2 OF 3

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
2	BM	WM	MC	2024-06-03	ADDDED TYPICAL PIPE CROSSING
1	BM	WM	MC	2023-12-22	FIRST ISSUE

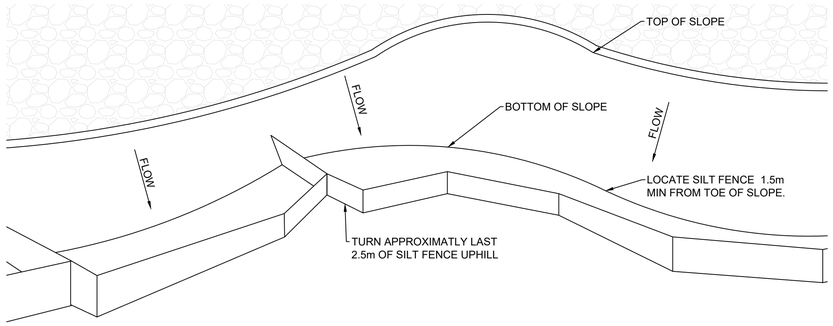
PURPOSE: PLANNING	COORDINATES: N/A
SCALE: AS SHOWN @ A1	DATUM: N/A
LAYOUT DWG: N/A	T-LAYOUT NO.: N/A

PROJECT TITLE: CONTULLICH ENERGY STORAGE FACILITY

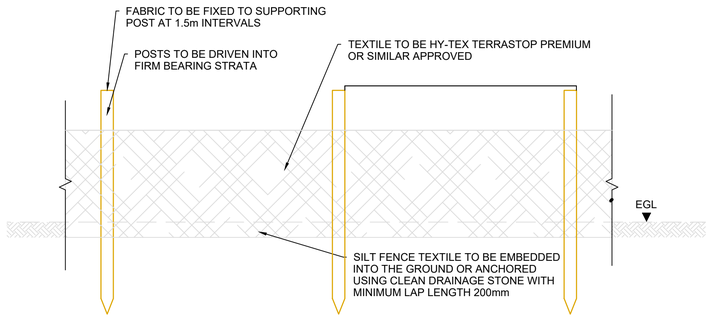
DRAWING TITLE: TYPICAL DRAINAGE DETAILS

RES DRAWING NUMBER: 05196-RES-DRN-DR-PT-001 | REV: 2

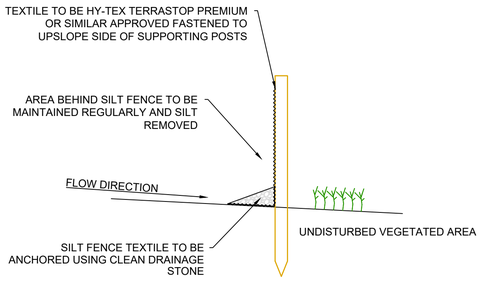
BEAUFORT COURT,
EGG FARM LANE,
KINGS LANGLEY,
HERTS WD4 8LR. UK
TEL +44 (0) 1923 299200
WWW.RES-GROUP.COM



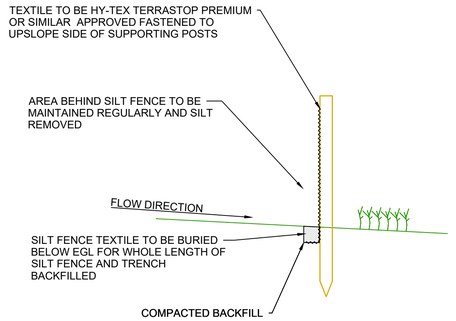
TYPICAL SILT FENCE BOTTOM OF SLOPE
SCALE - NTS



SILT FENCE TEXTILE DETAIL
SCALE 1:20



ANCHORED TYPE OPTION
SCALE 1:20



BURIED TYPE OPTION
SCALE 1:25

NOTES:

1. DO NOT SCALE, ANY DISCREPANCIES SHALL BE HIGHLIGHTED TO THE DESIGNER FOR CONFIRMATION.
2. SUDS SYSTEMS TO BE CONSTRUCTED PRIOR TO, OR AT THE SAME TIME AS THE ACCESS TRACK AND COMPOUND. INTERIM MEASURES SUCH AS THE PLACEMENT OF SILT FENCES TO BE USED AROUND WATERCOURSES AND RETAINED IN PLACE UNTIL SUDS ARE ESTABLISHED AND PROVIDING SUFFICIENT SILT REMOVAL.
3. WHERE RESEEDING IS REQUIRED, NATIVE SPECIES SEED MIX SHALL BE USED BASED UPON THE SURROUNDING HABITAT. THE PLANTING SHALL BE CAPABLE OF RESISTING DROUGHT CONDITIONS.
4. AREAS STRIPPED OF VEGETATION SHOULD BE KEPT TO A MINIMUM.
5. SILT LEVELS AT DETENTION BASIN TO BE VISUALLY INSPECTED AS PART OF AN ONGOING MAINTENANCE PROGRAMME DURING THE CONSTRUCTION PHASE. WHERE CHECK DAMS BECOME CLOGGED WITH SILT OR VEGETATION, STONE CHECK DAM TO BE REMOVED AND DISPOSED OF APPROPRIATELY.
6. SUDS DETAILS, DIMENSIONS AND LEVELS MAY BE MODIFIED DURING DETAILED DESIGN. CHANGES WILL ADHERE TO THE REQUIREMENTS AND PHILOSOPHY IN THE SURFACE WATER MANAGEMENT PLAN AND ADDENDUM.

SHEET 3 OF 3

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
2	BM	WM	MC	2024-06-03	ADDDED TYPICAL PIPE CROSSING
1	BM	WM	MC	2023-12-22	FIRST ISSUE

PURPOSE: PLANNING
COORDINATES: N/A
SCALE: AS SHOWN @ A1
DATUM: N/A
LAYOUT DWG: N/A
T-LAYOUT NO.: N/A

PROJECT TITLE: CONTULLICH ENERGY STORAGE FACILITY

DRAWING TITLE: TYPICAL DRAINAGE DETAILS

RES DRAWING NUMBER: 05196-RES-DRN-DR-PT-001
REV: 2

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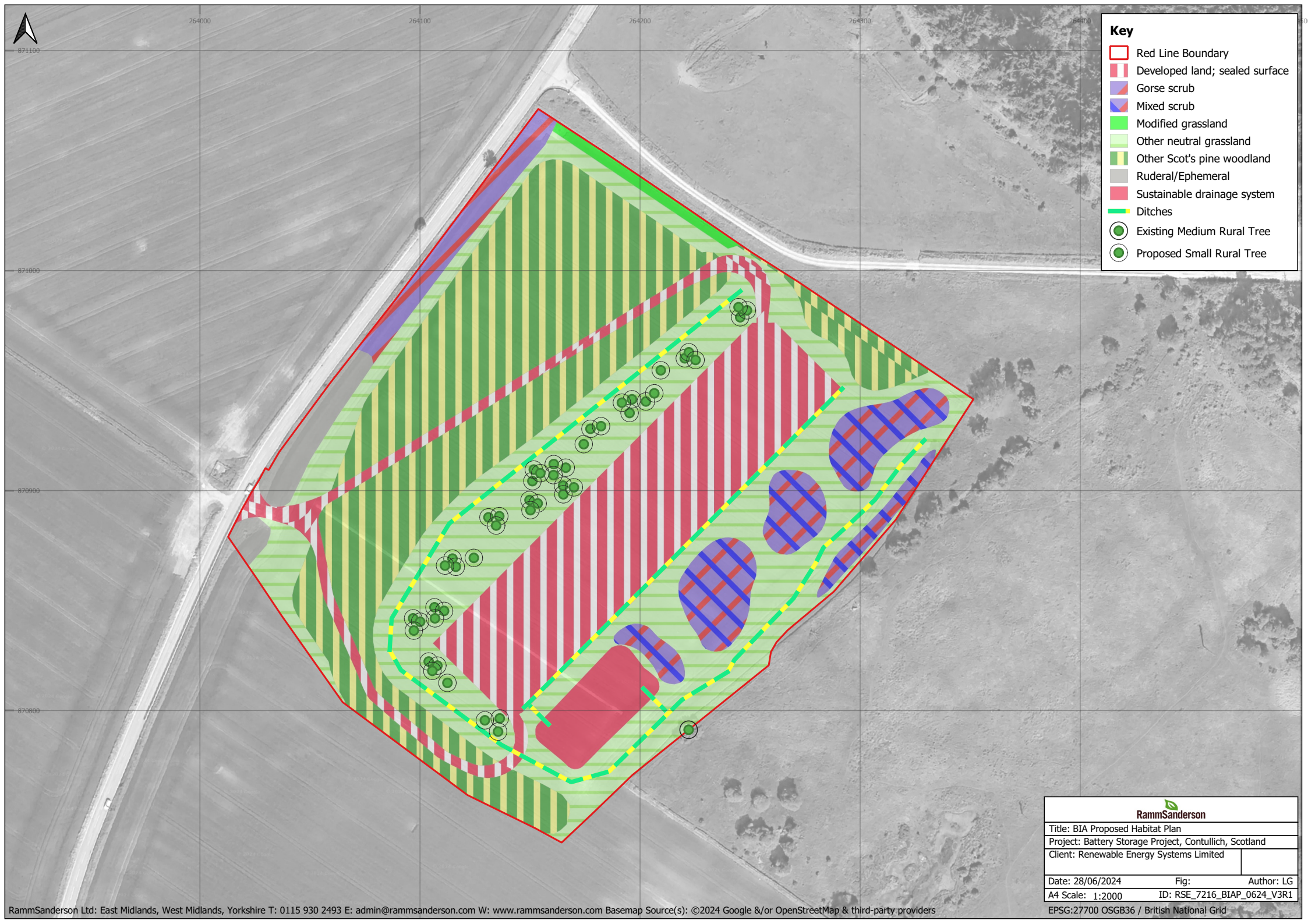

RammSanderson

Title: BIA Proposed Habitat Plan	
Project: Battery Storage Project, Contullich, Scotland	
Client: Renewable Energy Systems Limited	
Date: 28/06/2024	Fig: Author: LG
A4 Scale: 1:2000	ID: RSE_7216_BIAP_0624_V3R1

RammSanderson Ltd: East Midlands, West Midlands, Yorkshire T: 0115 930 2493 E: admin@rammsanderson.com W: www.rammsanderson.com

EPSG:27700 OSGB36 / British National Grid

PLANTING SPECIFICATION

1 GENERAL

1.1 All plants will conform to BS 3936-1 (1992): and be in accordance with the National Plant Specification. Supplying nurseries will be registered under the HTA Nursery Certification Scheme. All plants will be packed and transported in accordance with the Code of Practice for Plant Handling as produced by CPSE.

1.2 Planting will not be carried out when the ground is waterlogged, frost bound or during periods of cold drying winds.

1.3 All bare-root planting stock will be kept covered until actually planted in order to minimise water-loss and prevent the roots from drying out.

1.4 All bare-root planting stock will be root dipped in an approved water-retaining polymer.

1.5 If the formation level is compacted it should be ripped through before topsoiling.

2 TREE PLANTING

2.1 All areas of proposed structure mix/tree belt planting shall be ripped in advance of planting works.

2.2 All extraneous matter such as plastic, wood, metal and stones greater than 100mm diameter will be removed from the planting areas and disposed of off-site.

2.3 Where necessary existing weeds will be treated with a suitable glyphosate-based herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect before new planting commences.

Standard

2.4 Trees are to be placed into pits (1000 x 1000 x 600mm depth) and backfilled with excavated topsoil. A general-purpose slow-release fertiliser (at the rate of 35gm/m2) and Tree Planting and Mulching Compost (at the rate of 20 litres/m2) are to be incorporated into the top 150mm of topsoil during backfilling if existing ground is unsuitable for re-use or is deemed to be required. Where tree pits are more than 300mm deep, backfilled material shall be consolidated/firmed in 150mm layers.

2.5 Trees shall be planted as per the plant schedule shown on this drawing.

2.6 All trees will be held so that movement at the root collar is minimised until new roots have developed to anchor the tree. A single vertical stake (75mm dia x 1.8m length) will be used and attached to the tree at approximately 1200mm above ground level. Stakes will be driven 300mm into undisturbed ground beneath tree pit before planting the tree, taking care to avoid underground services and cables. The trees will be secured using proprietary rubber straps and must be firmly fixed with a spacing device used to prevent chafing against the tree.

2.7 All standard trees will be protected from rabbit and deer damage by the fitting of 1.2m tree guards.

2.8 Composted bark mulch or equivalent will be spread to a depth of 50mm in a 1.0m diameter circle around all individual standard trees.

2.9 All trees shall be watered in at the end of each day of planting.

3 WOODLAND MIX PLANTING

Ground Preparation

3.1 Cut existing rough grass and **weeds** to between 20mm and 30mm and remove 300x300mm squares of turf.

Planting

3.2 The minimum overall recommended rooting depth for shrubs is 600mm and for trees is 900mm. The first 300mm shall be made up of multi-purpose topsoil; it shall be ensured that a suitable subsoil provides the remainder of the minimum rooting depth. Before receiving topsoil, subsoils should be loosened using ripping equipment; this shall be done when the subsoil is dry to encourage soil shattering. All stones and other objects larger than 50 mm shall be removed from the prepared surface.

3.3 Shrub / tree planting is to be as per the planting pattern as set out on the planting plan and planting schedule, with shrubs / trees planted at even spaces into the prepared soil at the specified number per centre, with minimal disturbance to the rootball, and well firmed in. Planting should avoid man-made grids and lines, and should group species together in groups of 5–7 plants. Spread ornamental pine bark mulch to a depth of 75mm to a 900mm diameter around each planting station.

3.4 All bare-root planting stock will be protected from rabbit damage using approved proprietary 0.6m (for shrub species) or 1.2m (for tree species) plastic shrub/tree guards, supported with 0.9m (or 1.35m for trees) x 32mm x 32mm softwood stakes as advised by the manufacturer.

3.5 All container-grown planting stock will be protected from rabbit damage using approved proprietary 600mm plastic shrub shelters, supported with 0.9m x 32mm x 32mm softwood stakes as advised by the manufacturer.

Maintenance

3.6 Using approved herbicides, a 900mm diameter circle centred on each planting station shall be kept weed free throughout the maintenance period. In the autumn following planting the CA will prepare a list of all plants which are dead, dying or diseased and are to be replaced during the following planting season.

3.7 Within the day of planting climber plants should be saturated to field capacity, this shall be done before applying the below bark mulch.

4 NATIVE SHRUB PLANTING

Ground Preparation

4.1 Cut existing rough grass and weeds to between 20mm and 30mm and remove 300x300mm squares of turf at 1/m^2.

Planting

4.2 The minimum overall recommended rooting depth for shrubs is 600mm and for trees is 900mm. The first 300mm shall be made up of multi-purpose topsoil; it shall be ensured that a suitable subsoil provides the remainder of the minimum rooting depth. Before receiving topsoil, subsoils should be loosened using ripping equipment; this shall be done when the subsoil is dry to encourage soil shattering. All stones and other objects larger than 50 mm shall be removed from the prepared surface.

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4.6 Using approved herbicides, a 900mm diameter circle centred on each planting station shall be kept weed free throughout the maintenance period. In the autumn following planting the CA will prepare a list of all plants which are dead, dying or diseased and are to be replaced during the following planting season.

5 GRASS

Preparation

5.1 Areas to be seeded will be sprayed out using a glyphosate-based herbicide and cultivated to a minimum depth of 100mm. During the construction phase there may be areas which have suffered high soil compaction, for instance due to heavy machinery being deployed. These areas should be harrowed using a disc harrow to ensure the soil structure is suitable for subsequent sowing. If such a requirement arises to harrow with discs, caution should be exercised to ensure newly installed underground services are not damaged during harrowing.

5.2 Seeding should take place in early spring in the first year following completion of underground wiring and be broadcast by machine and rolled where possible. In areas where a machine is unable to access, bare areas shall be raked by hand and seeding in these areas should be broadcast by hand.

5.3 Grass seed will be sown in accordance with BS 4428 (1989), and will be sown from April to May or from September to October, during calm weather and not when the ground is frost bound or waterlogged. The site will be seeded where shown using the seed mix shown below or equivalent (to be agreed with the project ecologist).

5.4 The seed supplier should be contacted prior to purchasing the seed mixture and the soil conditions and location of the site should be discussed. A bespoke seed mixture suitable for the specific conditions on the site may be more suitable.

5.5 Seeds can be mixed with a substrate such as sand or sawdust for ease of broadcasting.

Grassland Cutting

5.6 Following establishment of a suitable sward, the grassland habitats will be managed through mechanical cuts to develop grassland with a varied structure. Both approaches are identified below.

5.7 Problem perennial weeds within the grassland will be controlled by carefully targeted applications of a suitable selective non residual herbicide by way of spot spraying with a knapsack (low pressure to avoid spray drift), or weed wiping.

5.8 In the unlikely event that grassland fails to become established upon areas of bare ground created during the works these areas will be lightly scarified and reseeded with the same seed mix used to seed the site at the during the construction phase.

5.9 An inspection will be undertaken in early August following completion of the installation. The inspection will be undertaken by the BESS operator. Should the proportion of bare ground be greater than 20% sowing will be repeated in these areas. Reseeding in August is likely to be particularly appropriate where the months of May, June and July have been very dry. The operating company will assess the proportion of bare ground on the site.

Mechanical Cutting Regime

5.10 Areas of newly seeded grassland will be subject to one cut during the first year of establishment. In good growing conditions (warm soils and adequate rainfall) the grass will establish and require its first management around 6–10 weeks from sowing. Cut when sward reaches 100mm in height, however, additional cuts may be required. The grassland should be cut to 40–70mm. Arising's will be left in situ for 3–5 days to allow seeds to disperse, then be collected with a baler or rake to remove nutrients and thereby promote the establishment of a bio dive rse sward.

5.11 Cutting should follow a sympathetic method (ie working outwards towards the boundary features), this will allow fauna such as invertebrates, birds and small mammals to temporarily and safely vacate the area.

5.12 The management will take a flexible approach and the exact dates will be dependent upon weather conditions. A phased (rotational) cutting regime is recommended (ie ideally the entire area should not be cut at the same time) in order to allow for more structured grassland.

5.13 Grassed areas along hedgerow bases can be cut less frequently once established, with a single main cut (reducing sward height to approximately 150mm) late in the season, between August and September, subject to weather conditions.

5.14 All arising's will be removed from site.

5.15 Please refer to seed suppliers recommendations for ongoing maintenance and cutting regime.

KEY

- Site Boundary
- Landowner Boundary
- Existing trees and vegetation

PROPOSED

- Standard tree planting
- Upland pine/birch woodland
- Riparian woodland
- Native scrub
- Meadow grass: Wild Flower Meadow MG5 or similar & approved
- Meadow grass: Damp Grasslands Mixture MG8 or similar & approved
- Linear drainage channel/swale
- Anti-glare fencing
- Security fencing
- Acoustic fencing (up to 4m in height)
- 2.4 m high deer fencing

NOTE

Proposed planting accounts for a minimum 3m offset from proposed and existing features

Indicative Plant Schedule

STANDARD TREE PLANTING

SPECIES	SIZE
Betula pendula	8-10cm; 250-300cm; RB 2x; Standard; clear stem 175-200cm; 3 Breaks
Prunus avium	8-10cm; 250-300cm; RB 2x; Standard; clear stem 175-200cm; 3 Breaks
Sorbus aucuparia	8-10cm; 250-300cm; RB 2x; Standard; clear stem 175-200cm; 3 Breaks

UPLAND PINE/BIRCH WOODLAND

SPECIES	SIZE	%
Betula pendula	60-80cm; 1+1; Transplant; seed raised; B	40
Pinus sylvestris	60-80cm; 1+1; Transplant; seed raised; B	30
Populus tremula	60-80cm; 1+1; Transplant; seed raised; B	10
Sorbus aucuparia	60-80cm; 1+1; Transplant; seed raised; B	20

RIPARIAN WOODLAND

SPECIES	SIZE	%
Alnus glutinosa	60-80cm; 1+1; Transplant; seed raised; B	50
Betula pubescens	60-80cm; 1+1; Transplant; seed raised; B	25
Salix cinerea subsp. oleifolia	60-80cm; 1+1; Transplant; seed raised; B	25

NATIVE SCRUB

SPECIES	SIZE	%
Corylus avellana	60-80cm; 1+2; Transplant; seed raised; B	20
Crataegus monogyna	60-80cm; 1+1; Transplant; seed raised; B	30
Ilex aquifolium	60-80cm; Leader with laterals; 3L	10
Prunus spinosa	60-80cm; 1+1; Transplant; seed raised; B	20
Rosa canina	60-80cm; 1+1; Transplant; seed raised; B	20

DATE	NO	REVISION NOTE
25/06/2024	E	AMENDED OWNERSHIP BOUNDARY
11/06/2024	D	LANDSCAPING AMENDED TO UPDATED LAYOUT
09/05/2024	C	LANDSCAPING AMENDED TO CLIENT COMMENT
20/12/2023	B	LANDSCAPING AMENDED TO CLIENT COMMENT
19/12/2023	A	UPDATED BOUNDARY LINES

LANDSCAPE MASTERPLAN

Contullich (Alness) Energy Storage Facility

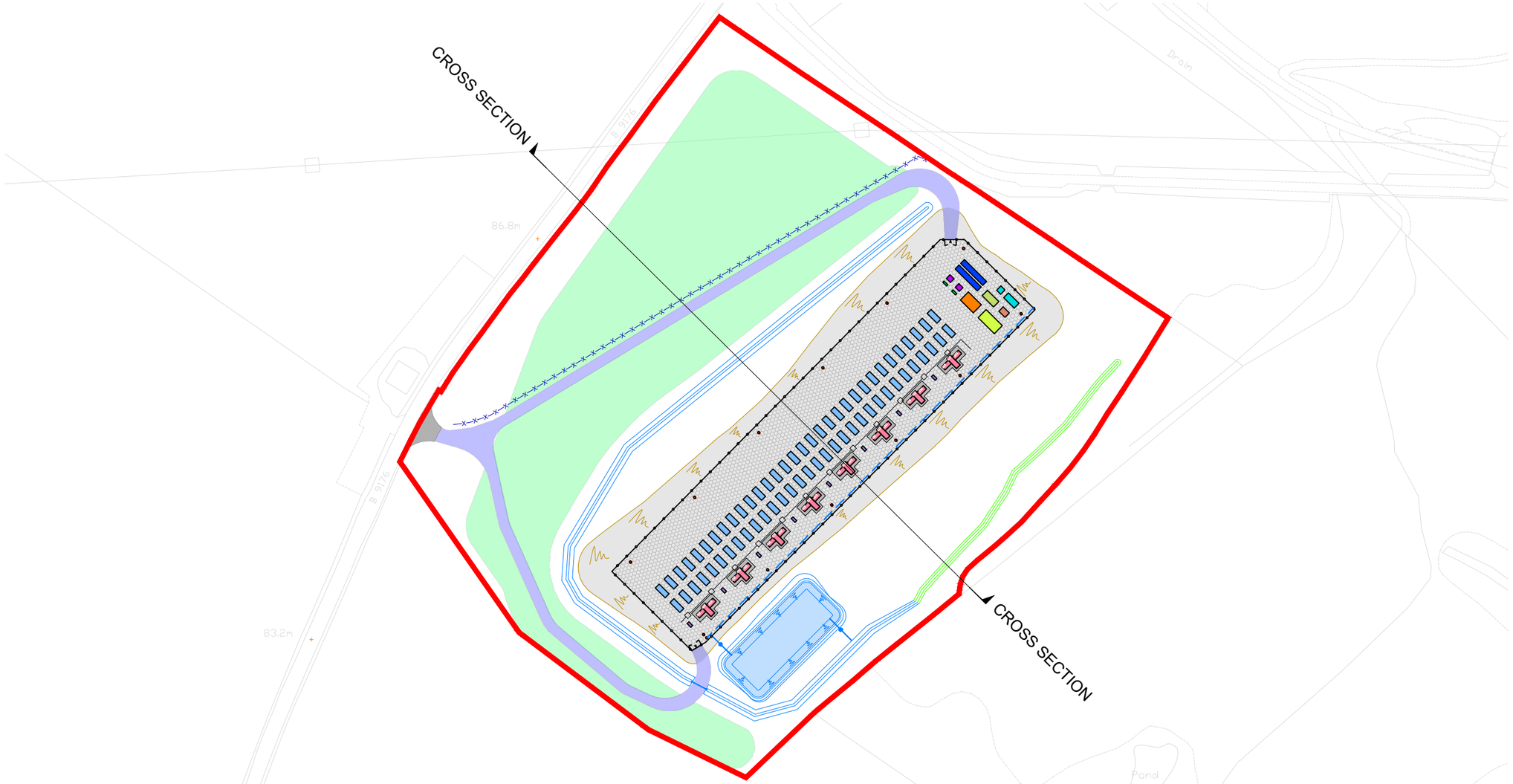
CLIENT
Renewable Energy Systems

DATE	SCALE	TEAM	APPRVD
11/06/2024	1:1000 @A0	VK/NM	DG

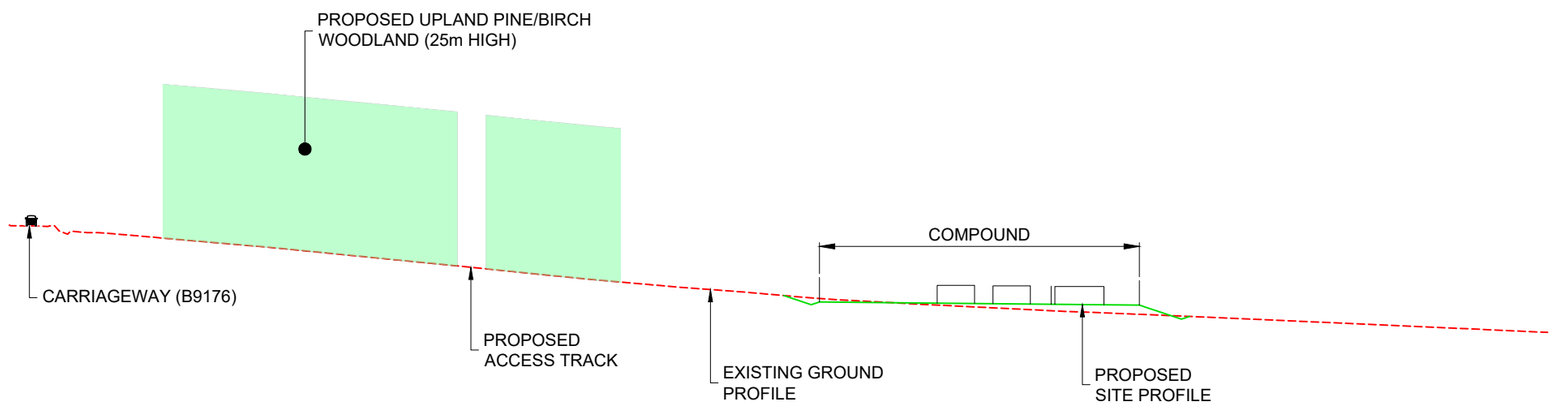
DRAWING NUMBER

P23-1582_EN_002_E_-

PEGASUS GROUP



OVERVIEW
SCALE 1:2,000



CROSS SECTION
SCALE 1:1,000

REFERENCES:

1. PROPOSED INFRASTRUCTURE TAKEN FROM RES DRAWING "INFRASTRUCTURE LAYOUT - 05196-RES-LAY-DR-PT-001"
2. PROPOSED LANDSCAPING TAKEN FROM PEGASUS DRAWING "LANDSCAPE MASTERPLAN - P23-1582-_EN_002_E_V3"

PROPOSED LAYOUT
(WITH WOODLAND SCEENING)
SHEET 2 OF 2

ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
1	JM	WM	MAS	2025-01-02	First Issue

PURPOSE: PLANNING	COORDINATES: OSGB 1936
SCALE: AS SHOWN @A3	DATUM: N/A
LAYOUT DRAWING: N/A	T-LAYOUT NO: N/A

PROJECT TITLE
CONTULLICH (ALNESS)
ENERGY STORAGE FACILITY

DRAWING TITLE
SITE CROSS SECTION

RES DRAWING NUMBER	REV
05196-RES-STE-DR-PT-004	1

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