

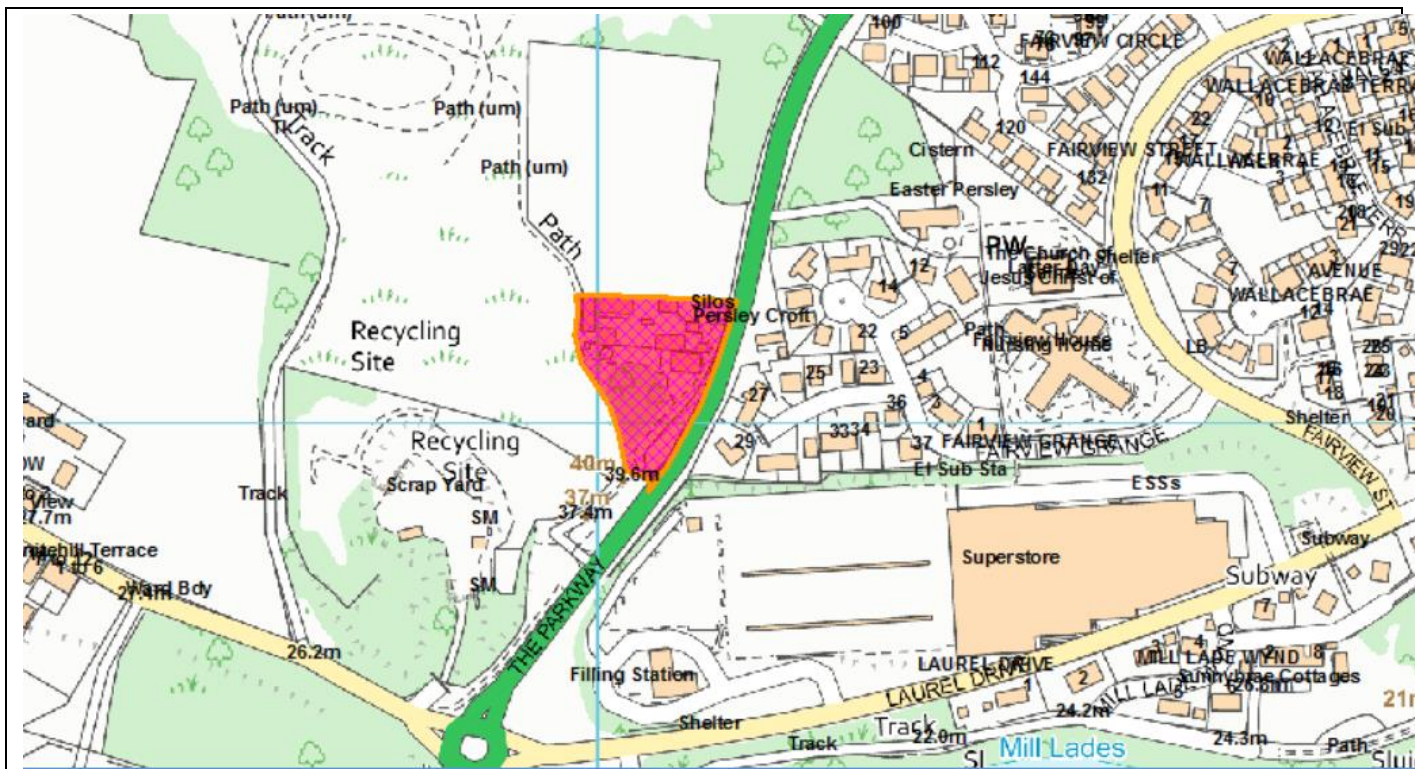


Planning Development Management Committee

Report by Development Management Manager

Committee Date: 22 August 2024

Site Address:	Land at Persley Croft, Parkway, Aberdeen AB22 8AN
Application Description:	Erection of battery energy storage system (BESS) development with a capacity up to 49.9MW including erection of welfare unit, substation and fencing; demolition of an existing buildings and associated Infrastructure
Application Ref:	231134/DPP
Application Type	Detailed Planning Permission
Application Date:	12 September 2023
Applicant:	Persley Croft BESS Ltd
Ward:	Bridge of Don
Community Council:	Danestone



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RECOMMENDATION

Approve Conditionally

APPLICATION BACKGROUND

Site Description

The site relates to a group of derelict agricultural buildings, structures and associated land extending to around 0.7 hectares on the edge of Danestone. It is located immediately west of the Parkway (A92). There is a vehicular access road which has a junction onto the Parkway at the southern end of the site and at the north end there is a secondary access. The site slopes gently from north to south.

The buildings and structures are in a dilapidated state, some having partially collapsed with open roofs. Yard space surrounds the buildings, with areas of dense scrub and scattered self-seeded trees.

To the north is an agricultural field; to the west is an area of scattered trees and improved grassland forming the former Persley Quarry; to the south is the RGS Hutchison & Sons scrap yard; and to the east across the Parkway are residential properties forming Fairview Grange and the Tesco supermarket slightly further south, forming part of the wider Danestone residential area. A house known as Persley Croft is the closest residential property and faces onto the Parkway, opposite the site, circa 20 metres away.

Relevant Planning History

- The applicant submitted an environmental impact assessment ('EIA') screening opinion request (230453/ESC) in April 2023. It was determined that the proposal is not an EIA development and submission of an environmental report is therefore not required.
- The applicant submitted a proposal of application notice (230447/PAN) in April 2023, indicating their intention to submit a planning application for the proposed development and seeking confirmation of the public consultation required. It was confirmed that some further public consultation would be required, in addition to that proposed by the applicant.

APPLICATION DESCRIPTION

Description of Proposal

Detailed planning permission is sought for the construction of a grid scale battery energy storage system ('BESS') with a capacity of up to 49.9 megawatts.

The facility would be an enclosed compound accommodating a range of equipment and small buildings located on concrete pads, surrounded by a gravel surface. The equipment housings would generally have the appearance of shipping containers, whereas the buildings would have the appearance of small buildings or enclosures that would typically be found within an electricity substation.

<u>Item</u>	<u>Quantity</u>	<u>Item Dimensions (L x W x H)</u>
Battery energy storage container	20	6.1m x 2.4m x 2.9m
Inverter and transformer unit	10	6.1m x 2.4m x 2.9m
Auxiliary transformer and feeder pillar	1	2.7m x 2.4m x 2.4m

Customer switch room	1	14.0m x 3.3m x 3.5m
Customer control building	1	4.9m x 5.8m x 3.7m
Customer store building	1	12.2m x 2.4m x 2.6m
Distribution Network Operator control building	1	4.9m x 5.8m x 3.7m

The compound area containing the buildings set out above would be enclosed by a 4.0m high acoustic fence around the north, east and south boundaries and a 2.4m high metal palisade fence along the western boundary. There would be eight pole-mounted CCTV cameras and lights, each 4.1m high sited at various points around the perimeter.

On the south side of the main compound would be a smaller secondary compound containing equipment required by the Distribution Network Operator, which in the north of Scotland is Scottish and Southern Electricity Networks ('SSEN'). This compound would accommodate a control building (4.9m x 5.8m x 3.7m) and storage container (3.0m x 2.1m x 2.1m). It would be enclosed by a 2.8m high perimeter palisade fence on its east, south and west boundaries and the 4.0m high acoustic fence of the main compound on its north side.

The existing southern junction with the Parkway would be retained to provide vehicular access to the site. It would be altered to create a left-in/left-out arrangement. An access road would lead to the compound where a gate would provide access to a loop road within. A personnel gate would be provided within the fence on the east side of the compound, accessed from the secondary access road which would be altered to provide agricultural access for the field to the north of the site.

Amendments

In agreement with the applicant, the following amendments were made to the application:

- Access road realigned and site access junction design amended.
- Internal service road route adjusted to form a loop.
- Layout and design of battery equipment amended.
- Minor adjustments to the extent of the compound and consequential changes to landscaping.
- Amended drainage arrangements to include an attenuation tank and pollution control device.

Supporting Documents

All drawings and supporting documents listed below can be viewed on the Council's website at:

<https://publicaccess.aberdeencity.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=S0TQY5BZFJY00>

- Alternative Site Assessment
- Arboricultural Impact Assessment
- Construction Traffic Management Plan
- Design and Access Statement
- Drainage Impact Assessment (and addendum)
- Ecological Impact Assessment
- Heritage Buildings Summary Note
- Landscape Visual Appraisal

- Noise Impact Assessment
- Outline Battery Safety Management Plan (and associated Fire Safety Technical Note)
- Phase 1: Desk Study
- Planning Statement
- Pre-Application Consultation Report
- Transport Statement

Reason for Referral to Committee

The application has been referred to the Planning Development Management Committee for two reasons –

- it is being recommended for approval and has been the subject of formal timeous objection by the local community council within whose area the application site falls; and
- has been the subject of six or more timeous letters of representation that express objection or concern about the proposal.

Pre-Application Consultation

The applicant undertook statutory pre-application consultation which included –

- A meeting was held with Danestone Community Council on 10 May 2023. The project team presented the proposal to attendees, answered questions and attained feedback on the scheme.
- Two public consultation events held at Danestone Congregational Church on Thursday 11 May and Thursday 25 May 2023. Two newspaper adverts were placed, and leaflets were distributed to 840 addresses in the area surrounding the application site, inviting residents to the public events and providing details of the project website. The first event was attended by 19 members of the public, as well as community council representatives, whereas 21 members of the public and community council representatives attended the second event. The applicant collated and reviewed feedback received, and where feasible has made changes to the proposals accordingly.
- The applicant presented to the Council's Pre-Application Forum on Thursday 25 May 2023 (minutes of meeting).
- An online meeting was held with Jackie Dunbar MSP on 1 June 2023.

CONSULTATIONS

ACC - Environmental Health – No objection. The Noise Impact Assessment has been reviewed and it is considered reasonable. Therefore, the proposed development is accepted provided that:

- The BESS comprises the plant detailed in Section 4.1 (20x Battery Energy Storage Units [with integrated inverter] and 10x Transformers), with A-weighted sound power levels not exceeding those detailed in Table 2 and is arranged as shown on the site layout plan.
- Prior to construction of the BESS, the warranted sound power levels, number of items and location of the chosen plant shall be checked against the assumptions considered in the

assessment and where the proposed items are found to vary (i.e., in sound power level, location or number) an updated assessment shall be undertaken to confirm that the operational noise levels meet the relevant criteria (noise limits).

- A 4m high acoustic barrier is installed as shown on the site layout plan, providing (as a minimum) the acoustic absorption coefficients detailed in Table 3 of the report. The acoustic barrier must meet the following minimum specifications:
 - Minimum mass per unit area of 15 kg/m².
 - Minimum sound absorption performance equivalent to or greater than the values shown in Table 3.
 - The absorptive acoustic barrier must be a solid sealed construction with no holes or gaps.
 - The absorptive acoustic barrier must be properly installed with the base of the barrier sealed into the ground along the base.
 - Junctions between any lengths of the absorptive acoustic barrier must also be properly sealed with no holes or gaps.
- To protect the amenity of neighbouring properties/occupants, development works (including site/ground preparation, demolition, and construction) causing noise beyond the site boundary should not occur outside the hours of Monday to Friday 0700 to 1900 and Saturday 0800 to 1300.

ACC - Environmental Health (Contaminated Land) – No objection. The Phase 1 Desk Study has been reviewed and the Environmental Health Service is in general agreement with the conclusions and recommendations. There is no objection to the approval of this application, but it is recommended that a condition is attached to any approval, requiring a phase 2 Site Investigation (intrusive investigations) to verify the assumptions made in the Preliminary Conceptual Site Model and to provide data for foundation design. It is recommended that any site investigation works are undertaken following the demolition of the existing structures. Given the age and nature of the existing buildings, it is likely that asbestos containing materials ('ACMs') are present. It is recommended that an asbestos survey is undertaken prior to demolition, with any ACMs removed from site to a licensed waste management disposal facility. The works should be undertaken by a licensed contractor with any waste transfer notes retained for future reference.

ACC - Roads Development Management Team – No objection.

- Like other BESS sites, once operational the site shall not generate any daily vehicular trips in/out of the site given there shall be no physical presence on site. It is anticipated that a maximum of one maintenance vehicle trip per month would be required, which obviously shows the extremely low use of access required to the site.
- With the above in mind, it is noted that the site has an existing vehicular site access onto the Parkway (A92) which is located within the south-east corner of the site and would be retained. This means of access is considered acceptable given the volume of vehicular movements proposed.
- However, the access is located at a point on the Parkway in which there is a dual lane heading northbound, which would make it difficult for any vehicles exiting the site to cross all lanes to head southbound. This is safety concern and therefore the junction requires to be adjusted to a left in/left out arrangement and designed to force such manoeuvres to alleviate these concerns.

- The applicant has provided a design for an upgraded access, which is considered acceptable. It would provide a splitter island, associated signage and visibility splay, commensurate with the number of trips associated with the site and the speed limit on the Parkway. The matter of the visibility splay southwards is a key requirement and shall require a lot of vegetation to be cut back which is out with the redline boundary of the site, so this requires to be reaffirmed and conditioned (if necessary).
- The upgraded/amended site vehicular access would require a section 56 roads construction consent application and the visibility splay and cut back of vegetation shall be a key part of such application.
- The site would be securely gated across the vehicular access which is appropriately offset to allow a vehicle to be fully off the road when opening and closing the gate, so as to not interfere with the flow of vehicles on the Parkway and to avoid the potential for collision.
- Within the site, there would be adequate space and parking to accommodate the estimated volume of maintenance vehicles to manoeuvre within the site and turn and exit in a forward gear. The layout also provides access for fire service vehicles across all areas of the site.
- As with any development, there would be a certain level of impact during the construction phase. The applicant and contractors would be required to liaise with ACC Roadworks Coordination Team to programme the works and allow for appropriate traffic management measures to be in place.

Archaeology Service (Aberdeenshire Council) – No objection. Taking into account the Heritage Buildings Summary Report, which includes a photographic survey of the surviving buildings, the 20th century date of the structures and their former use as a piggery, it is confirmed that the survey provides an acceptable record of the site prior to any demolition or development works. There is no further comment to make other than to thank the applicant for providing this information at this stage of the planning process.

Danestone Community Council – Object to the application. Bad neighbours should be sensitively sited. This development has the potential to be a bad neighbour and siting it so close to existing and future houses.

1. BESS Regulation – It is understood this type of facility is required in the future as renewable energies supply more of our energy needs. Aberdeen City Local Development Plan 2017 (3.143) only mentions renewable energy in terms of generation, and this is a plan for storage only. There have been questions asked in Parliament that councils are not prepared to know what regulations these facilities should comply with (Sir David Evennett MP, September 7 2022, and Dame Maria Miller MP, July 2023).
2. Traffic Safety – The development is located near the Parkway (A92), a three-lane road with limited visibility and a 50mph speed limit, posing risks of accidents due to slow lorries turning in or out of the site. Visibility is poor for vehicles exiting the site. Police Scotland reported 15 collisions in the Danestone area of the Parkway over the last three years, including during the pandemic.
3. Site Planning History – Houses were previously rejected on this site in 2015, due to access issues.

4. Environmental and Health Risks – The proposed development poses fire risks, particularly involving lithium batteries, which can lead to hazardous contamination and release of flammable gases. The proximity to a scrapyards, care home, nursery, and doctors' surgery raises concerns about the impact of fires and the need for effective emergency response measures.
5. Noise Pollution – The acoustic fence proposed will bounce back noise of traffic towards the housing which increase noise considerably. In the noise report they have not given the distance from the nearest house to the installation to get a true reading. There is concern is this has not been measured fully and this will be noisier than suggested.
6. Grid Connection – The facility would be linked to the Persley Grid substation across the River Don at Station Road, Woodside. It should be clarified how the facility and substation would be connected as any connection would have to cross the river.
7. Wildlife Impact – The development could contaminate the River Don and harm local wildlife, including otters, salmon, and various bird species.
8. Drainage Issues – Increased drainage from the site could exacerbate dampness problems at RGS Hutchison Metals and affect nearby football fields.
9. Community Disruption – The construction phase, estimated to last nine months, will cause noise, dust, and commuting issues, with no suitable transportation options for construction workers. In terms of construction vehicle access, this is a narrow bendy residential 20 mph family housing estate. There are concerns about this as residents have already raised complaints and concern about the traffic in a built-up area. There are concerns about how this is going to impact residents' health with it being so close to residents' properties, especially with the removal of asbestos and other hazardous goods.
10. Anti-Social Behaviour – There are concerns about potential graffiti and vandalism due to the site's accessibility and the area's existing anti-social behaviour problems.

Health and Safety Executive – For grid scale BESS there are statutory requirements for duty holders to notify the fire and rescue service to inform their emergency response planning.

There is a robust regulatory regime in place which addresses the risks associated with grid scale BESS. Of relevance are the Dangerous Substances and Explosive Atmospheres Regulations 2002 which set out minimum requirements for the protection of workers and others from fire and explosion risks; the Electricity at Work Regulations 1989 which require precautions to be taken against the risk of death or personal injury from electricity in work activities; and the Management of Health and Safety at Work Regulations 1999 which require risks to be assessed and appropriately managed.

The fundamental principle of health and safety law is that those who create risks are best placed to control them so far as is reasonably practicable. Designers, installers, and operators all have a duty to ensure this is the case. HSE expects the duty holder to assess the specific situation and implement necessary control measures, to manage the risks of fire and other hazards.

Scottish Environment Protection Agency – BESS developments do not fall within category 3 (energy generation) of SEPA's Triage Framework. Therefore, please refer to SEPA's standing advice, SEPA do not require consultation on this application. SEPA are aware of potential legislative changes to how battery storage proposals, such as the one in question, are regulated. As a result, SEPA may respond differently to these types of developments in the future.

Scottish Fire and Rescue Service – SFRS direct the planning authority to the guidance from the National Fire Chiefs Council ('NFCC'): 'Grid Scale Battery Energy Storage System Planning – Guidance for Fire and Rescue Services'.

In response to the initial plans as submitted:

- Battery units would be separated by 3m – NFCC guidance is 6m.
- Whether the fire suppression is water or gaseous is not specified – NFCC recommends water.
- Separation distances from the site boundary to residential areas is compliant but no mention of distance to vegetation. Areas within the boundary would be landscaped and seem to indicate trees, it is assumed to limit the visual impact of the site – NFCC recommend 10m distance to any combustible vegetation.

In response to the amendments made by the applicant to address the above comments, SFRS welcome the additional fire safety measures taken.

Scottish Water – No objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced.

REPRESENTATIONS

Sixty representations have been received. Two are neutral, whereas fifty-eight object to the application. Most of the representations come from residents of Danestone and wider Bridge of Don area, including an objection on behalf of the members of Danestone Congregational Church. The matters raised are summarised below –

Location

1. The development would be too close to housing in Danestone; there are other locations, such as an industrial estate, which would be more suitable.
2. The site should be used for housing.
3. The application lacks information on why this site is considered suitable over other sites.

Technical

4. It is not clear what the capacity of the BESS is.
5. A route for the underground cable for the grid connection to the electricity substation has not been indicated.

Amenity

6. The BESS equipment would generate noise and affect residents. The acoustic fence does not go around the whole site.
7. There would be noise during construction.
8. There would be vibrations from the BESS equipment.
9. The development would have an adverse visual impact.

Environment

10. Removal of the existing buildings would negatively affect local wildlife, such as bats, owls, swallows and swifts, which rely on outbuildings such as those on the Persley Croft site for nesting sites.

11. Should a fire occur, a large volume of water is likely to be required for firefighting. The water run-off would be contaminated by the batteries and could adversely affect the environment.
12. Lithium batteries cannot be recycled, where would they end up?

Transportation

13. There is concern with the increased risk of an accident on the Parkway (which is already a busy road with fast moving traffic) due to vehicles entering and exiting the site.
14. There is no information on how the left-in/left-out junction would be monitored and enforced. There is already a left-hand only entrance / exit further up the road to the new housing estate, which is not always adhered to.
15. Concern with the implication on road safety during construction. How would any traffic management be monitored and enforced?
16. A planning application for housing at the site was previously refused due to issues relating to access, it is not clear why an access would now be acceptable.

Safety

17. Lithium batteries present a risk of fire and explosion, with resultant toxic fumes.
18. There is a petrol station close by and scrap merchants yard.
19. The adjacent scrap merchants yard is the frequent target of fire raising and vandalism. This poses a risk of introducing external heat to the BESS, which will depend on keeping its batteries cool.
20. A BESS fire in Liverpool during 2020 occurred despite a fire suppression system being installed. The fire spread so quickly the suppression system did not activate and the conclusion was that such a system would have had little to no effect on the resulting fire. How can it be ensured that the installed fire suppression system would be fit for purpose?
21. There are no emergency services based in Danestone to deal with any issues arising from this installation.

Other Matters

22. The demolition of the buildings could result in rats being displaced.
23. Who would take responsibility to dispose of the lithium batteries and restore the site if the operating company ceased to trade?
24. The development would be unmanned with monitoring taking place via CCTV cameras. Where would they be linked to, who would be responsible if anything happened and what response time would be in place.
25. Property values in the area would be adversely affected.
26. A second BESS development is proposed in the area.
27. The proposed site is on a busy helicopter flight path.
28. The supporting information states that the site would be accessible by workers who walk to the site. There is no pavement on that side of the Parkway at that location, leaving people to either cross a 50mph road, or walk alongside it on no pavement, both of which increase the likelihood of accidents.
29. The supporting information states that a publicly accessible board would be erected with details of site management etc. Without a pavement, or vehicle draw in, this is not publicly accessible.
30. What compensation or philanthropic initiatives does the applicant propose for surrounding community?

Administrative

31. Despite two public consultations, inadequate information has been made available to the local communities. There are many people in Danestone, and in the wider Bridge of Don, who were not informed of this application by the applicants and have no idea of the plans.

MATERIAL CONSIDERATIONS

Legislative Requirements

Sections 25 and 37(2) of the Town and Country Planning (Scotland) Act 1997 require that where making any determination under the planning acts, regard is to be had to the provisions of the Development Plan; and, that any determination shall be made in accordance with the plan, so far as material to the application, unless material considerations indicate otherwise.

Development Plan

National Planning Framework 4

National Planning Framework 4 (NPF4) is the long-term spatial strategy for Scotland and contains a comprehensive set of national planning policies that form part of the statutory development plan.

- Policy 1 (Tackling the Climate and Nature Crises)
- Policy 2 (Climate Mitigation and Adaptation)
- Policy 3 (Biodiversity)
- Policy 4 (Natural Places)
- Policy 6 (Forestry, Woodland and Trees)
- Policy 8 (Green Belts)
- Policy 9 (Brownfield, Vacant and Derelict Land and Empty Buildings)
- Policy 11 (Energy)
- Policy 12 (Zero Waste)
- Policy 13 (Sustainable Transport)
- Policy 14 (Design, Quality and Place)
- Policy 22 (Flood Risk and Water Management)
- Policy 23 (Health and Safety)

Aberdeen Local Development Plan (2023)

- Policy D1 (Quality Placemaking)
- Policy D4 (Landscape)
- Policy D5 (Landscape Design)
- Policy NE1 (Green Belt)
- Policy NE2 (Green and Blue Infrastructure)
- Policy NE3 (Our Natural Heritage)
- Policy NE4 (Our Water Environment)
- Policy NE5 (Trees and Woodland)
- Policy R2 (Degraded and Contaminated Land)
- Policy R7 (Renewable and Low Carbon Energy Developments)
- Policy T2 (Sustainable Transport)
- Policy WB3 (Noise)

Aberdeen Planning Guidance

- Flooding, Drainage and Water Quality
- Landscape
- Natural Heritage
- Noise
- Transport and Accessibility
- Trees and Woodlands

Other National Policy and Guidance

- Energy Storage: Planning Advice (Scottish Government)

Other Material Considerations

- Grid Scale Battery Energy Storage System Planning – Guidance for Fire and Rescue Services (National Fire Chiefs Council)

EVALUATION

Background

Renewable energy sources such as wind and solar power rely on the weather to generate electricity. This means that renewable sources cannot adjust to demand from consumers and businesses as easily as fossil fuels and nuclear power can. Therefore, with the national energy system increasingly relying on renewable sources, it will need to be underpinned by technologies that can respond to fluctuations in supply and demand, such as battery energy storage, gas with carbon capture and storage, and hydrogen.

Grid scale battery energy storage systems ('BESS') store energy that is produced when demand is lower than supply. The energy stored in batteries can be released when energy demand exists but there is little wind and sun, to ensure the demand can always be met, a process known as "grid balancing." Without such facilities, excess energy is wasted as any surplus cannot be stored in the electricity network.

The Scottish Government's planning advice on energy storage states that "*A clear case has been made that, if the energy sector is to maximise environmental, economic and social benefits, renewable energy will need to be linked to energy storage. Energy storage technologies can counteract intermittency associated with certain energy supplies, can ensure excess power is not lost at times of high production, can provide energy on demand off-grid in a variety of ways. Oversupply is likely to become more prevalent the closer Scotland gets to realising its 100% electricity from renewables target. It is also expected that energy storage will be essential if Scotland is to realise its ambition to become a renewable energy exporter and to attract the economic advantages of ensuring that the energy storage supply chain locates in Scotland.*"

According to the UK Government's Renewable Energy Planning Database, in Scotland as of January 2024, there were 15 operational BESS and 124 BESS that were awaiting a planning application determination or were under construction. Across the UK there were 105 operational BESS and 596 have been given planning consent and are awaiting or were under construction.¹

¹ [Renewable Energy Planning Database, Department for Energy Security and Net Zero, GOV.UK](#)

Principle of Development

Energy Developments

Policy 11 (Energy) of National Planning Framework 4 ('NPF4') at a strategic level seeks to encourage, promote, and facilitate all forms of renewable energy development onshore and offshore. In terms of considering planning applications, Policy 11 states that development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported, with battery energy storage being listed as one of these technologies.

Similarly, Policy R7 (Renewable and Low Carbon Energy Developments) of the Aberdeen Local Development Plan ('ALDP') encourages and supports renewable and low carbon energy schemes in principle, where the technology can operate efficiently, and the environmental and cumulative impacts can be satisfactorily addressed.

Policy 1 (Tackling the Climate and Nature Crises) of NPF4 requires that when considering all development proposals, significant weight will be given to the global climate and nature crises. With the generation of energy being a significant generator of carbon emissions, the decarbonisation of the energy system is an important element of addressing the global climate and nature crises.

These policies establish that the principle of renewable energy developments, such as the proposed BESS, is acceptable and indeed in recognition of their importance in achieving net zero targets, such developments are lent substantial support at both national and local level.

Brownfield, Vacant and Derelict Land and Empty Buildings

The site comprises brownfield land as it has previously been developed. Policy 9 (Brownfield, Vacant and Derelict Land and Empty Buildings) of NPF4 explains that "*development proposals that will result in the sustainable reuse of brownfield land including vacant and derelict land and buildings, whether permanent or temporary, will be supported. In determining whether the reuse is sustainable, the biodiversity value of brownfield land which has naturalised should be taken into account.*"

The existing agricultural premises are understood to have last been used as a piggery and appear to have been derelict for at least fifteen years, with no productive use during that period. The buildings are in an increasingly dilapidated state, accompanied by overgrown vegetation throughout the site and buildings. The reuse of the site would therefore be lent support from Policy 9. Matters relating to biodiversity are considered later in the report.

Policy 9 goes on to say that "*Where land is known or suspected to be unstable or contaminated, development proposals will demonstrate that the land is, or can be made, safe and suitable for the proposed new use.*" Policy R2 (Degraded and Contaminated Land) of the ALDP contains similar provisions.

A phase 1 desk study has been undertaken by the applicant and considers that the site is likely to be contaminated, with the potential sources being construction/demolition waste and possibly oils or fuel from vehicle spills from the former use as a piggery and the adjacent former quarry. Asbestos could be present within the old structures. These potential contaminants are commonly associated with the former uses. The study recommends a phase 2 site investigation should be undertaken to verify the assumptions made in the initial study and to provide data for foundation design. The report recommends that any site investigation works are undertaken following the demolition of the existing structures. The Council's Environmental Health Service has reviewed the phase 1 study and found the recommendations to be acceptable. A condition is proposed requiring the phase 2 study to be

carried out and submitted for approval. The proposals are therefore in accordance with Policy 9 of NPF4 in this regard and Policy R2 of the ALDP (*Community Council issue 9*).

Green Belt

The site is zoned as green belt where Policy 8 (Green Belts) of NPF4 applies and has the aim of encouraging, promoting and facilitating compact urban growth and use the land around our towns and cities sustainably. Development in the green belt is strictly controlled. For proposals to be supported, they must fall into one or more of the categories of development which are acceptable in the green belt as policy exceptions. Thereafter, should they fall into one of these categories, they must also meet a range of other requirements to ensure the integrity of the green belt is retained.

In terms of being an acceptable development type, the proposal falls into two categories of development which are generally permitted in the green belt. The first relates to essential infrastructure, which under Policy 8 is described as '*essential infrastructure or new cemetery provision*' and in Policy NE1 as development that "*is directly associated with essential infrastructure such as telecommunications, electricity grid connections, transport proposals identified in the Plan or roads planned through masterplanning of sites, if they cannot be accommodated anywhere other than the Green Belt;*'

The second category relates to renewable energy, which under Policy 8 is categorised as '*minerals operations and renewable energy developments*' and in Policy NE1 as development that '*is related to the generation of renewable energy (wind turbine, solar farm, or hydro scheme) and/or heat;*'

As described earlier in the report, given the emphasis placed on achieving net-zero targets and the essential role battery energy storage plays in decarbonising the UK's electricity network, such developments are therefore considered to be essential infrastructure and related to renewable energy development. Therefore, with it established that the development is of a type acceptable as an exception within the green belt, the second element of Policy 8 requires a range of other matters to be demonstrated which are discussed below.

1. *Why a green belt location is essential and why it cannot be located on an alternative site outwith the green belt;*

The UK's electricity grid is highly constrained and therefore identifying a location where battery energy storage can be connected to the electricity grid is a significant challenge. Typically, for a grid scale facility to be commercially viable it must be located within 2km of a grid supply point that has available capacity. The greater the distance from the grid supply point, the greater the electricity transmission loss and greater the cost to lay a cable to the connection point. Even within 2km, viability relies upon there being no significant physical obstacles which would make the laying of a cable between the two locations technically or financially unviable.

In this case, the applicant has the offer of a connection to SSEN's Persley Grid Supply Point at Station Road, Woodside, situated around 0.9km to the southeast of the site, south of the River Don.

The applicant has submitted an Alternative Site Assessment which considers why a green belt site is necessary to accommodate the development. It provides a comparative analysis of sites which were considered as potentially being capable of accommodating the development within a 2km radius of Persley Grid Supply Point.

- Five brownfield sites were identified from the Council's Brownfield Urban Capacity Study. However, all are unavailable or are being developed for other uses. Four of the sites were

also located south of the Aberdeen to Inverness railway line, which presents a significant barrier in terms of making a connection to the grid supply point.

- Existing business and industrial land (four sites) and mixed-use areas (five sites) were considered, such as Aberdeen Innovation Park, Twin Spires Business Park, Northfield Industrial Estate, St. Machar Road Industrial Estate. The areas considered either have no available land, are too small to accommodate the development or other are otherwise unsuitable.
- Nine sites designated as opportunity sites within the ALDP were also considered. Five are below the minimum sites size and the remainder are being developed for other purposes, such as residential use.
- Greenfield sites outside the green belt were considered, but all are protected as urban green space, so are not suitable for a battery energy storage development.

The assessment has demonstrated that there is no suitable site outside the green belt within the 2km search area.

2. the purpose of the green belt at that location is not undermined;

The ALDP states that the aim of the Aberdeen green belt is to maintain the distinct identity of Aberdeen, and the communities within and around the city, by defining their physical boundaries clearly. Safeguarding the green belt helps to avoid coalescence of these settlements and sprawling development on the edge of the city, maintain Aberdeen's landscape setting, and provide access to open space. The green belt directs planned growth to the most appropriate locations and supports regeneration.

Being a previously developed site within the green belt, the site can be described as brownfield, rather than being an undeveloped greenfield site. Therefore, its redevelopment would not represent urban sprawl or any increase in the level of development within the green belt. Due to the small scale and brownfield status of the site, the development would not lead to any coalescence between settlements.

3. the proposal is compatible with the surrounding established countryside and landscape character;

Policy D4 (Landscape) of the ALDP indicates that development should avoid adversely affecting the character of landscapes which are important for the setting of the city, including the coast, river valleys and hill landscapes.

The Parkway is the boundary between the green belt and this part of the developed edge of Danestone. The Parkway represents the transition between the developed suburban area to the east and the open countryside to the west. However, both the derelict application site and neighbouring scrap yard, although being to the west of the Parkway and within the green belt, have a negative influence on its character, due to their industrial appearance and in the case of the application site, its dilapidated state. Taking this baseline character into account, the redevelopment of the site would, through the removal of the derelict buildings, enhance the visual amenity of this part of the green belt

In terms of the new development, most of the equipment would be located within the main compound, with the site boundaries being what would predominately be seen from the

surrounding area. Both the main and secondary compounds would be partially screened by landscaping, which over time would mean they would sit comfortably within their surroundings.

With respect to its relationship with the wider green belt and countryside to the west, the site is largely contained within the landscape, with long views being restricted due to the screening effect of the surrounding topography, which falls gently towards the River Don to the south. There is also a tree shelterbelt between the area surrounding the site and the fields further west, beyond which the character is more open. The areas of woodland to the north, beyond the field, would also shield the development from long views from the north, as would trees surrounding the scrap yard. Therefore, as a site which is on the edge of the green belt and suburban area and in a relatively contained situation in relation to the rest of the green belt, the redevelopment of the site would ensure that the integrity of the wider green belt is not compromised.

4. *the proposal has been designed to ensure it is of an appropriate scale, massing and external appearance, and uses materials that minimise visual impact on the green belt as far as possible; and*

Battery storage facilities typically have an industrial and utilitarian appearance, similar to an electricity substation. In this case, the equipment enclosures, most of which would have the shape and appearance of shipping containers, would sit within an enclosed compound, with the tallest units being 3.7m high. The compound would be surrounded on its north, east and south boundaries by a 4.0m high solid fence. This would screen the equipment from external views from these directions. The western boundary of the compound would comprise a metal palisade fence, which given the limited views and existing screening on this side of the site, would be acceptable.

The development would occupy a prominent position alongside the Parkway and would be visible by those using the road. When travelling southbound towards the site the site benefits from sitting lower than the land immediately to the north and is seen against the backdrop of trees behind it which are generally taller. When approaching in a northbound direction along the Parkway and when alongside it, the development would be prominent, although would be seen against the backdrop of trees further north. At 4m high, the fence around the compound itself would have a visual impact, however this is necessary to screen the equipment from view and to act as a noise barrier as discussed later in the report. To soften the appearance of the compound, the fence would be coloured green, and landscaping would be provided between the fence and road carriageway. The landscaping would comprise native tree planting (heavy standard, 3.0–3.5m tall at planting) and shrub planting. The existing grass, gorse and scrub vegetation along the adopted verge of the Parkway would be retained. The outline landscaping scheme would be in accordance Policy D5 (Landscape Design) which requires development proposals to be designed with an effective, functional and attractive landscape framework.

The secondary smaller compound enclosing DNO equipment, essentially an electricity substation, would be enclosed by a 2.8m high perimeter palisade fence on its east, south and west boundaries and the 4.0m high acoustic fence of the main compound on its north side. It would be surrounded by shrub planting helping to soften its appearance.

5. *there will be no significant long-term impacts on the environmental quality of the green belt.*

The site has limited ecological value at present, which could be enhanced through suitable landscape planting. The removal of the derelict buildings would enhance the environmental quality of the greenbelt through the remediation of the site and removal of any contaminants.

In summary, the proposal is for a development type which is permitted within the green belt, subject to other criteria being met, as described above. Due to the specific locational characteristics of the

site, on the edge of the greenbelt and suburban area, the criteria which all developments within the green belt are required to adhere to can be met.

The removal of the derelict buildings would enhance the environmental and visual quality of the greenbelt. Whilst the compound would have a visual impact, with the provision of suitable landscaping this can be mitigated to an acceptable level.

Representations raise concern that there is no information on why this site is considered suitable over other sites and indicating that there are other locations, such as an industrial estate, which would be more suitable. However, through the assessment to justify why a green belt location is essential and why the development cannot be located on an alternative site outwith the green belt, the applicant has demonstrated why other sites within a 2km radius of the grid connection point are not suitable. Notwithstanding, beyond the green belt assessment, there is no requirement for the applicant to consider other sites. The proposal at this site must be considered on its own merits, rather than being compared with other hypothetical sites (*issue 3 in representations*).

Economic Benefit

Policy 11 (Energy) of NPF4 explains that development proposals will 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.

Battery energy storage makes an indirect but significant contribution to renewable energy generation targets and greenhouse gas emissions reduction targets, by increasing the productivity of renewable generators elsewhere on the grid. The provision of a secure electricity system brings economic benefits across the national economy. The construction and decommissioning of the development presents supply chain opportunities for business and would contribute to local economic activity.

Project Design and Mitigation

As well as supporting energy developments in general, Policy 11 (Energy) of NPF4 expects the design of projects and any associated mitigation measures to demonstrate how the following impacts are addressed. Many of these matters are aimed more towards considering large scale renewable projects, such as wind farms, nonetheless each is considered in relation to this application. Policy R7 of the ALDP also contains such criteria, much of which reiterates that in Policy 11, however where there are additional requirements, they are highlighted in the relevant part of the discussion or considered at the end of this section.

In considering all these impacts, Policy 11 requires significant weight to be placed on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets. The significant weight required to be given to the global climate and nature crises by Policy 1 of NPF4 must also be considered. The substantial support for the principle of the development should not be outweighed by other matters, unless it can be demonstrated that significant harm would be caused.

(i) impacts on communities and individual dwellings, including, residential amenity, visual impact, noise, and shadow flicker.

Policy 14 (Design, Quality and Place) of NPF4 is relevant and requires development proposals to be designed to improve the quality of an area whether in urban or rural locations and regardless of scale. Development proposals that are poorly designed, detrimental to the amenity of the surrounding area or inconsistent with the six qualities of successful places, will not be supported. Policy D1 (Quality Placemaking) contains similar provisions.

In terms of visual impact on residential properties, the Parkway provides an element of separation of uses and signals a change in character between the established residential area on its east side and the woodland and agricultural character to the west. Apart from the closest dwelling known as Persley Croft, which faces onto the Parkway directly opposite the site, all other houses face eastwards towards their respective streets, with their rear gardens backing onto the Parkway and facing towards the site.

Due to the setting of the dwelling at Persley Croft with its south east facing frontage, it is unlikely that the development would typically be seen from any windows at the property, as none are present on the property's west elevation. Views of the site would be available from within the curtilage of the house; however, the amenity of this area is already impacted upon by the A92. There would be views of the site from upper storey windows within dwellings on Fairview Grange, but the site is likely to be largely screened from ground floor windows and gardens due to boundary fences and vegetation.

As described above in relation to the visual impact on the green belt, the compound fence would be a noticeable feature along the Parkway. However, the height of the fence is essential for it to provide the necessary noise mitigation. The compound would generally be seen against the surrounding areas of woodland to the west and the proposed landscaping around it would soften its visual impact.

Furthermore, the facility would have a generally lower profile than the former agricultural buildings it would be replacing. The existing derelict state of the buildings adversely affects the character and amenity of the area, so through suitable design and landscaping, the introduction of the proposed use has the potential to actually enhance the visual appearance and character of the area.

To summarise, once complete there would be a change in visual impact for nearby residential properties, however when compared to the current situation, this would be an improvement due to the removal of the derelict buildings. The test within Policy R7 of the ALDP is that "*proposals will not have a significant adverse impact on the amenity of dwelling houses.*" In this case, although there would be an impact upon visual amenity, it would represent an improvement on the existing situation.

In terms of other aspects of amenity, the distance between the site and any surrounding uses ensures there would be no impact on daylight availability or overshadowing. Shadow flicker is associated with wind energy development, with none being generated by the proposed facility.

In relation to noise, there is the potential for the equipment to generate sound which could adversely affect nearby residential properties. Policy 23 (Health and Safety) of NPF4 explains that development proposals that are likely to raise unacceptable noise issues will not be supported. The agent of change principle applies to noise sensitive development. Similarly, Policy WB3 (Noise) of the ALDP indicates that there will be a presumption against noise generating developments, as identified by a noise impact assessment, being located close to noise sensitive developments, such as existing or proposed housing, without suitable mitigation measures in place to reduce the impact of noise to an acceptable level.

The applicant has carried out a noise impact assessment ('NIA') which has been reviewed by the Council's Environmental Health Service. A baseline noise survey was carried out and computerised noise model has been developed, based on the anticipated noise emissions with the proposed equipment operating simultaneously. Any noise generated from the equipment is expected to be tonal (a continuous note such as a hum), with no intermittent (noticeable on/off) or impulsive (sudden) sounds. With the exceptions of the inverters, the noise model assumes all cooling equipment (the primary noise generator) would be operating at maximum noise level output. However, this would only occur when ambient temperatures are high, or the equipment is under full

load. Most of the time, the facility would be functioning at lower capacities and overall sound output would be considerably lower than the modelled noise levels.

The NIA determined that to ensure the nearest residential properties are protected from noise, a 4m high acoustic barrier should be installed around the north, east and south perimeters of the compound. With the barrier in place, noise in the external areas of the nearest homes during the day and night would be within the ACC Environmental Health requirements. For internal noise break-in to nearby dwellings, the calculated noise levels are low in absolute terms and meet ACC Environmental Health requirements, both during daytime and nighttime, even with windows partially open. At times when windows are closed, the indoor noise levels would be considerably lower still.

Concern was raised in representations that the noise barrier would reflect traffic noise from the Parkway back towards dwellings. However, the noise model takes into account distance attenuation of sound to the nearest dwellings, ground absorption (negligible in this case) and up to two orders of reflections and acoustic screening provided by the barrier.

The assessment was carried out on the assumption that equipment would operate within certain noise limits. Therefore, a condition is proposed which requires confirmation to be provided that the equipment installed is within these limits before the facility is brought into use. A condition is also recommended requiring the noise barrier to be in place and to be maintained for the life of the facility.

Concern is raised with the potential for construction noise. It is inevitable that there would be some disruption during construction. The applicant would be required to adhere to reasonable working hours as specified in the advisory note at the end of the report. Where complaints are received enforcement action may be initiated under the Control of Pollution Act 1974 by the Council's Environmental Health service (*issue 7 in representations*).

With these measures in place, noise levels associated with the development would be within acceptable limits at the nearest noise sensitive properties and there would be no tension with Policy 23 (Health and Safety) of NPF4 in relation to noise and Policy WB3 (Noise) of the ALDP (*issue 6 in representations and Community Council issue 5*).

Although not mentioned in Policy 11, the issue of ground-based vibrations being generated by the battery equipment has been raised in representations. The applicant has advised that none of the equipment would be expected to generate any significant vibration. There are no items of plant with large rotational generation, instead electrical generation would be undertaken via electrical inverters, with transformers used to step up the voltage, resulting in any vibration from the equipment being electrical in origin and of much lower amplitude. Such vibrations would be absorbed in the ground quickly near the originating plant. Where specified by manufacturer guidelines, any larger pieces of equipment would be mounted using anti-vibration pads (*issue 8 in representations*).

In summary, despite being in relatively proximity to a residential area, the amenity impacts of the development upon the community would be negligible and could be satisfactorily managed through mitigation measures (*issue 1 in representations*).

(ii) significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/ or appropriate design mitigation has been applied, they will generally be considered to be acceptable.

This matter has been considered under the green belt assessment.

(iii) public access, including impact on long distance walking and cycling routes and scenic routes.

The former Persley Quarry to the west of the site is used by the public for walking, being accessed from an unmade footpath from Upper Persley Road to the west and from an informal route along the western boundary of the application site. Access to the former quarry would be maintained and would not be affected by the development. No core paths, long distance walking and cycling routes or scenic routes are present close to the site.

(iv) impacts on aviation and defence interests including seismological recording.

It is noted in a representation that the area is on a helicopter flight path. There is no requirement to consult Aberdeen International Airport or helicopter operators in relation to the application. No impact on aviation or defence interests is anticipated (*issue 27 in representations*).

(v) impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised.

No impacts on telecommunications and broadcasting installations are expected.

(vi) impacts on road traffic and on adjacent trunk roads, including during construction.

Policy 13 (Sustainable Transport) of NPF4 seeks to encourage, promote and facilitate developments that prioritise walking, wheeling, cycling and public transport for everyday travel and reduce the need to travel unsustainably. Policy T2 (Sustainable Transport) of the ALDP has similar provisions.

The submitted Transport Statement indicates that once operational, the facility would generate very infrequent vehicle trips. It is anticipated an average of two vehicles would travel to and from the site per month to undertake routine maintenance. This would have no discernible impact on traffic levels or road safety on the local road network or trunk roads (*issue 13 in representations*).

The existing access road into the site from the Parkway would be retained. Notwithstanding, the very low traffic levels that would be associated with the facility, in acknowledgement of the 50mph speed limit on the Parkway, the access road junction would be altered to create a left-in/left-out arrangement, to avoid vehicles trying to cross both lanes of the road when entering or exiting. The ACC Roads Development Management Team have reviewed the proposal and are satisfied with the junction design. Adherence to such arrangements is the responsibility of drivers and enforceable by Police Scotland (*issue 14 in representations*).

The access road would lead to a gate which would provide access to a loop road within the compound. A second minor access, further north on the Parkway and along the eastern perimeter of the site, would also be retained and provide a separate access into the field to the north of the site.

Reference is made in representations to a previous failed bid to have the site reallocated for housing as part of the preparation for the last ALDP, adopted in 2017. A significant reason for the site being inappropriate was due to accessibility and its location on the opposite side of the Parkway from the residential area of Danestone. The accessibility and transport requirements for housing developments are significantly different and more onerous than a facility that would have no human presence for much of the time and would generate insignificant levels of traffic (*issue 16 in representations and Community Council issue 3*).

Construction of the facility would be expected last approximately twelve months. There would inevitably be traffic associated with the construction, however this is not expected to be at significant

levels. The applicant would be responsible for obtaining roads construction consent for the junction works and obtaining consent for any associated temporary traffic management measures. Again, adherence to such measures is the responsibility of drivers and enforceable by Police Scotland (*issue 15 in representations and Community Council issue 9*).

Concern is raised with how construction workers would reach the site. The Construction Traffic Management Plan notes the presence of the pavement on the opposite side of the Parkway from the site, which could be used by workers before crossing the road. Although this stretch of the Parkway has a 50mph limit, it is expected any worker choosing to walk to the site would be capable of safely crossing the road. It is expected that most workers would travel to the site in works vehicles or their own vehicle (*issue 28 in representations*).

The ACC Roads Development Management Team have no concerns with the proposal. In summary, the impact of the proposals on the transport network would be insignificant and there would be no tension with Policy 13 (Sustainable Transport) of NPF4 and Policy T2 (Sustainable Transport) of the ALDP (*Community Council issue 2*).

(vii) impacts on historic environment.

The site is not within a conservation area and there are no historic assets, such as listed buildings or scheduled monuments, either within the site or in the surrounding area that would be affected by the proposed development. The applicant has submitted a Heritage Buildings Summary Note, which provides a photographic record of the site as it is at present. This has been reviewed by the Council's archaeology advisor and is acceptable for the purposes of recording the building prior to development.

(viii) effects on hydrology, the water environment and flood risk.

Policy 22 (Flood Risk and Water Management) of NPF4 expands on these matters and aims to strengthen resilience to flood risk by promoting avoidance as a first principle and reducing the vulnerability of existing and future development to flooding. Policy NE4 (Our Water Environment) of the ALDP has similar provisions. To address these matters the applicant has produced a drainage impact assessment.

In terms of flooding, the site has not been identified as being at any particular risk from fluvial, tidal or surface water flooding. The proposed drainage scheme would see surface water from hard surfaces and gravel within the site collected in an underground attenuation tank which would then release water to an underground soakaway at a controlled rate.

Should an accident occur at the site, such as a fire, there is the potential that surface water, including water used for firefighting, becomes contaminated by battery chemicals and affects the surrounding environment. In response, the applicant has re-designed the drainage proposals so that in the event of an emergency, an alarm would be triggered which would activate a pollution control device to prevent surface water flowing from the attenuation tank into the soakaway. Once any incident was over, potentially contaminated water would be collected from the tank by tanker and safely disposed of off-site. The attenuation tank is designed to store a combination of a 200 year +38% climate change allowance, and the minimum amount of water required in fighting a fire, calculated in accordance with the National Fire Chiefs Council guidance (*issue 11 and Community Council issue 7 in representations*).

There would be no toilets or kitchens which would generate wastewater at the site, therefore a foul water connection to the public sewer is not required. No other impacts upon hydrology or the water

environment have been identified. There is no reason to believe that redevelopment of the site would increase dampness at neighbouring properties (*Community Council issue 8*).

The drainage proposals are acceptable, subject to a condition requiring the finalised drainage design, including groundwater testing results, to be submitted for approval.

(xi) biodiversity including impacts on birds

Policy 4 (Natural Places) of the ALDP aims to protect, restore, and enhance natural assets making best use of nature-based solutions. It states that development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported. Policy NE3 (Our Natural Heritage) of the ALDP has similar provisions.

The existing site comprises predominantly hard surfaces forming the yard space around the buildings, associated with the previous agricultural use. There is also area of dense scrub and scattered self-seeded trees. There are no watercourses in or adjacent to the site.

An area of approximately 0.12 hectares in the centre of the site is designated as green space network in the ALDP, part of a wider area of network to the west and north of the site. The area is a small area of broadleaved trees comprising around nine closely spaced self-seeded young beech trees, five sycamore trees, and a single semi-mature oak tree with extensive upper canopy dieback. Several mature trees have recently been felled after storm damage, with stumps and dead trunks piled up.

A Pre-liminary Ecological Assessment has been undertaken by the applicant which has determined that the site has limited biodiversity value. In terms of species, the buildings have negligible suitability for bat roosts and the wider site has low suitability for foraging and commuting bats. The woodland to the immediate west of the site provides a green corridor and would be retained. The survey found no evidence of badger or their setts, or any indication of other protected species, including birds (*issue 10 in representations*). The tree and scrub habitats on the site may provide a small number of opportunities for a limited range of common nesting bird species. Remaining cover of buildings may also provide nesting opportunities.

The provision of native species as part of the landscaping scheme discussed earlier in the report would contribute towards the aim of Policy 3 (Biodiversity) to enhance biodiversity.

In summary, the biodiversity value of the site is limited. There are opportunities to enhance the biodiversity value through appropriate landscaping planting (*issue 10 in representations*).

(x) impacts on trees, woods and forests

Policy 6 (Forestry, Woodland and Trees) of NPF4 seeks to protect and expand forests, woodland and trees. It goes on to say that Development proposals that “*enhance, expand and improve woodland and tree cover will be supported*” and that “*Development proposals will not be supported where they will result in adverse impacts on native woodlands, hedgerows and individual trees of high biodiversity value*”. Policy NE5 (Trees and Woodland) largely reiterates these aims.

The submitted Arboricultural Assessment identified ten individual trees and seven groups of trees. One tree and two groups were allocated a moderate retention value, eight trees and seven groups were allocated a low retention value, and two trees and three groups were deemed unsuitable for long-term retention regardless of the development proposals.

The development would require the removal of a single low-quality tree and a low-quality group. Three trees and two groups located within the development footprint are also recommended for removal as they are unsuitable for retention regardless of the development proposals. The assessments have been reviewed by the Council's Natural Heritage Policy Team and found to accurately reflect the general low quality of the tree cover and its physiological condition. The proposed tree removal is acceptable, subject to satisfactory replacement planting, which can be secured by condition through the landscaping scheme.

The tree removal would include the area designated as Green Space Network, which would be removed to allow for development. It is therefore necessary to consider against Policy NE2 (Green and Blue Infrastructure) which states that –

Development proposals will seek to protect, support and enhance the Green Space Network. This broadly encompasses the wildlife, biodiversity, ecosystem services & functions, access, recreation, landscape and townscape value of the Green Space Network. Development that does not achieve this will not be supported.

Coherence of the Green Space Network should also be maintained when considering any development and infrastructure proposals. Where infrastructure projects or certain developments necessitate crossing the Green Space Network, they should maintain and enhance the coherence and quality of the network. In doing so, appropriate provision should be made for access across roads for wildlife and outdoor recreation.

The area in question represents a small part of the wider Green Space Network which it forms. As discussed above, the value of the trees is low, and their removal is considered acceptable. This would not result in a severance of the network, as the trees and area to the immediate west of the site would be unaffected and would remain as a continuous green link between the areas to the north and south. The overall coherence and function of the network in the area would be retained. Therefore, the requirements of Policy NE2 (Green and Blue Infrastructure) would be met.

(xi) proposals for the decommissioning of developments, including ancillary infrastructure, and site restoration; and (xii) the quality of site restoration plans including the measures in place to safeguard or guarantee availability of finances to effectively implement those plans; and

Policy 12 (Zero Waste) seeks to encourage, promote and facilitate development that is consistent with the waste hierarchy.

It is anticipated that the proposed facility would be operational for 40 years and would then be decommissioned and the land restored to a suitable state.

Although currently a costly and complex process, lithium batteries can be recycled. It is expected that over the 40-year life of the facility battery recycling technology will significantly improve. The battery supplier would be obliged to recycle the batteries under current legislation or such equivalent regulations in force at the time of decommissioning (*issue 12 in representations*).

Given the small scale of the development and limited visual impact it would have, a bond or other financial security, which is typically used for large wind farm projects, is not required.

Should the operator cease to exist at any point during the life of development, the responsibility for the site would be with the party that gains control of it through the insolvency of the company. This is not a material planning consideration (*issue 23 in representations*).

(xiii) cumulative impacts.

A second battery energy storage system facility is proposed on land to the north of Persley Waste Water Treatment Works, Upper Persley Road, approximately 200m to the southwest of the application site. The proposal is for a facility with a capacity exceeding 50 megawatts, therefore the consenting authority is the Scottish Ministers, rather than the Council. The application (ACC ref: 240791/S36) is with Scottish Ministers and currently pending, with a decision expected towards the end of 2024.

A combination of vegetation, existing development and undulating topography, means the area from where the second facility can be seen would largely be restricted to the immediate area around which it is located, with glimpses available from limited locations to the south. It is not anticipated that there would be any significant cumulative impacts if both developments were to be constructed (*issue 26 in representations*).

Otherwise, there are no other developments in proximity which in combination with this development would generate any unacceptable impacts.

In addition to the matters covered by both Policy 11 of NPF4 and Policy R7 of the ALDP above, Policy R7 also requires that proposals for all energy developments –

(i) will not negatively impact on air quality.

The battery energy storage facility would not emit any emissions and its use in the wider scale would assist in the transition to renewable energy sources, thereby indirectly reducing emissions from non-renewable energy sources and improving air quality.

(ii) will not negatively impact on tourism

There are no specific tourist activities associated with the site or surrounding area.

In summary, both Policy 11 of NPF4 and Policy R7 of the ALDP require decision makers to give significant weight to the benefit which the development of renewable energy project in terms of reducing carbon emissions. The criteria contained within Policy 11 in terms of potential impacts because of the development have been satisfactorily addressed and that any impact because of the proposal would be localised and minor. None would outweigh the significant weight which should be attached to the benefit of reducing carbon emissions.

Health and Safety

Although safety incidents for battery storage energy systems are rare, a common concern is the potential fire risk from the lithium-ion batteries which are used. Lithium-ion batteries can catch fire because of a process known as “thermal runaway” which can occur, if for example part of a battery is damaged or there is a manufacturing fault. This concern is reflected in numerous representations.

Policy 23 (Health and Safety) of NPF4 does not cover such developments specifically, however it has a general intent 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.

There are no specific planning or health and safety laws relating to battery energy storage systems. However, they are typically subject to general health and safety laws that impose obligations on all

employers. The Health and Safety Executive (HSE), the national regulator for workplace health and safety, was consulted on the application and has provided a neutral response, with no specific comments to make, other than to highlight that it is the responsibility of the site operator to control any risk arising from their operation so far as is reasonably practicable and to implement any necessary control measures through compliance with relevant legislation.

Planning Advice Note 51 (Planning, Environmental Protection and Regulation) explains that planning decisions should always be made on planning grounds and in the public interest. The planning system should not be used to secure objectives that are more properly achieved under other legislation. Even where legal or administrative measures outwith the planning system may exist for controlling a particular activity, this can still be a consideration to which weight is given in reaching a planning decision.

Therefore, whilst health and safety is a legitimate material planning consideration, in considering the planning application the focus should be on locational, design and layout aspects of the proposal, rather than any concern with the principle of using such technology or the technical design of equipment, which is controlled by health and safety and other legislation and industry standards.

To demonstrate that safety has been an integral part of the design process, the applicant has submitted an Outline Battery Safety Management Plan and an accompanying Fire Safety Technical Note, which explains the range of design and operational safety measures to protect people, the surrounding areas and the facility in the unlikely event of an incident occurring. The safety mechanisms would reduce the likelihood of accidents occurring and if they do occur, reduce their potential impact.

Although not a statutory consultee in the planning process, the Scottish Fire and Rescue Service has been consulted on the application. The fire service highlighted the document '*Grid Scale Battery Energy Storage System Planning – Guidance for Fire and Rescue Services*' published by the UK National Fire Chiefs Council's (NFCC) in April 2023, which it would expect the applicant to consider in designing the facility. The fire service has also reviewed the proposal and made recommendations. In respect to health and safety, the key design and layout measures incorporated into the layout and design are –

- The closest properties on the east side of the Parkway would be at least 30m away from the closest battery units, which themselves would be behind the 4m high noise barrier, which would also act as a fire barrier. The NFCC guidance recommends an initial minimum distance of 25 metres is provided between any occupied buildings and battery units, prior to considering any mitigation.
- There are two entrances to the site, the main vehicle entrance and a personnel gate on the east boundary, which in the event of a fire would allow firefighting to take account of opposite wind directions.
- The loop road within the compound would allow fire service vehicles to access the whole facility and enter and exit in a forward gear.
- The compound would be free from vegetation, with a gravel base, which would limit the ability of a fire to spread.

The physical distance between equipment is the most significant factor in how fire can spread within a battery energy storage facility, so maintaining adequate separation is crucial to minimising its potential impacts. Containers housing battery cells, being the most likely source of a fire, must be separated from each other and from other equipment such as transformers, control equipment, office buildings, and from the site perimeter. Following comments from the fire service, the following amendments were made –

- The distance between the battery units was increased from 3m to 6m, as recommended in the NFCC guidance. The guidance is based upon the Property Loss Prevention Data Sheet on BESS published by commercial insurance provider FM Global. Since the NFCC guidance was adopted, the FM Global data sheet has been updated, which reduces the recommended distance to 1.5m, where units have cooling systems, which would be the case here. Therefore, the distance between the battery units would significantly exceed the current recommendation.
- The fire service recommends that a 10m separation distance is provided between battery units to any surrounding vegetation, to ensure that there is no increased fire risk on the site or to cause ignition of local vegetation. The closest battery units would be 3m away from vegetation which would be outside the site, however the noise barrier around the north, east and south boundaries would also act as 'fire walls', preventing or delaying the spread of any fire, achieving the same aim as the recommended 10m separation distance.

The Outline Battery Safety Management Plan also explains the other technical design and operational safety measures that would be employed.

- The BESS has been designed in accordance with UK and international standards, recognised best practice guidance and codes of practice
- Lithium iron phosphate batteries would be used as they have a higher thermal runaway temperature threshold than alternative battery types.
- The facility would be monitored and controlled remotely 24 hours a day by staff.
- Cooling, ventilation and monitoring systems would be incorporated into the enclosures to ensure operational safety by maintaining the batteries at a stable operating temperature and removing excess heat in the event of overheating.
- The battery units would be installed with a fire detection and alarm system. If an alarm is triggered, the remote operator is informed, and the BESS operation would stop.
- Once the site is fully tested and operational, equipment maintenance would be undertaken at intervals as recommended by the original equipment manufacturer.
- An emergency response plan would be agreed with the fire service and other emergency services.
- The site has access to a firefighting water supply, with the closest fire hydrant on the Parkway, opposite the site boundary and a second hydrant just north of the site.

An incident at a battery energy storage facility in Liverpool and use of a fire suppression system is referred to in representations. This is the only known serious incident involving such a facility in the UK and since the Liverpool facility was constructed in 2018, battery energy storage system design and technology has been continuously improving. Following advice from the fire service, a revised fire suppression system would be installed, utilising water rather than being solely gaseous, as recommended by the NFCC guidance (*issue 20 in representations*).

Concern is raised in representations that Danestone has no dedicated emergency service cover. Emergency cover and response times are the responsibility of the relevant emergency services, however the fire stations at North Anderson Drive, Dyce and Mounthooly Way, are all within a 5 to 10-minute drive of the site (*issue 21 in representations*).

In summary, whilst the facility would be located relatively close to the suburban area, it would be separated from residential properties by the Parkway and exceed the recommended minimum distance from occupied buildings. In the unlikely event an incident does occur, the layout and design of the facility has been planned to limit the impact of such an incident, through the spacing of battery units, enclosure of the compound in a 4m high fence and providing emergency services with suitable access to respond. Otherwise, as with a wide range of other activities and industries, the health and safety aspects of the design and use of the facility are governed by non-planning requirements

which the applicant must adhere to. There are no objections from the Scottish Fire and Rescue Service or Health and Safety Executive (*issues 17, 18, and 19 in representations and Community Council issue 4*)

Climate Mitigation and Adaptation

Policy 2 (Climate Mitigation and Adaptation) of NPF4 seeks to encourage, promote and facilitate development that minimises emissions and adapts to the current and future impacts of climate change. It goes on to require development proposals to be sited and designed to minimise lifecycle greenhouse gas emissions as far as possible and adapt to current and future risks from climate change. In this regard, the site is not at any known risk of flooding, with drainage proposals designed to accommodate anticipated future rainfall. More generally, the development itself would contribute towards minimising emissions by allowing renewable energy to be used to its full potential.

Other Matters Raised in Representations

- *Community Council Issue 10 – There are concerns about potential graffiti and vandalism due to the site's accessibility and the area's existing anti-social behaviour problems.*

Graffiti and vandalism would be dealt with by Police Scotland as criminal offences. The derelict state of the existing buildings already appears to attract such activities, whereas the development would benefit from CCTV surveillance and would see the dilapidated buildings removed.

- *Issue 2 – The site should be used for housing.*

The proposal must be considered on its own merits, rather than being compared with hypothetical proposals that do not exist. The site is not zoned for residential use and a bid to have the site re-zoned for housing in the 2017 ALDP was not progressed.

- *Issue 4 – It's not clear what the capacity of the BESS is.*

The installed capacity of the facility would be 49.9 megawatts, which refers to the rated power capacity of the site, the maximum amount of power that the facility can generate at any particular time. The total amount of energy that the battery facility could store and provide would be 99.9 megawatt-hours, therefore the facility could provide energy for approximately two hours.

- *Issue 5 and Community Council issue 6 – A route for the underground cable for the grid connection to the electricity substation has not been indicated.*

The applicant has advised that the grid connection would be via a cable laid between the site and Persley Grid Supply Point. Such works would be managed and undertaken on behalf of Scottish and Southern Electricity Networks ('SSEN'), the Distribution Network Operator for north Scotland. SSEN are a statutory undertaker for planning purposes and benefit from permitted development rights which allow, subject to certain conditions, the installation of electric lines under land, without the requirement for planning permission. Therefore, the installation of the grid connection does not form part of this application.

- *Issue 22 – The demolition of the buildings could result in rats being displaced.*

Although not a material planning consideration, the applicant would be expected to implement best practice measures to minimise any dispersion of pests prior to demolition. Any displaced pests would be a matter for the particular landowner.

- *Issue 24 – The development would be unmanned with monitoring taking place via CCTV cameras. Where would they be linked to, who would be responsible if anything happened and what responses time would be in place.*

These are operational matters for the applicant rather than material planning considerations. It is the responsibility of the applicant to ensure that the facility is operated safely.

- *Issue 25 – Property values in the area would be adversely affected.*

Any impact upon property values because of a development is not a material planning consideration.

- *Issue 30 – What compensation or philanthropic initiatives does the applicant propose for surrounding community?*

Community benefits schemes are a well-established, integral part of larger renewable energy developments such as onshore wind farms. They are voluntary initiatives; they are not a material consideration in the planning process. In this case the applicant has not indicated that they intend on setting up a community benefit scheme.

Administrative Matters

Issue 31 – Despite two public consultations, inadequate information has been made available to the local communities. There are many people in Danestone, and in the wider Bridge of Don, who were not informed of this application by the applicants and have no idea of the plans.

Statutory public consultation was undertaken by the applicant prior to submission of the application, including two public events, creation of a website and leaflet drop to 840 addresses in Danestone. The proposals were also subject of press coverage. On submission of the application, the planning authority undertook the statutory neighbour notification, and an advert was placed in the *Evening Express*. Sixty representations have been received, which is a relatively high number, suggesting that a significant number of people were aware of the application.

RECOMMENDATION

Approve Conditionally

REASON FOR RECOMMENDATION

Policy 11 (Energy) of National Planning Framework 4 ('NPF4') and Policy R7 (Renewable and Low Carbon Energy Developments) of the Aberdeen Local Development Plan ('ALDP') require decision makers to place significant weight on the contribution of the proposal to renewable energy generation targets and on greenhouse gas emissions reduction targets. This is echoed by Policy 1 (Tackling the Climate and Nature Crises) of NPF4 which requires significant weight to be given to the global climate and nature crises when determining all applications. The principle of the proposed battery energy storage facility is therefore lent substantial support by these policies.

The proposal is for a development type which is permitted within the green belt, subject to specific criteria being met. Due to the specific locational characteristics of the site, notably its previously used, brownfield nature, on the edge of the greenbelt and suburban area, coupled with design and mitigation measures, the criteria which all developments within the green belt are required to adhere

to can be met. The removal of the derelict buildings would enhance the environmental and visual quality of the green belt and surrounding area.

Otherwise, with suitable mitigation measures in place, the proposals satisfactorily address how the potential impacts in Policy 11 (Energy) would be addressed, ensuring the protection of residential amenity and the environment. The most significant impact would be the visual impact of the compound, however with appropriate landscaping the facility could be satisfactorily be integrated into its surroundings, with the residual impact being minimal.

All other matters raised, including those relating to health and safety, drainage, accessibility and transport have been satisfactorily addressed or are outside the scope of determining this planning application. None of these matters would have a significant impact or outweigh the substantial support that applies to renewable energy projects in national and local planning policy and therefore it is considered the proposal is in accordance with the development plan.

CONDITIONS

(01) DURATION OF PERMISSION

The development to which this notice relates must be begun not later than the expiration of 3 years beginning with the date of this notice. If development has not begun at the expiration of the 3-year period, the planning permission lapses.

Reason - in accordance with section 58 (duration of planning permission) of the 1997 act.

PRE-COMMENCEMENT OF DEVELOPMENT

(02) TREE PROTECTION FENCING

No development (including demolition or site setup) shall take place unless

- (i) a scheme to protect the trees to be retained out with the site has been submitted to and approved in writing by the planning authority; and
- (ii) the approved tree protection fencing is in place.

Thereafter, the fencing shall remain in place for the duration of construction of the development.

Reason – to protect trees and vegetation from damage during construction.

(03) SITE INVESTIGATION

No development (including demolition or site setup) shall take place unless a scheme to deal with any contamination on the site has been submitted to and approved by the planning authority.

The scheme shall follow the procedures outlined in Planning Advice Note 33 (Development of Contaminated Land) and shall be conducted by a suitably qualified person in accordance with best practice as detailed in BS 10175 (Investigation of Potentially Contaminated Sites – Code of Practice) and other best practice guidance and shall include:

- a) an investigation to determine the nature and extent of contamination,
- b) a site-specific phase 2 risk assessment,
- c) a remediation plan to address any significant risks and ensure the site is fit for the use proposed.

The development shall not be brought into use unless –

- a) any long-term monitoring and reporting that may be required by the approved scheme of contamination or remediation plan or that otherwise has been required in writing by the planning authority is being undertaken; and
- b) a report has been submitted and approved in writing by the planning authority that verifies that remedial works to fully address contamination issues have been carried out, unless the planning authority has given written consent for a variation.

Reason – to ensure that the land is made suitable for the new use and avoid unacceptable risks to human health and the environment.

(04) NOISE – EQUIPMENT

No development shall take place unless evidence has been submitted to and approved in writing by the planning authority that the warranted sound power levels of the chosen equipment meets the assumptions considered in the Noise Impact Assessment P-22-489-R02v5 produced by Hepworth Acoustics.

Where the proposed items are found to vary in sound power level from the assumptions, to confirm that the operational noise levels will meet the relevant criteria (noise limits) an updated noise impact assessment shall be undertaken and submitted to and approved in writing by the planning authority.

Reason – to protect surrounding residential properties from any unreasonable noise generated by the development.

(05) LANDSCAPING

All soft landscaping proposals shall be carried out in accordance with the approved scheme of landscaping (Pegasus Group drawing P22-2723_EN_0004 (Rev.E) or such other drawing approved for the purpose) and shall be completed during the planting season immediately following the commencement of the development or such other date as may be agreed in writing with the planning authority.

Any planting which, within a period of five years from the completion of the development, in the opinion of the planning authority is dying, is severely damaged or becoming seriously diseased, shall be replaced by plants of similar size and species to those originally required to be planted.

Reason – to satisfactorily integrate the development into the surrounding area and enhance biodiversity.

PRE-USE OF DEVELOPMENT

(06) DRAINAGE

The development hereby approved shall not be brought into use unless all drainage works detailed in the approved Drainage Assessment (8600 (Rev. P03) and drawing 8600-MJM-XX-XX-DR-C-5200 (Rev. P07) produced by MJM (or such other details approved for the purpose) have been installed in accordance with the approved details and are available for use.

Reason – to safeguard water qualities, prevent flooding and ensure that the proposed development can be adequately drained.

(07) PROVISION OF NOISE BARRIER

The development hereby approved shall not be brought into use unless the noise barrier recommended in Noise Impact Assessment P-22-489-R02v5 produced by Hepworth Acoustics has been installed in accordance with paragraph 4.10 and figure 2 of the assessment (or such other details approved for the purpose).

Thereafter, the barrier shall remain in place for the duration of the life of the development and shall be maintained to ensure that it continues to perform to the minimum specifications in paragraph 4.10 of the assessment.

Reason – to protect surrounding residential properties from any unreasonable noise generated by the development.

(08) LANDSCAPING

All soft landscaping proposals shall be carried out in accordance with the approved scheme of landscaping (Pegasus Group drawing P22-2723_EN_0004 (Rev.E) or such other drawing approved for the purpose) and shall be completed during the planting season immediately following the commencement of the development or such other date as may be agreed in writing with the planning authority.

Any planting which, within a period of five years from the completion of the development, in the opinion of the planning authority is dying, is severely damaged or becoming seriously diseased, shall be replaced by plants of similar size and species to those originally required to be planted.

Reason – to satisfactorily integrate the development into the surrounding area and enhance biodiversity.

RESTORATION

(09) CESSATION OF OPERATION

The operator of the battery energy storage system shall notify the planning authority in writing if the site does not function for a continuous period of more than six months. The notification must occur within one month of the expiry of the six-month period.

Reason – to define the cessation of operation and to give effect to the restoration of the development site.

(10) DECOMMISSIONING

Six months prior to the decommissioning of the battery energy storage system, a decommissioning and site restoration scheme shall be submitted for the written approval of the planning authority.

The scheme shall provide details of (i) how equipment, ancillary structures and infrastructure located within the development hereby approved would be decommissioned and removed and the site made good and (ii) a timescale for these actions.

Thereafter, decommissioning and the making good of the site shall be carried out in accordance with the approved restoration scheme.

Reason – to ensure satisfactory restoration of the site and continued integrity of the green belt.

ADVISORY NOTES FOR APPLICANT

(01) HOURS OF DEMOLITION AND CONSTRUCTION WORK

Unless otherwise agreed in writing with Aberdeen City Council Environmental Health Service (poll@aberdeencity.gov.uk / 03000 200 292), demolition or construction work associated with the proposed development should not take place out with the hours of 07:00 to 19:00 Mondays to Fridays and 08:00 to 13:00 on Saturdays. No noisy work should be audible at the site boundary on Sundays.

Where complaints are received and contractors fail to adhere to the above restrictions, enforcement action may be initiated under the Control of Pollution Act 1974.