Application Number:	P/FUL/2023/02446
Webpage:	https://planning.dorsetcouncil.gov.uk/
Site address:	Land south of Coldharbour Chickerell Dorset DT3 4BG
Proposal:	Installation of a Battery Energy Storage System of up to 60MW, associated infrastructure and enclosing compound, together with access and landscaping works
Applicant name:	Corylus Planning & Environmental Ltd
Case Officer:	Matthew Pochin-Hawkes
Ward Member(s):	Cllr Dunseith & Cllr Worth

### **1.0** Reason application is going to planning committee:

1.1 This application has been brought to committee following a scheme of delegation consultation at the request of the Service Manager for Development Management and Enforcement.

### 2.0 Summary of recommendation:

2.1 Grant subject to the planning conditions at Section 17 of this report.

#### 3.0 Reason for the recommendation:

• Large scale battery storage is identified at a national level as playing an essential role in our energy transition and ability to fully decarbonise the electricity grid by 2035 and achieve net zero by 2050.

• The proposal would make a significant contribution towards tackling climate change though the provision of battery storage, enough to supply the average annual electricity needs of 13,491 households, equating to almost 8% of households in Dorset.

• Biodiversity net gains would be delivered through on-site planting, including new woodland and wildflower planting.

• The proposed development would have limited and localised adverse landscape and visual impacts and would not harm the Dorset National Landscape (AONB). Appropriate mitigation would be secured via planning condition to minimise adverse impacts.

• The proposal minimises adverse impacts on residential amenity and would not cause significant adverse impacts.

• The site is sufficient distance from nearby residential properties and battery safety

would be appropriately managed and secured via through planning condition.

Issue	Conclusion
Principle of development	Acceptable in principle under Policy COM11.
Landscape visual impact	Limited and localised landscape and visual impact. Appropriate mitigation to be secured. No harm to Dorset National Landscape / AONB.
Noise and residential	No significant adverse effects on residential amenity.
amenity	Increased noise levels would not detract significantly from
	the character or amenity of the area.
Biodiversity	No adverse impacts on ecology or biodiversity. Net gains would be secured.
Highways	No objection from Highways Authority. Highway impacts would not be severe. No highway safety concerns.
Health and safety	Acceptable subject to planning conditions, including BESS Safety Management Plan.
Pollution	Acceptable subject to planning conditions.
Flood risk and drainage	Acceptable subject to planning conditions.

#### 4.0 Key planning issues

### 5.0 Description of Site

5.1 The 0.99ha application site is located between Chickerell and the Southill area of Weymouth within the parish of Chickerell. The site comprises a roughly rectangular shaped field approximately 500m south of Coldharbour together with the 'L'-shaped access track from Coldharbour.

5.2 The field is bounded: to the north by the access track; to the west and east by similar small fields; and to the south by woodland. A Public Right of Way (PRoW) runs along its southern boundary (PRoW S16/21). Further south is Chickerell substation, with overhead powerlines running north/south to the west of the site forming a dominant landscape feature.

5.3 Ground levels of the site fall gently from west to east and north to south. The western and southern site boundaries are formed by hedgerows, the eastern boundary is formed by an electric fence and the northern boundary is formed by a post and rail fence.

5.4 The site is currently used for the grazing of horses and has in the past been used for the rearing of game birds. That use is similar to surrounding agricultural plots.

## 6.0 Description of Development

6.1 The proposed development comprises the installation of a 60MW Battery Energy Storage System (BESS), associated infrastructure, enclosing compound, landscaping and access.

6.2 The proposed BESS would consist of two mirrored rows of five transformers and five pairs of battery units approximately 3.5m high, two larger transformers and a customer substation also approximately 3.5m high set on a level rectangular hard surfaced area approximately 50m long by 40m wide surrounded by a 3.5m high acoustic fence with CCTV masts and cameras at its corners and mid points. Within the acoustic enclosure, the transformers and customer substation would be further enclosed with palisade fencing. The battery units are proposed to comprise Tesla Megapack 2 units.

6.3 Land outside of the compound is proposed to be landscaped with a combination of wildflower mix (to the west and south), scrub planting (to the north, east and west) and woodland planting (along the eastern and southern field boundaries). Five circular water tanks measuring 2.10m high and 5m wide and coloured green are proposed immediately north of the compound. Land is proposed to be re-contoured through a cut-and-fill exercise associated with the formation of the level platform.

6.4 A larger access to the existing access track would be formed to the north of the site.

## 7.0 Relevant Planning History

7.1 The site does not have any relevant planning history.

7.2 To the west of the site a planning application for a 400MW BESS was submitted in August 2023. The application is currently pending consideration:

P/FUL/2023/02446 - Decision: N/A - Decision Date: N/A

"Development of a Battery Energy Storage System (BESS) of up to 400MW, connected directly to the National Grid, with associated infrastructure including access, drainage and landscaping."

## 8.0 List of Constraints

Land Outside Defined Development Boundary.

Land of Local Landscape Importance; Land north and east of Chickerell.

Landscape Character Type; Ridge and Vale; South Dorset Ridge and Vale.

PROW - Right of Way: Footpath S16/21; 3m to south.

PROW - Right of Way: Footpath S16/20; 15m to the south east

National Grid Overhead Line AXMINSTER - CHICKERELL - MANNINGTON Operating 400; 160m to the west, extending north from Chickerell Substation.

National Grid Substations (132kV & 400kV) and Grid Towers: to the south and west.

Southern Gas Networks high pressure gas pipeline 150m or less from Regional High Pressure Pipelines (>7 bar); Under part of access route. Site of proposed BESS falls within 150m buffer zone.

Flood Zone 1.

Risk of Surface Water Flooding Extent (1 in 30, 1 in 100 and 1 in 1000 year risks): Parts of access route.

Risk of Groundwater Emergence; Groundwater levels are between 0.025m and 0.5m below the ground surface; Within this zone there is a risk of groundwater flooding to both surface and subsurface assets. There is the possibility of groundwater emerging at the surface locally; Western part of site.

Existing ecological network; Part of the access route.

Higher Potential ecological network; Part of the access route and the south eastern third of the site approximately 30m from adjacent to woodland to the south.

Chesil Beach & the Fleet RAMSAR and SAC; - Distance: 2.1km.

Site of Special Scientific Interest (SSSI) impact risk zone.

Minerals and Waste Safeguarding Area (IDs: 7080, 7081 and 7082).

Minerals and Waste – Building Stone (IDs: 1061, 1062 and 1063).

Office of Nuclear Regulation: within Portland 12km zone.

#### 9.0 Consultations

9.1 All consultee responses can be viewed in full on the website.

#### **Consultees**

#### **Environment Agency**

9.2 The EA's initial response of 20 July 2023 recommended refusal because the proposed development was considered to pose an unacceptable risk of pollution to the water environment.

9.3 The response notes the location of the site on a Secondary A aquifer, with contamination in the event of fire having the potential to enter surface water systems. The response notes the proposal could result in the discharge of pollutants to both ground and surface water. The EA raised concerns with allowing contaminated effluent to drain through permeable gravel and over nearby ground, with the proposal to then manage any contamination through remediation following the event.

9.4 Following a serious battery fire the EA considered contamination could be significant and widespread, making remediation of the permeable gravel and surrounding surface soil potentially ineffective.

9.5 To overcome the objection, the EA requested further clarification, a further risk assessment and/or revised scheme demonstrating how effluent would be managed and contained to minimise risks to the environment.

9.6 Following submission of further information and liaison between the applicant, EA and Dorset Council, the EA provided a series of subsequent consultation responses. The most recent consultation response (16 January 2024) withdraws the EA's objection subject to planning conditions. The response notes that any emergency plan should be developed in line with the advice from the Dorset and Wiltshire Fire and Rescue Service and that adequate supply of water is provided.

# **Natural England**

9.7 No objection. Welcome submission of Biodiversity Plan to be secured by any permission.

# **Planning Policy**

9.8 Identify main planning policy issues of: distribution of development; renewable energy; landscape and green infrastructure; biodiversity; amenity and pollution.

9.9 The Planning Policy Team provide an overview of BESS and note it can play an important role in supporting the transition from fossil fuels to energy from renewable sources, such as solar and wind, which generate electricity intermittently.

9.10 The Council's declaration of a climate and ecological emergency and Natural Environment, Climate and Ecological Strategy (NECES) are noted and advises that the decision maker will need to be convinced that there are sufficient measures to mitigate adverse impacts on residential amenity and pollution.

# Lead Local Flood Authority

9.11 Following an initial holding objection, the LLFA confirmed the Applicant has provided sufficient detail to demonstrate that they are proposing a surface water management scheme that should not impact flood risk on or off the site. Accordingly, the LLFA has confirmed removal of its holding objection subject to the Environment Agency also withdrawing its holding objection which relates to maintenance of the surface water management scheme following a fire incident.

Urban Design – No comment.

# **Dorset National Landscape (AONB) Partnership**

9.12 Confirm Dorset National Landscape (AONB) Partnership do not wish to offer detailed comments in this instance given the site size and location outside of the Dorset National Landscape (AONB).

9.13 The proposed development is unlikely to have a significant effect on views into, out of or across the Dorset National Landscape (AONB). However, given the site is within a locally valued landscape it is recommended that advice is sought form the Council's Landscape team in order to ensure full consideration is given to the local impacts and corresponding issues of design/mitigation.

# Landscape Officer

9.14 The Landscape Officer raises no objection subject to planning conditions related to paint finish, hard and soft landscaping, Arboricultural Method Statement and tree protection.

Tree Officer – No objection.

Rights of Way Officer – No comments received.

# Archaeology

9.15 The Council's Senior Archaeologist advises that archaeology is not a constraint that needs to be taken into account when the application is determined.

# Highways

9.16 The Highway Authority's initial response (29 June 2023) raised highway safety concerns with access arrangements and noted a full Construction Traffic Management Plan (CTMP) would be required.

9.17 Following submission and review of further information, the Highway Authority's' subsequent response (12 October 2023) concluded the submitted information is satisfactory and robust and that the residual cumulative impact of the development cannot be thought to be "severe". Conditions and informatives are recommended.

Building Control – No comments received.

# **Environmental Services – Protection**

9.18 All the mitigation measures identified in the Noise Impact Assessment prepared by Inacoustic should be implemented.

Emergency Planning – No comments received.

# Minerals & Waste Policy

9.19 The proposed site lies within the Minerals Safeguarding Area (MSA) designated in Policy SG1 of the Bournemouth, Dorset and Poole Minerals Strategy 2014.

9.20 The safeguarded mineral underlying the site is expected to be Cornbrash Forest Marble. The Minerals Planning Authority (MPA) accepts that, although the mineral is safeguarded, the requirement to prior extract the building stone and then backfill/compact the void in advance of the proposed built development would cause an unreasonable delay in bringing forward the proposed built development. In addition, it is considered that there is a relatively low level of demand for this type of stone.

9.21 Having taken these various factors into consideration, the MPA confirm that in this case the mineral safeguarding requirement is waived and no objection is raised to this proposal on mineral safeguarding grounds.

Dorset Waste Team – No comments received.

Economic Development and Tourism – No comments received.

Public Health Dorset – No comments received.

### **Dorset Fire & Rescue Service**

9.22 Dorset FRS does not object to the principle of development but recognise BESS developments pose some specific hazards in the event of fire.

9.23 The FRS note any fire involving grid scale Lithium Ion (Li-ion) battery storage would be treated as a hazardous materials incident and confirm the expectation that fire and rescue services would initiate an emergency response in the event of an incident, in conjunction with the site operator's own plans.

9.24 The FRS note the evolving technology and ongoing research into the most suitable methods of extinguishing a fire, with current guidance recommending significant volumes of water for a prolonged period.

9.25 The response includes the following recommendations and detailed comments:

- 1. Layout, access and provision of suitable water supply complies as far as is reasonably practicable with the minimum requirements of B5 of Approved Document B, The Building Regulations 2010.
- 2. Other industry or sector specific guidance anticipated by the National Fire Chiefs Council (NGCC) should be consulted once published.
- 3. Necessary resources for the provision of water including standard fire engines, bulk water carriers and High Volume Pumps (HVPs).
- 4. Consideration of contaminated water runoff, although the type and level of contamination is not easily quantifiable. The FRS' default position is one of containment.
- 5. Liaison with other agencies to support air monitoring and warning and informing local residents due to toxic fumes would form part of the emergency response.
- 6. Water supply resilience and the terrain over which service vehicles may have to drive to access the site should be specifically considered.
- 7. Suitable turning space and appropriate hard standing is necessary to enable effective firefighting with multiple vehicles.
- 8. Drenchers or fire service inlets within battery modules may be a design consideration.
- 9. Automatic suppression systems which aim to prevent thermal run-away are noted to have variable effectiveness.
- 10. Fast response detection system linked to the battery management system is considered an essential component of the design.

- 11. Site contingency plans must consider the impact of wind direction on access and egress from the site which may impose operational constraints and an inevitable delay in firefighting.
- 12. Alternative access points and the ability to access all parts of the site should be considered in the design.

## Dorset Police Architectural Liaison Officer – No comments received.

## **National Grid Plant Protection**

Confirm there are no National Gas Transmission assets affected in the area.

Southern Gas Networks – No comments received.

## Scottish and Southern Energy (sub-stations) – No comments received.

Wessex Water - No comments received.

**Dorset Wildlife Trust –** No comments received.

Ramblers Association – No comments received.

## Chickerell Town Council

9.26 Recommend refusal on the grounds of:

- 1. The absence of local policy related to the fire safety of BESS;
- 2. The proximity of the BESS to residential properties, schools and public open spaces;
- 3. Health and safety concerns for the surrounding residential properties; and
- 4. Adverse effects on wildlife through the blocking of a wildlife corridor.

## **Chickerell Ward Councillors**

## <u>Cllr Worth</u>

9.27 Request Dorset Fire & Rescue service is consulted with regards to fire safety and question what mitigation will be put in place to prevent contaminated water entering the water table in the event of a fire.

9.28 Cllr Worth also requested that the application is considered by the relevant planning committee.

## Cllr Dunseith

9.29 Requests that the application is considered by the relevant planning committee.

## **Representations received**

9.30 In summary, the following responses have been received:

#### Weymouth Town Council

9.31 The council supports a robust approach to an Environmental Impact Assessment, including fire safety and water usage in fire-fighting, and wishes to see this evidenced.

#### Weymouth Civic Society

9.32 Weymouth Civic Society object to the proposal on the grounds of:

- 1. Risks of thermal runaway;
- 2. Water supply and pollution;
- 3. Noise levels; and
- 4. Adverse impacts on landscapes and Best and Most Versatile agricultural land.

9.33 Full investigation and consideration by the relevant authorities, including the FRS and the Health and Safety Executive of the consequences of thermal runaway are requested.

#### Dorset CPRE

9.34 Whilst Dorset CPRE note the need for some type of energy storage system in the future they consider the site inappropriate due to the proximity to the local population. Note there is no guarantee that fires and toxic gasses will not occur. Note the area is not suitable for heavy machinery movements.

#### **Chickerell Action Group**

9.35 The objection from Chickerell Action Group (CAG) raises a number of concerns. In summary:

- 1. Need for BESS capacity is not known.
- 2. Development is not acceptable in principle under Policy SUS2.
- 3. Location of site is inappropriate. Site is very close to a large number of residential properties, schools, and other community areas. BESS development next to a rural sub-station suggested as an alternative.
- 4. Landscape harm and harm to green infrastructure network.
- 5. Absence of planning policy and regulatory regime for BESS developments.
- 6. Safety concerns due to potential fire risk, evolving BESS technology and proximity to local population. Risks cannot be eliminated. DWFRS comments are not site specific. Non-compliance with NFCC guidance.
- 7. Health of population is a material consideration.
- 8. Adverse impacts on adjacent agricultural land.
- 9. Net loss of biodiversity if NFCC guidance is deemed appropriate to the application.
- 10. Pollution of air and water in the event of a BESS fire and adverse impacts due to noise.

- 11. Absence of economic and employment benefits to the local community.
- 12. Absence of Traffic Management Plan identifying the weight, size and number of vehicles entering and exiting the site.

9.36 Note: The Applicant has provided a response to the comments raised by CAG which is available to view on the planning register on the Council's website.

#### Comments from members of the public

9.37 At the time of writing 61 representations have been received. Of these 57 are objections and four make comments. No representations in support of the application have been received. These representations have been taken into account in assessing the proposal.

9.38 Comments received were wide-ranging, with the principal concern related to fire risk and associated impacts. It is clear that a number of the responses have conflated the proposals with the nearby proposed development for a 400MW BESS proposed by Statera (P/FUL/2023/04657).

9.40 In summary, the following key themes of the representations are as follows:

Торіс	Comments
Location	<ul> <li>Too close to urban area, residential properties, holiday accommodation, schools, police station, football stadium and golf course.</li> <li>Location in the countryside is inappropriate.</li> <li>Should be located in an industrial area.</li> <li>Loss of best and most versatile agricultural land.</li> </ul>
Need	<ul> <li>Question the need for further BESS capacity given existing developments and approved pipeline.</li> <li>The need for BESS developments must be understood to avoid ad hoc and uncontrolled development.</li> <li>BESS developments should be paused until a national requirement is established.</li> </ul>
Scale	<ul> <li>BESS would be one of the largest in the world.</li> <li>Massive development.</li> </ul>
Climate change	<ul> <li>Alternatives are more suited to Dorset, such as tidal power.</li> <li>No guarantee stored electricity would be produced from sustainable sources.</li> </ul>
Whole lifecycle considerations	<ul> <li>Carbon will be released during construction.</li> <li>Adverse impacts from the mining of lithium.</li> <li>BESS developments are carbon positive, creating more carbon than they save. This doesn't exceed benefit.</li> <li>Excessive water usage required to produce lithium.</li> </ul>

Landscape and visual impact	<ul> <li>Adverse landscape and visual impacts.</li> <li>Site is an unspoilt area.</li> <li>Site is located within the Dorset National Landscape (AONB).</li> </ul>
Ecology	<ul> <li>Harm to ecology through widening of access road and removal of hedgerow.</li> <li>Adverse impacts on wildlife.</li> <li>Adverse impacts on Radipole RSPB reserve, Chesil Beach and the Fleet SAC.</li> </ul>
Economy	<ul> <li>No benefit to local economy.</li> <li>Development would harm tourism in local area.</li> </ul>
Highways	<ul> <li>Unsuitable access, including for emergency vehicles.</li> <li>Adverse highway safety impacts due to increased traffic.</li> <li>Adverse impact on local business, including nearby equestrian smallholdings.</li> <li>Adverse impacts during construction.</li> </ul>
Fire risk	<ul> <li>Unacceptable risk to resident and tourist safety and wellbeing.</li> <li>Large scale evacuation would be necessary in the event of fire.</li> <li>Unproven technology which is not safe.</li> <li>Lack of regulation</li> <li>Lithium is a highly reactive alkali metal. Aluminium-Ion should be considered.</li> <li>Development will put lives at risk.</li> <li>Risk of thermal runaway.</li> <li>Release of potentially fatal toxic gases and explosion affecting nearby population.</li> <li>Fires are difficult to extinguish.</li> <li>Perception of fear due to fire risk.</li> <li>Lack of water supply suitable for firefighting.</li> <li>Inadequate evidence submitted to demonstrate that a major battery fire will not occur.</li> <li>Risk of fire cannot be ruled out.</li> </ul>
Pollution, noise and vibration	<ul> <li>Pollution of land, watercourses and sea in the event of fire.</li> <li>Noise impact is not acceptable.</li> <li>Potential vibration impacts.</li> <li>Smell would be an intrusion.</li> </ul>
Flood risk	- Flood risk.
Decommissioning	<ul> <li>Decommissioning is unclear.</li> <li>Doubts applicant/operator would clean up the site at end of development.</li> </ul>

	- Potential hazardous material.
Cumulative impacts	- With 400MW BESS development proposed by Statera (P/FUL/2023/04657).
Private interests	<ul> <li>Loss of property value without compensation.</li> <li>Developer is the only one who benefits through profit.</li> </ul>

## 10.0 Duties

10.1 s38(6) of the Planning and Compulsory Purchase Act 2004 requires that the determination of planning applications must be in accordance with the development plan unless material circumstances indicate otherwise.

## **11.0 Relevant Policies**

## **Development Plan**

# West Dorset and Weymouth & Portland Local Plan:

11.1 The following policies are considered to be relevant to this proposal:

- INT1 Presumption in favour of Sustainable Development
- ENV1 Landscape, seascape & sites of other geological interest
- ENV2 Wildlife and habitats
- ENV3 Green infrastructure network
- ENV4 Heritage assets
- ENV5 Flood risk
- ENV6 Coastal erosion & land instability
- ENV8 Agricultural land and farming resilience
- ENV9 Pollution and contaminated land
- ENV10 The landscape and townscape setting
- ENV 12 The design and positioning of buildings
- ENV 16 Amenity
- SUS2 Distribution of development
- COM7 Creating a safe & efficient transport network
- COM9 Parking provision
- COM11 Renewable energy development

## Chickerell Neighbourhood Plan:

- CNP10 Locally valued landscape north and east of Chickerell Village
- CNP11 General design principles
- CNP12 Enhancing biodiversity

## **Material Considerations**

## Emerging Local Plans:

11.2 Paragraph 48 of the NPPF provides that local planning authorities may give weight to relevant policies in emerging plans according to:

- the stage of preparation of the emerging plan (the more advanced its preparation, the greater the weight that may be given);
- the extent to which there are unresolved objections to relevant plan policies (the less significant the unresolved objections, the greater the weight that may be given); and
- the degree of consistency of the relevant policies in the emerging plan to the NPPF (the closer the policies in the emerging plan are to the policies of the NPPF, the greater the weight that may be given).

11.3 The Dorset Council Local Plan Options Consultation took place between January and March 2021. Being at a very early stage of preparation, the Draft Dorset Council Local Plan should be accorded very limited weight in decision making.

# Supplementary Planning Document and Guidance

Dorset AONB Landscape Character Assessment

Dorset AONB Management Plan 2019-2024

Landscape Character Assessment February 2009 (West Dorset)

Climate & Ecological Emergency Strategy, Dorset Council (15 July 2021)

Natural Environment, Climate and Ecology Strategy 2023-25 Refresh (March 2023)

Planning for Climate Change: Interim Guidance and Position Statement (December 2023)

# National Planning Policy Framework (December 2023):

11.4 Paragraph 11 sets out the presumption in favour of sustainable development. Development plan proposals that accord with the development plan should be

11.5 approved without delay. Where the development plan is absent, silent or relevant policies are out-of-date then permission should be granted unless any adverse impacts of approval would significantly and demonstrably outweigh the benefits when assessed against the NPPF or specific policies in the NPPF indicate development should be restricted.

11.6 Relevant NPPF sections include:

• Section 4. Decision taking: Para 38 - Local planning authorities should approach decisions on proposed development in a positive and creative way. They should use the full range of planning tools available...and work

proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area. Decision-makers at every level should seek to approve applications for sustainable development where possible.

 Section 12 'Achieving well designed places indicates that all development to be of a high quality in design, and the relationship and visual impact of it to be compatible with the surroundings. In particular, and amongst other things, Paragraphs 131 – 141 advise that:

The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people.

It is important to plan positively for the achievement of high quality and inclusive design for all development, including individual buildings, public and private spaces and wider area development schemes.

Development that is not well designed should be refused, especially where it fails to reflect local design policies and government guidance on design.

- Section 14 'Meeting the challenges of climate change, flooding and coastal change'. Local planning authorities should not require applicants to demonstrate the need for renewable or low carbon energy and should approve applications if impacts are (or can be made) acceptable (Para. 163).
- Section 15 'Conserving and Enhancing the Natural Environment'- Paragraphs 185-188 set out how biodiversity is to be protected and encourage net gains for biodiversity.

#### National Planning Practice Guidance

11.7 The NPPG acknowledges the benefits of BESS and provides guidance to applicants and Local Planning Authorities (034 Reference ID: 5-034-20230814 and 035 Reference ID: 5-035-20230814 respectively). It recommends consultation with the local fire and rescue service and consideration of proposals against guidance produced by the National Fire Chiefs Council (NFCC) (2023).

11.8 The associated <u>Chief Planner Newsletter</u> of 11 September 2023 notes that ensuring BESS developments are sited, installed, operated, maintained and decommissioned safely are priorities for the Government together with ensuring that potential risks to safety are duly assessed.

#### Grid Scale Energy Storage System Planning Guidance

11.9 This planning guidance was published by the National Fire Chiefs Council (NFCC) in 2023. It provides detailed guidance on the planning, design and management of BESS developments and references other guidance, comprising:

 National Fire Protection Authority (NFPA) (2023) – Standard for the Installation of Stationary Energy Storage Systems ('NFPA855') • FM Global (2017) Property Loss Prevention Data Sheets: Electrical Energy Storage Systems

## National Policy, Government Guidance and Strategy

- Net Zero Strategy: Build Back Greener (2021)
- British Energy Security Strategy (2022)
- Government Response: Facilitating the deployment of large-scale and long duration electrical storage (2022)
- Powering Up Britain (2023)
- Powering Up Britain Energy Security Plan (2023)
- Overarching National Policy Statement for Energy (EN-1) (2023)
- National Policy Statement for Renewable Energy Infrastructure (EN-3) (2023)
- UK Battery Strategy (2023)

### 12.0 Human rights

Article 6 - Right to a fair trial.

Article 8 - Right to respect for private and family life and home.

The first protocol of Article 1 Protection of property.

This recommendation is based on adopted Development Plan policies, the application of which does not prejudice the Human Rights of the applicant or any third party.

## 13.0 Public Sector Equalities Duty

13.1 As set out in the Equalities Act 2010, all public bodies, in discharging their functions must have "due regard" to this duty. There are 3 main aims:-

- Removing or minimising disadvantages suffered by people due to their protected characteristics
- Taking steps to meet the needs of people with certain protected characteristics where these are different from the needs of other people
- Encouraging people with certain protected characteristics to participate in public life or in other activities where participation is disproportionately low.

13.2 Whilst there is no absolute requirement to fully remove any disadvantage the Duty is to have "regard to" and remove or minimise disadvantage and in considering the merits of this planning application the planning authority has taken into consideration the requirements of the Public Sector Equalities Duty and it is not considered that the development would affect anyone with protected characteristics.

### 14.0 Financial benefits

14.1 Employment, particularly during the construction and decommissioning phases of the development, as well as statutory and site operators during the lifetime of the development.

### **15.0 Environmental Implications and Context**

15.1 At a national level the Government aims to reduce carbon emissions by 80% (compared to 1990 levels) by 2050 and fully decarbonise the electricity grid by 2035. The Government aims to achieve these targets in a number of ways, including through development of up to 50GW of offshore wind by 2030 and a fivefold increase in solar by 2035 (Powering Up Britain, 2023).

15.2 The Government's Net Zero Strategy: Build Back Greener (October 2021) acknowledges that the path to net zero in 2050 will respond to the innovation and adoption of new technologies over time. Whilst the exact technology and energy mix in 2050 cannot be known now, the Government identifies a number of green technologies (including storage), which interact to meet demand across sectors.

15.3 Electricity storage complements the rapid necessary expansion of renewable technologies by providing a balancing function to support the intermittent energy supply from renewable sources.

15.4 National Policy Statement EN-1 (2023) states that storage has a key role to play in achieving net zero and providing flexibility to the energy system. Storage is noted to support the usable output from intermittent low carbon generation, reducing the total amount of generation capacity needed on the energy system, thereby helping to reduce constraints on the network and helping to defer or avoid the need for costly network upgrades as demand increases. EN-1 confirms there is currently around 4GW of electricity storage operational in Great Britain, around 3GW of which is pumped hydro storage and around 1GW is battery storage.

15.5 National Policy Statement for Renewable Energy Infrastructure (EN-3) (2023) adds that as the electricity grid sees increasing levels of generation from variable renewable generators such as offshore wind, onshore wind and solar power, there will be an increasing need for storage infrastructure to balance electricity supply and demand.

15.6 The Government's British Energy Security Strategy (2022) sets out how the Government seeks to secure clean and affordable energy in the long term. The wide-ranging initiatives include encouraging all forms of flexibility with sufficient large-scale, long-duration electricity storage (LLES) to balance the overall system.

15.7 In August 2022, the Government issued a response on facilitating the deployment of LLES. The response states that *"a smart and flexible energy system is essential for integrating high volumes of low carbon power, heat, and transport. The importance of flexibility for our energy security to ensure that we can efficiently* 

match supply and demand and minimise waste was recognised in the British Energy Security Strategy. We anticipate that at least 30GW of low carbon flexible assets, which includes electricity storage, may be needed by 2030 to maintain energy security and cost-effectively integrate high levels of renewable generation."

15.8 The document notes that battery developments have an important role to play in achieving net zero, helping to integrate renewables, maximising their use, contributing to supply, and helping manage constraints in certain areas. The response further recognises that electricity storage developments provide low carbon flexibility, replacing some unabated gas generation and diversifying our technology mix to help meet energy targets.

15.9 More recently, the Government's Powering Up Britain: Energy Security Plan (2023) explains the Government is facilitating the deployment of electrical storage at all scales and is working to ensure an appropriate, robust and future-proofed health and safety framework is sustained as electrical storage deployment increases.

15.10 In November 2023 the Government published the UK Battery Strategy. It reiterates that batteries will play an essential role in our energy transition and our ability to achieve net zero by 2050. In respect of battery safety, the Strategy notes the UK has a strong health and safety and regulatory framework covering the breath of different batteries noting work is continuing to improve battery safety. It confirms the Government will continue to prioritise cross-departmental work into the ongoing safety of industrial-scale batteries.

15.11 The NPPF (Para. 163) sets out that when determining planning applications for renewable and low carbon development, local planning authorities should not require applicants to demonstrate the overall need for renewable energy and recognise that even small-scale projects provide a valuable contribution to significant cutting of greenhouse gas emissions. It also sets out that applications should be approved if the impacts are (or can be made) acceptable.

15.12 Dorset Council accepts that energy needs to be produced from renewable sources and the Council must aim to provide this within its administrative area. The Council recognised this by declaring a climate emergency in May 2019, with the aim of taking a lead as an authority in tackling climate change. In November 2019 this was escalated to a Climate and Ecological Emergency.

15.13 Dorset Council's Natural Environment, Climate & Ecology Strategy (2023) includes a number of missions to support the strategy. 'Mission 1: Renewable Generation' identifies the deployment of renewables and storage to support the overarching mission of decarbonising the grid by 2035. Dorset Council published the Climate Change: Interim Guidance and Position Statement in December 2023. The Statement confirms battery storage infrastructure as forming a component of standalone renewable energy generation schemes. It notes climate change will be given significant weight as a material consideration in the balance when determining

applications, in line with the legislative and national policy context.

15.14 The proposed BESS is 60MW and is estimated by the Applicant to discharge 36,427MWh/year, enough to supply the average annual electricity needs<sup>1</sup> of 13,491 households. Whilst electricity discharged by the BESS would not all be consumed locally, based on 2021 census data, and for comparison purposes, the BESS has potential to serve the electricity needs of almost 8% of households in Dorset<sup>2</sup>. It would help to support local, national and international targets through the provision of renewable energy supporting infrastructure, thereby reducing carbon emissions and helping to decarbonise the grid. The location, in close proximity to the Chickerell Substation, would reduce electricity losses compared to transmission of electricity over longer distances.

15.15 It is understood that the Applicant has secured a grid connection date in 2026 subject to planning permission. The proposal therefore has potential to make an early positive contribution towards the above objectives.

15.16 The environmental benefits have to be balanced against the environmental impacts of the development, including: embodied carbon in construction materials; associated transport emissions during construction and operation; and the partial development of a greenfield site with associated landscaping.

## 16.0 Planning Assessment

## Principle of Development

# Principle of BESS development

16.1 Local Plan policy SUS2 imposes strong restrictions over development in the countryside outside of defined development boundaries, it states that having regard to the need for the protection of the countryside and environmental constraints development will be restricted, inter alia to "proposals for the generation of renewable energy or other utility infrastructure".

16.2 Policy COM11 provides specific support for proposals for generating heat or electricity from renewable energy sources noting such proposals will be allowed wherever possible providing that the benefits of the development significantly outweigh any harm. It further requires that:

1. "any adverse impacts on the local landscape, townscape or areas of historical interest can be satisfactorily assimilated;

<sup>&</sup>lt;sup>1</sup> Average household in England, Scotland and Wales uses 2,700kWh of electricity and 11,500kWh of gas per year (OFGEM).

<sup>&</sup>lt;sup>2</sup> Census (2021) confirms Dorset has a total of 169,261 households.

- 2. the proposal minimises harm to residential amenity by virtue of noise, vibration, overshadowing, flicker, or other detrimental emissions, during construction, its operation and decommissioning;
- 3. adverse impacts upon designated wildlife sites, nature conservation interests, and biodiversity are satisfactorily mitigated."

16.3 These detailed matters are assessed in subsequent sections of this report.

16.4 Although not generating renewable energy the proposal would assist in managing supply and demand for renewable energy across the grid. Policy COM11 should be considered in conjunction with the Council's Climate and Ecological Emergency Strategy which recognises electricity will need to be generated from renewable energy, and that therefore, inter alia, it is also essential to be able to store energy locally and manage supply and demand.

16.5 Para. 157 of the NPPF specifically states that the planning system should support renewable and low carbon energy and associated infrastructure. Para. 162 notes that local planning authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions and that such applications should be approved if the impacts are (or can be made) acceptable.

16.6 As infrastructure that will support renewable energy generation, the principle of development is consistent with the aims and objectives of relevant Local Plan policies and provisions of the NPPF summarised above.

## Principle of loss of best and most versatile agricultural land

16.7 The Local Plan recognises that agricultural land is an important resource for current and future populations. Policy ENV8 seeks to steer built development towards areas of poorer quality land where it is available. The NPPF (Para. 180) notes decisions should enhance the natural and local environment, including by recognising the wider benefits from natural capital, including the economic and other benefits of the best and most versatile agricultural (BMV) land. It further states in reference to plan making that where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality and that the availability of agricultural land used for food production should be considered, alongside the other policies in the NPPF, when deciding what sites are most appropriate for development (Footnote 62).

16.8 A number of objections raise concerns with the loss of agricultural land and highlight concerns with food security. The Applicant has submitted an Agricultural Land Classification (ALC) Assessment which identifies that the majority (64%) of the study area (including land to the east of the site) is Grade 3a (good) BMV land. The remainder is identified as Grade 3b (moderate) BMV land (18%) or non-agricultural

land (18%). The study area extends beyond the application site to include the adjoining field to the east. As this area includes the majority of non-agricultural land, the proportion of BMV land on the site is higher than the study area (approximately 0.75ha / 75%).

16.9 The site comprises a small agricultural plot which is not currently used for food production. The existing low intensity use of the site for horse grazing and previously game bird rearing supports limited jobs in the local economy. The loss of BMV land though development of the site and associated loss of the natural capital and economic and food security benefits is therefore limited.

16.10 Part ii) of Policy ENV8 states that where possible, the Council will steer built development towards areas of poorer quality agricultural land where it is available, except where this would be inconsistent with other policy and sustainability considerations. In this case, the site is well related to the Chickerell Substation and Point of Connection (POC) and is therefore a sustainable location for battery storage. Whilst the site is not currently used for food production, development to provide a 60MW battery storage facility would be consistent with Policy COM11 and would represent a sustainable alternative use of land given the limited food production potential of the small agricultural plot. The limited loss of the BMV land therefore complies with Policy ENV8. It is also relevant to note that the site after its 40-year lifetime.

## Landscape and visual impact

16.11 The site falls within Ridge and Vale Dorset Landscape Character Type an area of broad evenly spaced shallow ridges and valleys which follow a west-east alignment. They are enclosed and defined by the dramatic chalk escarpment to their north and the coast to their south.

16.12 The site is identified as Land of Local Landscape Importance (LLLI) within the West Dorset, Weymouth and Portland Local Plan and Chickerell Neighbourhood Plan. It is therefore considered a valued landscape wherein the NPPF (Para. 180) explains decisions should contribute to and enhance the natural and local environment by inter alia protecting and enhancing valued landscapes in a manner commensurate with their statutory status or identified quality in the development plan.

16.13 Local Plan Policy ENV3 confirms development that would cause harm to LLLI's or would undermine the reasons for an area's inclusion within the network will not be permitted unless clearly outweighed by other considerations.

16.14 Chickerell Neighbourhood Plan Policy CNP10 notes the LLLI is a locally valued landscape and should be protected for the following qualities, in summary: long views to the Dorset National Landscape (AONB) to the north; rural setting for Chickerell and Radipole villages and wider rural backdrop to north-west Weymouth; green wedge between Chickerell and Southill/Radipole; and part of the north-south wildlife corridor.

16.15 The West Dorset, Weymouth and Portland Local Plan confirms that development should be located and designed so that it does not detract from and, where reasonable, enhances local landscape character. Development that significantly adversely affects the character or visual quality of the local landscape will not be permitted (Policy ENV1).

16.16 The proposed BESS facility would be located in the northern part of the field, with infrastructure enclosed by a 3.5m high fence. Indicative landscaping would include woodland planting along the southern and eastern boundaries. This would mature and reduce visual impacts of over time. Existing trees and vegetation along other boundaries would provide some degree of screening.

16.17 There are a number of visual detractors in the immediate and wider vicinity of the site, including the Chickerell Substation and electricity pylons. Close to middle distance publicly accessible views of the site are generally limited to views from the nearby public right of ways (including S16/21 which runs east to west along the southern boundary of the site) from which users are aware of surrounding urban development. Proposed woodland planting would provide screening.

16.18 More distant views are for the most part screened by rising topography and/or the adjacent small copses and intervening field boundary vegetation. From the Dorset National Landscape (AONB) partial views of the site are possible. However, views would be seen in the context of the surrounding and intervening development. The development would not harm the special qualities of the Dorset National Landscape (AONB).

16.19 Overall adverse landscape and visual impacts would be limited and localised. The proposals would not have a significantly adverse impact on the character or visual quality of the local landscape and would not cause harm to the LLLI, the reasons for inclusion within the network or the identified qualities. Subject to securing a detailed landscaping scheme and maintenance via planning condition, appropriate measures to moderate the limited adverse effects of the development can be secured and local landscape impacts would be satisfactorily assimilated. Given the proposed fencing of the site, a planning condition controlling the colour of the battery storage units is not considered necessary.

16.20 In landscape terms, the proposals accord with Policies ENV1, ENV3, COM11 of the Local Plan, Policy CNP10 and the NPPF.

#### Noise and residential amenity

16.21 The application site is situated approximately 350m from the closest dwelling (on Grafton Avenue) and approximately 600m from dwellings along Coldharbour. The residential-led mixed use development site to the east of Chickerell is approximately 400m to the west.

16.22 The application is supported by a Noise Impact Assessment. For the closest residential receptors, the assessment concludes that the development with mitigation measures in place would give rise to sound levels that do not exceed the measured background sound levels and would be within the 'no observed effect level' of the Planning Practice Guidance (Paragraph: 004 Reference ID: 30-004-20190722)

which defines such impacts as not having an adverse effect on health or quality of life.

16.23 The Council's Environmental Health Officer notes the mitigation measures set out in the Noise Impact Assessment should be implemented. With the mitigation measures proposed to be secured via planning condition the proposal would not have a significant adverse impact on residential amenity in accordance with Policy ENV16 of the West Dorset, Weymouth and Portland Local Plan.

16.24 Policy ENV16 also states developments will only be permitted where they do not generate a level of noise that will detract significantly from the character and amenity of the area. Public right of way S16/21 follows the southern boundary of the site. Along the route, existing noise from the Chickerell Substation and overhead powerlines are audible. Sound level mapping within the Noise Impact Assessment confirms users of the footpath would experience elevated noise levels of 35-45dB(A). Given the existing background noise levels and the fact users would experience elevated noise levels for only a short period of time whilst following the footpath, the proposal is not considered to generate a level of noise that would significantly detract from the character or amenity of the area.

16.25 The proposals accord with Policy ENV16 and would avoid harm to residential amenity in accordance with Policy COM11.

## **Biodiversity**

16.26 The application is supported by a Biodiversity Plan (BP) that has been agreed by the Council's Natural Environment Team (NET). The BP outlines a range of measures to deliver biodiversity net gains, including grassland enhancement and a new woodland buffer. Whilst the BP does not account for the design change to install five water tanks at the entrance of the site, it concludes the ecological enhancement measures would result in a 100% biodiversity net gain. This represents a substantial increase above current policy requirements and the existing ecological value of the site. Whilst the water tanks would reduce the biodiversity net gain value below 100%, the resultant net gain would still be substantial and is a benefit to be considered in the planning balance. Natural England raises no objection.

16.27 Objectors have commended that hedgerows along the site access would need to be removed to facilitate site access. However, vehicle tracking shows suitable access can be provided. Objectors also raise concern that the proximity of new woodland planting is too close to battery units. NFCC guidance recommends areas within 10m of battery units should be cleared of combustible vegetation and any other vegetation should be kept in a condition that doesn't increase fire risk. The indicative landscape scheme shows woodland planting would be approximately 10m from BESS units. Subject to appropriate planning conditions securing the detailed design of landscaping and a Battery Safety Management Plan a biodiversity net gain

would be delivered in excess of policy requirements and NFCC guidance in respect of vegetation proximity can be adhered to.

16.28 Subject to these planning conditions and a planning condition to ensure compliance with the approved BP, the development is acceptable from a biodiversity perspective in accordance with Policies ENV2 and COM11 of the West Dorset, Weymouth and Portland Local Plan and the Policy CNP12 of the Chickerell Neighbourhood Plan.

### <u>Highways</u>

16.29 The application is accompanied by a Highways Appraisal and Construction Traffic Management Plan Technical Note, which consider highways related impacts of the development during construction and operation. The applicant has also responded to queries raised by the Highways Authority over the course of determination.

16.30 Access to the site would remain from Coldharbour via the existing hard surfaced 'L'-shaped access track which leads to the site. The applicant has undertaken vehicle access tracking / swept path analysis of the access from Coldharbour and access into the site which demonstrates suitable access to accommodate Heavy Goods Vehicles (HGVs). Planning conditions to ensure appropriate access construction and visibility splays are proposed.

16.31 There would be traffic impacts during construction of the development and very infrequent vehicle movements when the site is in operation. As such, there would be ample space for onsite car parking during operation of the development. Construction is anticipated to take 6 months and is expected to involve a maximum of 10 HGV arrivals and departures per day during the first three months. Advanced warning signage and banksman are required via the proposed Construction Traffic Management Plan (CTMP) condition to manage potential conflict between users of the access track during construction. A pre-commencement condition requiring approval of a manoeuvring, parking, loading and unloading scheme is also required to ensure highway safety.

16.32 Subject to planning conditions, the highway related impacts of the development are acceptable, can be appropriately managed and accord with Policy COM7 and the NPPF (Para. 114). The development would not have an unacceptable impact on highway safety and the residual cumulative impact on the road network would not be "severe" where considered against the NPPF (Para. 115).

#### Health and safety

16.33 Fire risk and associated impacts are the principal reason for objection raised by members of the public and third parties.

16.34 The NPPF notes Local Planning Authorities must determine applications on planning grounds only. Whilst fire risk can be associated with almost all types of development it is not routinely assessed at the planning application stage as potential implications are managed under other regulatory frameworks and regimes, such as Building Regulations and the Environmental Protection Act. However, given the nature of the development, providing lithium-ion battery storage, health and

safety is a material planning consideration so far as it relates to land use planning. It should also be noted that the proposal does not constitute a building for the purposes of the Building Regulations, and so the requirement to comply with the fire-related aspects of Building Regulations does not apply.

16.35 The NPPF notes Local Planning Authorities should "consult the appropriate bodies when considering applications for the siting of, or changes to, major hazard sites, installations or pipelines, or for development around them" (Para. 45). This application is not for or within the consultation zones of a major hazard site, and so does not fall within the remit of the Health and Safety Executive (HSE). Appropriate bodies have been consulted in respect of health and safety matters.

16.36 Of relevance to health and safety considerations is Planning Policy ENV16, which notes inter alia that development proposals will only be permitted provided "they do not generate unacceptable pollution, vibration or detrimental emissions unless it can be demonstrated that the effects on amenity and living conditions, health and the natural environment can be mitigated to the appropriate standard".

16.37 The NPPF more generally promotes healthy places and notes decisions should "promote public safety and take into account wider security and defence requirements" (Para. 101). In respect of pollution, the NPPF states decisions should also ensure "new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development..." (Para. 191).

16.38 National Planning Practice Guidance establishes guidance to Local Planning Authorities in the assessment of applications for battery storage (034 References ID: 5-034-20230814 and 035). It recommends consultation with the local Fire and Rescue Service (FRS) and consideration of guidance for FRS' published by the National Fire Chiefs Council (NFCC) entitled 'Grid Scale Battery Storage System Planning'.

16.39 The NFCC guidance recognises BESS developments are a fundamental part of the UK's move toward a sustainable energy system and recognises the potential for fire. It notes the NFCC's expectation is that a comprehensive risk management process must be undertaken by operators to *"identify hazards and risks specific to the facility and develop, implement, maintain and review risk controls. From this process a robust Emergency Response Plan should be developed."* The guidance is wide ranging. It includes a number of recommendations relevant at the planning stage (such as access and layout) as well as detailed design and site management recommendations (such as venting and signage). The guidance explains that every BESS development is different and states a FRS should not limit themselves to the content of the guidance noting reference may be made to other guidance and standards including the internationally recognised guidance of the National Fire Protection Authority (NFPA) (2023) – Standard for the Installation of Stationary Energy Storage Systems ('NFPA855').

16.40 In accordance with the Council's consultation protocol, the FRS has been consulted and at the request of planning officers, the applicant submitted a Fire Statement and safety information which details the risk management of the BESS.

The applicant has also responded to comments from the Chickerell Action Group (CAG). The Fire Statement notes the various safety features of the proposed Tesla Megapack units and site design measures. It confirms the statement has been informed by consultation responses, product information and guidance.

16.41 The Tesla website notes Megapack units are "one of the safest battery storage products of its kind. Units undergo extensive fire testing and include integrated safety systems, specialised monitoring software and 24/7 support." In respect of embedded design measures, the proposed Tesla Megapack units have a range of safety features. As described in the submission, these include:

- Separated battery bay sections and individually fused battery modules;
- Sealed thermal management systems containing coolants and/or refrigerants.
- Integrated Battery Management System (BMS);
- Customer Interface Bay to manage Megapacks during operation;

- Thermal roof with deflagration vents to mitigate the impact of thermal runaway by directing all gases, smoke and flame out the top of the Megapack in the event of a fire;

16.42 If fire occurs, the submitted Megapack product information advises fires burn in a "controlled manner, consuming themselves slowly without explosive bursts or unexpected hazards, and without propagating to neighbouring enclosure units". The submitted Lithium-Ion Battery Emergency Response Guide includes recommendations for firefighting noting fire crew should allow a battery to burn itself out, rather than seeking to extinguish the fire. This is consistent with comments from Dorset FRS which advises that once "thermal run-away has occurred, defensive firefighting tactics would be the preferred option to allow the cell or module involved in fire to burn out and to protect surrounding modules and infrastructure."

16.43 Tesla recommends fire detection at the site-level with the use of multispectrum infra-red cameras that can capture the early signs of thermal runaway. The proposed drawings show eight inward facing CCTV cameras around the boundary of the compound. It is unclear whether they would be infra-red. However, details can be secured via planning condition.

16.44 The Fire Statement advises that the site design has been informed with regard to safety. Each pair of Megapack units are spaced approximately 2.5m away from adjacent pairs and an access route of approximately 6.5m between enclosed battery pairs and associated transformers. Spacing between batteries falls below the "suggested" 6m minimum standard identified within the NFCC Guidance. However, the guidance notes reduced spacing can be introduced where suitable design features are proposed. The referenced FM Global (2017) Property Loss Prevention Date Sheets: Electrical Energy Storage Systems document also explains spacing can be reduced where there is adequate thermal barrier between battery enclosures. As noted above, the proposed units include extensive mitigation measures which could be secured via a planning condition.

16.45 In respect of distance to residential properties, the NFCC guidance notes distances between BESS units and occupied buildings/site boundaries will vary. It recommends an initial minimum distance of 25m prior to any mitigation and notes reduced distances may be possible in rural settings. Notwithstanding the proposed mitigation, the closest residential property is located approximately 350m away, fourteen times further than the NFCC guidance. This indicates the site is appropriately sited in relation to residential properties. Given the agricultural nature of surrounding land uses, the closer proximity between the battery enclosures and the northern (approximately 10m) and eastern (approximately 13m) site boundaries is considered to accord with guidance.

16.46 The site would be accessed by a single access point to the north whereas the NFCC guidance advises sites should include at least two separate access points to account for opposite wind directions/conditions. As prevailing winds are generally from the south, having one access to the north does not comply with the recommendations of the NFCC guidance and in the worst-case scenario could hinder firefighting. Dorset FRS advise that "site contingency plans must consider the impact of wind direction on access and egress from the site which may impose operational constraints and an inevitable delay in firefighting. Alternative access points and the ability to access all parts of the site should be considered within the design." It is acknowledged that the site is of limited scale and provides opportunities for turning of vehicles within the site so that a downwind position could be established. The applicant also notes access could be provided around the western side of the enclosure and over the boundary fence as an alternative. Given this alternative, the limited scale of the development, ability to turn within the site and good separation distances from nearby residential buildings well in excess of NFCC Guidance, and recognition that firefighting in the event of a thermal runaway would be defensive, the proposed single access is considered adequate.

16.47 In respect of water supply, NFCC guidance recommends that hydrant supplies should be located close to BESS containers and should be capable of delivering no less than 1,900 litres per minute for at least 2 hours. Wessex Water has confirmed the closest fire hydrant on Coldharbour Road has a flow rate of 8.5l/second (510 litres per minute). As this falls significantly below recommended guidance the applicant has amended the proposals to provide five water tanks with sufficient capacity on site. The provision of water tanks prior to installation of any battery units is proposed to be secured via planning condition.

16.48 As noted in section 9 of this report, Dorset FRS does not object, but raises a series of comments and recommendations. It notes early detection of a potential fire situation is critical and fast response detection system linked to the battery management system is considered an essential component of the design. This is proposed to be conditioned.

16.49 Whilst the risk of fire cannot be eliminated, with the proposed mitigation measures in place, a fire is not considered likely. Given the evolution of technology and acknowledgement that further information will become available at the detailed design stage, it is appropriate to secure a BESS Safety Management Plan condition via planning condition to require further details at the detailed design stage. The Management Plan would provide further details on site monitoring through infra-red cameras and other safety features to monitor, detect and isolate any faults. Dorset

Council would consult with Dorset FRS when details are submitted for approval pursuant to the condition. Subject to conditions, officers are satisfied that the health and safety matters of the development in so far as they relate to land use planning matters are satisfactory.

#### **Pollution**

16.50 The development would not generate unacceptable pollution, odour, detrimental emissions or associated impacts during normal operation. There is however a risk of such impacts in the event of a fire and thermal runaway.

16.51 The applicant has responded to initial concerns raised by the Environment Agency (EA) and the EA has now removed its objection to the development subject to conditions. These conditions relate to surface water drainage and pollution control. It is noted that contamination of land would be managed under separate legislation, notably the Environmental Protection Act, with the precise method of remediation depending on the nature and extent of contamination. Accordingly, with the recommended conditions imposed the proposal is not considered to give rise to concerns with pollution.

#### Flood risk and drainage

16.52 The site falls within Flood Zone 1 and has low risk of flooding. Parts of the access route are subject to high (1 in 30 year) and medium (1 in 100 year) risks of surface water flooding.

16.53 Groundwater levels are between 0.025m and 0.5m below the ground surface within the site. Within this zone there is a risk of groundwater flooding to both surface and subsurface assets and there is the possibility of groundwater emerging at the surface locally.

16.54 The LLFA has reviewed the surface water proposals by the applicant and confirms the applicant has followed the SuDS hierarchy and prioritised infiltration as a means of surface water management.

16.55 The majority of the surface surrounding the battery stores is proposed to be constructed from permeable materials and it is only the battery stores themselves, some transformer units and a substation which will produce some additional runoff. The proposed granular sub-base surrounded by an impermeable clay flow baffle will provide surface water attenuation and allow for some infiltration to ground. A separate surface water storage tank is proposed for the management of polluted surface water which will be utilised only in the event of fire. An overflow pipe will distribute and discharge excess surface water from the sub-base at a rate of no more than 2 l/s at the 1-in-30 year rainfall event and above. Subject to planning conditions securing the surface water management and maintenance scheme, the proposal is acceptable from a surface water perspective and would not generate flooding through surface water run-off or exacerbate flooding elsewhere.

16.56 Whilst all battery infrastructure is proposed to be located in areas of lower flood risk, part of the access route is subject to high and medium risks of surface water flooding. Alternative access via the east can be provided and is not affected by medium or high surface water flood risk. Accordingly, application of the sequential test is not required in this this instance as safe access and egress exists.

## Other Matters

# Archaeology

16.57 The Applicant's Archaeological Evaluation and Archaeological Desk-Based Assessment do not identify any archaeological remains and suggests the site was used for agriculture in the past. Based on the findings, the Council's Archaeologist advises that archaeology is not a constraint for the site. Accordingly, planning conditions are not required in respect of archaeology and the development accords with Policy ENV4 and the NPPF (Para. 209) in terms of archaeology.

## Built Heritage Assets

16.58 The closest listed buildings are located approximately 600m to the north east of the site along the Causeway and Radipole Lane and the Radipole Conservation Area lies approximately 300m to the east of the site. Given the nature of development and intervening topography the proposed development is not considered to fall within the setting of any built heritage asset or other heritage asset and would therefore avoid heritage harm in accordance with Policy ENV4 and the NPPF.

## Minerals Safeguarding

16.59 As advised by the Council's Minerals & Waste Policy Team, the Minerals Planning Authority (MPA) confirm that in this case the mineral safeguarding requirement is waived and no objection is raised to this proposal on mineral safeguarding grounds.

## Decommissioning

16.60 A suitably worded planning condition to secure appropriate decommissioning of the site would ensure that electrical storage infrastructure is removed at the end of the 40-year period or within 6 months of the cessation of electricity storage and distribution by the facility (whichever is the sooner).

## Environmental Impact Assessment

16.61 Following consideration of the relevant selection criteria for screening Schedule 2 development presented in Schedule 3 of the EIA regulations, it is concluded that the proposed development is unlikely to result in significant environmental impacts. Therefore, an Environmental Statement is not required in this instance.

## 17.0 Conclusion and planning balance

17.1 The proposal is for a battery storage scheme and associated infrastructure. It is located in the countryside in close proximity to the Chickerell Substation. It is approximately 350m from the closest residential dwelling.

17.2 The proposed BESS is 60MW. It is estimated by the Applicant to discharge 36,427MWh/year, enough to supply the average annual electricity needs of 13,491 households. Whilst electricity discharged by the BESS would not all be consumed locally, based on 2021 census data the BESS has potential to serve the electricity needs of almost 8% of households in Dorset.

17.3 The Dorset Council Climate Change: Interim Guidance and Position Statement notes climate change will be given significant weight as a material consideration in the balance when determining applications, in line with the legislative and national policy context. It identifies renewable energy generation as a public benefit which should be afforded significant weight even if the project is small-scale.

17.4 As noted in Section 15 of this report, the proposal would help to support local, national and international targets through the provision of renewable energy supporting infrastructure, thereby reducing carbon emissions and helping to decarbonise the grid. It would respond to Dorset Council's declared climate emergency and ecological emergency. The renewable energy benefits of the development therefore attract significant positive weight in the planning balance.

17.5 Moderate net positive benefits would accrue through the development of the site during the construction period and operation of the development in respect of economic benefits. A substantial biodiversity net gain would be delivered.

17.6 Adverse impacts on residential amenity would be minimised and significant adverse impacts would be avoided. There would be limited and localised adverse visual impact from the proposal with no harm to the Dorset National Landscape. Whilst part of the site is Best and Most Versatile Agricultural Land, it is not currently in agricultural use and the use of the site for non-agricultural uses would result in limited harm due to the size of the site limiting its potential to contribute toward food production.

17.7 Resulting pollution from fires is regulated by other legislative regimes and the planning system must operate on the assumption that these are effective. Nevertheless, the proposals have been considered against NFCC guidance and critically the site is located well in excess of the minimum distances to residential properties advised by the guidance. The EA's recommended planning conditions are proposed to be imposed and there is no objection from Natural England.

17.8 On balance, the collective significant benefits of the proposal are considered to significantly outweigh the limited harm of the development. For the reasons set out above, it is considered that the proposal is in accordance with the Development Plan and there are no material considerations meaning that planning permission should be refused. The application is therefore recommended for approval subject to planning conditions. These include a planning condition related to battery safety.

## 18.0 Recommendation

Grant subject to the following planning conditions:

# Time Limit (implementation)

1. The development to which this permission relates must be begun not later than the expiration of three years beginning with the date of this permission.

Reason: This condition is required to be imposed by Section 91 of the Town and Country Planning Act 1990 (as amended).

# **Approved Plans**

2. The development hereby permitted shall be carried out in accordance with the following approved plans:

Location Plan – 538-CH/538/05 Rev A Planning Layout – 538-CH/538/02 Rev F Proposed Site Contour Lines – 10563-002 Rev D Site Sections – 10563-003 Rev D Water Tank Detail – 538-CH/538/12 Existing Access Track Remedial Works – 10563-RW01 Reason: For the avoidance of doubt and in the interests of proper planning.

# Time limit (40 years)

3. The planning permission hereby granted shall be limited to a period of 40 years from the date when electrical power is first exported from the batteries to the electricity grid network, excluding electricity exported during initial testing and commissioning. Written confirmation of the first export date shall be provided to the Local Planning Authority no later than one calendar month after the event.

Reason: To define the permission and in the interests of proper planning.

# Decommissioning

- 4. No later than 6 months prior to the expiry of the planning permission, or within 6 months of the cessation of electricity storage and distribution by this facility, whichever is the sooner, a detailed scheme of works for the removal of the development (excluding the approved landscaping and biodiversity works) shall be submitted to and approved in writing by the Local Planning Authority. The scheme of works shall include the following details:
  - i) a programme of works;

- ii) a method statement for the decommissioning and dismantling of all equipment and surfacing on site;
- iii) a Decommissioning Traffic Management Plan to address likely traffic impacts associated with the decommissioning;
- iv) details of any items to be retained on site;
- v) a method statement for restoring the land to agriculture;
- vi) timescale for the decommissioning, removal and reinstatement of the land;
- vii) a method statement for the disposal/recycling of redundant equipment/structures.

The scheme of works shall be undertaken in accordance with the approved details and timescales. The Local Planning Authority shall be notified in writing of the date of the cessation of electricity storage by or distribution from the development within one calendar month of the event.

Reason: To ensure the satisfactory restoration of the site.

## **Construction Traffic Management Plan**

- 5. Before the development hereby approved commences a Construction Traffic Management Plan (CTMP) must be submitted to and approved in writing by the Local Planning Authority. The CTMP must include:
  - i.site operating hours.
  - ii.construction vehicle details (number, size, type and frequency of movement).
  - iii.a programme of construction works and anticipated deliveries.
  - iv.timings of deliveries so as to avoid, where possible, peak traffic periods.
  - v.a framework for managing abnormal loads.
  - vi.location of construction site access.
  - vii.location and form of compound, storage, parking, turning, surfacing and drainage details.
  - viii.wheel wash and vehicle cleaning facilities, including details of the design, specification, position of facilities and measures for the disposal of resultant dirty water, oils/chemicals and materials.
  - ix.inspection of the highways serving the site (by the developer or their contractor and Dorset Highways) prior to work commencing and at regular, agreed intervals during the construction phase.
  - x.a vehicle routing plan for all contractors and suppliers to adhere to.
  - xi.a scheme of appropriate signing of vehicle routes to the site (including access track);
  - xii.general signage details.

- xiii.temporary traffic management measures where necessary (for example, lollipop stop/go traffic management).
- xiv.banksmen to oversee larger vehicle arrivals and departures, and to warn any users of the lane.
- xv.measures for consideration of horse riders using the access track.
- xvi.a point of contact for the users of the lane and the Local Highway Authority.
- xvii.noise restrictions if appropriate.
- xviii. details of personnel car/van sharing initiative(s) to minimise vehicle movements.

The development must be carried out strictly in accordance with the approved CTMP.

Reason: To minimise the likely impact of construction traffic on the surrounding highway network and prevent the possible deposit of loose material on the adjoining highway.

## 6. Construction Environmental Management Plan (CEMP)

Before the development hereby approved commences a Construction Environmental Management Plan (CEMP) must be submitted to and approved in writing by the Local Planning Authority. The CEMP must include:

- i. details of pollution prevention measures;
- ii. details of the use and routing of plant equipment;
- iii. details of the control and removal of spoil and wastes; and
- iv. a timetable for implementation.

The development must be carried out strictly in accordance with the approved CEMP and agreed timetable.

Reason: To prevent pollution of the water environment in line with paragraph 180 of the National Planning Policy Framework.

## Water Tanks

7. Prior to the installation of battery storage units, the water tanks shown on approved drawings 538-CH/538/02 Rev F and 538-CH/538/12 shall be installed, filled with water and made available for use. Thereafter, the water tanks shall be maintained and available for use throughout the lifetime of the development and until the battery storage units are removed from the site. The water tanks shall be green in colour externally as indicated on drawing 538-CH/538/12, and details of the precise shade shall be submitted to and approved in writing by the Local Planning Authority prior to first installation and shall thereafter be installed and retained in the agreed colour. Reason: To ensure adequate water supplies in accordance with National Fire Chiefs Council guidance 'Grid Scale Battery Energy Storage System Planning – Guidance for FRS' (2023).

## **Battery Safety Management Plan**

8. Prior to installation of any battery storage units, a Battery Safety Management Plan (BSMP) shall be submitted to and approved in writing. The BSMP must prescribe measures to facilitate safety during the construction, operation and decommissioning of the battery storage system, including providing details of infra-red CCTV monitoring of the site. The BSMP shall be implemented as approved and strictly adhered to throughout the construction, operation and decommissioning of the development.

Reason: To minimise fire risks, associated pollution and adverse impacts on residential amenity.

# Hard and soft Landscaping

- 9. No development shall commence until a hard and soft landscape scheme informed by Indicative Landscape / Ecological Scheme drawing 538-CH/538/03 Rev D together with a schedule of landscape maintenance has been submitted to and approved in writing by the Local Planning Authority. The hard and soft landscaping scheme and schedule of landscape maintenance must include:
  - i. details of all trees and other planting to be retained;
  - ii. a planting specification and plan to include numbers, size, species, positions of all new trees and shrubs;
  - iii. details of existing and proposed levels, walls, fences and other boundary treatments (including colour of acoustic fencing);
  - iv. details of proposed surface treatments;
  - v. a programme of implementation; and
  - vi. a schedule of landscape maintenance covering a minimum period of five years following substantial completion of the development.

All hard and soft landscape works shall be carried out in accordance with the approved details and the landscaping shall be maintained in accordance with the approved schedule of landscape maintenance.

Reason: To ensure the adequate mitigation of the landscape and visual impact of the proposals and the provision of an appropriate hard and soft landscape scheme prior to the commencement of the development. 10. Any trees or other plants indicated in the approved scheme which, within a period of five years from the date of the development being completed, die, are removed or become seriously damaged or diseased shall be replaced during the next planting season with other trees or plants of a species and size to be first approved in writing by the Local Planning Authority. Hard landscape features will be maintained for the lifetime of the development.

Reason: To ensure that the agreed hard and soft landscaping scheme is established and maintained.

## **Biodiversity Plan**

11. The detailed biodiversity mitigation, compensation and enhancement/net gain strategy set out within the approved Biodiversity Plan certified by the Dorset Council Natural Environment Team on 21 March 2023 must be implemented in accordance with any specified timetable and completed in full save for where water tanks are proposed to the north of the compound and where additional separation distances between vegetation and battery units may be required in accordance with National Fire Chiefs Council guidance entitled 'Grid Scale Battery Storage System Planning' (2023). The works shall be completed prior to the substantial completion, or the first bringing into use of the development hereby approved, whichever is the sooner and photographic evidence of compliance shall be submitted to the Local Planning Authority in accordance with section J of the Biodiversity Plan. The development shall subsequently be implemented in accordance with the approved details and the mitigation, compensation and enhancement/net gain measures shall be permanently maintained and retained for the lifetime of the development.

Reason: To mitigate, compensate and enhance/provide net gain for impacts on biodiversity.

## **Highways and Access**

12. Before the development is occupied or utilised the first 20.00 metres of the vehicle access, measured from the rear edge of the highway (excluding the vehicle crossing - see the Informative Note below), must be laid out and constructed to a specification first submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that a suitably surfaced and constructed access to the site is provided that prevents loose material being dragged and/or deposited onto the adjacent carriageway causing a safety hazard.

13. Before the development commences a scheme for the manoeuvring, parking, loading and unloading of vehicles must be submitted to the Planning Authority. Any such scheme requires approval to be obtained in writing from the Planning Authority. The approved scheme must be constructed before any part of the development hereby permitted is occupied or utilised. Thereafter, these areas must be maintained, kept free from obstruction and available for the purposes specified.

Reason: To ensure the proper and appropriate development of the site and to ensure that highway safety is not adversely impacted upon

14. Before the development hereby approved is occupied or utilised the visibility splay areas as shown on Drawing Number 8529/201 must be cleared/excavated to a level not exceeding 0.60 metres above the relative level of the adjacent carriageway. The splay areas must thereafter be maintained and kept free from all obstructions.

Reason: To ensure that a vehicle can see or be seen when exiting the access.

### No gates

15. There must be no gates hung so as to form obstruction to the vehicular access serving the site.

Reason: To ensure the free and easy movement of vehicles through the access and to prevent any likely interruption to the free flow of traffic on the adjacent public highway.

## Surface Water Management

16. The development hereby permitted shall not be commenced until such time as a final scheme to dispose of surface water based upon the hydrological and hydrogeological context of the development, and including clarification of how surface water is to be managed during construction and including a timetable for implementation, has been submitted to, and approved in writing by, the Local Planning Authority. The scheme shall be based on the pollution prevention principles set out in the supporting 'Surface Water Drainage Design' (dated October 2023, Ref: MC0357 23energy) and the applicant's response to drainage queries letter (dated 5 December 2023, Ref: MC0357 23energy Chickerell). This should include impermeable areas surrounding the battery units (as shown in drawing CIV01, version P3), catch drains, automatic valve to divert contaminated firewater and contaminated effluent storage area (as shown in drawing CIV01, version P3). The final drainage designs should demonstrate that the impermeable membranes can resist the corrosive chemicals in any firefighting runoff and the

heat generated by a fire. Thereafter the surface water scheme shall be fully implemented in accordance with the submitted details and timetable.

Reason: To ensure that any potentially contaminated effluent in the event of a pollution incident does not pose an unacceptable risk to the water environment in line with paragraph 180 of the National Planning Policy Framework.

17. No development shall take place until details of maintenance and management of both the surface water drainage scheme and any receiving system have been submitted to and approved in writing by the Local Planning Authority. The scheme shall be implemented and thereafter managed and maintained in accordance with the approved details. These should include a plan for the lifetime of the development, the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the surface water drainage scheme throughout its lifetime.

Reason: To ensure future maintenance of the surface water drainage system, and to prevent the increased risk of flooding.

## **Emergency pollution control method statement**

18. The development hereby permitted shall not be commenced until such time as a detailed method statement and emergency plan for pollution control in the event of, and remediation following, a battery fire incident has been submitted to and approved in writing by the local planning authority. The scheme shall include, but not necessarily be limited to:

i) The pollution control methods used in case of a fire, such as how and when valves will be closed to ensure firewater is stored on site and ensuring there is sufficient capacity within the system if needed.

ii) How and where contaminated surface water, materials and drainage infrastructure will be sampled, managed and remediated/replaced following a fire incident to ensure no contamination enters the environment when normal operation resumes.

The scheme shall be implemented as approved in the event of a fire incident and any subsequent amendments shall be agreed in writing with the local planning authority.

Reason: To ensure that the any potentially contaminated effluent does not pose an unacceptable risk to the water environment in line with paragraph 180 of the National Planning Policy Framework.

## Noise

19. The development shall be carried out in strict accordance with the 'Noise Impact Assessment for Planning' reference 22-365 prepared by inacoustic and dated 9th September 2022. All measures detailed within the report shall be implemented in full and retained for the lifetime of development unless otherwise agreed in writing under the terms of this condition.

Reason: To avoid significant adverse impacts on residential amenity.

# Lighting

20. No external lighting shall be installed until a detailed lighting scheme including lighting levels at the boundary of the site has been submitted to and agreed in writing by the Local Planning Authority. Thereafter the external lighting shall be installed, operated and maintained in accordance with the approved details.

Reason: To protect visual amenities and avoid nuisance to adjoining properties.

## Informatives

1. Informative: National Planning Policy Framework Statement

In accordance with paragraph 38 of the NPPF the council, as local planning authority, takes a positive approach to development proposals and is focused on providing sustainable development.

The council works with applicants/agents in a positive and proactive manner by:

- offering a pre-application advice service, and

- as appropriate updating applicants/agents of any issues that may arise in the processing of their application and where possible suggesting solutions.

In this case:

- The applicant/agent was updated of any issues and provided with the opportunity to address issues identified by the case officer.

- The applicant was provided with pre-application advice.

-The application was acceptable as submitted and no further assistance was required.

## 2. Informative: Dorset Highways

The vehicle crossing serving this proposal (that is, the area of highway land between the nearside carriageway edge and the site's road boundary) must be constructed to the specification of the Highway Authority in order to comply with Section 184 of the Highways Act 1980. The applicant should contact Dorset Highways by telephone at 01305 221020, by email at dorsethighways@dorsetcouncil.gov.uk, or in writing at Dorset Highways, Dorset Council, County Hall, Dorchester, DT1 1XJ, before the commencement of any works on or adjacent to the public highway.

#### 3. Informative: Land Drainage Consent

Prior Land Drainage Consent (LDC) may be required from DC's FRM team, as relevant LLFA, for all works that offer an obstruction to flow to a channel or stream with the status of Ordinary Watercourse (OWC) – in accordance with s23 of the Land Drainage Act 1991. The modification, amendment or realignment of any OWC associated with the proposal under consideration, is likely to require such permission. We would encourage the applicant to submit, at an early stage, preliminary details concerning in-channel works to the FRM team. LDC enquires can be sent to

floodriskmanagement@dorsetcouncil.gov.uk.

#### 4. Informative: Water supply

Provision of water supply should comply as far as is reasonably practicable with the requirements of Approved Document B, specifically part B5, regarding access and water supplies for firefighting or other industry or sector specific guidance by the National Fire Chiefs Council. Particular regard should be given to water supply resilience and the terrain over which fire service vehicles may have to drive in order to access the site.