

<u>APPLICATION NO:</u>	23/02008/FUL	<u>CASE OFFICER:</u>	John Fleming
<u>WARD:</u>	Northwood	<u>PARISH:</u>	
<u>LOCATION:</u>	Land at Coopers Lane, Knowsley Industrial Estate, Kirkby, Knowsley, L33 7TT		
<u>PROPOSAL:</u>	PROPOSED DEVELOPMENT OF A BATTERY STORAGE FACILITY AND ASSOCIATED INFRASTRUCTURE		

Site Description

The application site is located to the east of Coopers Lane and is former farm land now allocated as part of a Sustainable Urban Extension for employment development. The application site covers approximately .49ha and is largely grass land with some scrub and self sown trees.

To the north of the application site is hardstanding and mature trees associated with the National Grid Substation located to the north beyond which is mature woodland. To the south, west and east boundaries is mature trees forming natural defensible boundaries to the application site.

The site is to be accessed off Coopers Lane located to the west via the existing access which is to be improved. Beyond which is the existing industrial estate which comprises a mix of commercial and industrial uses.

The nearest residential properties are located off Hewitts Lane (280m to the east) Permitter Road (300m to the north) and the managers accommodation associated with the Copper Pot to the south.

The application site is generally flat in terms of topography.

Proposal

The application proposals seek consent for the erection of a Battery Energy Storage System (BESS). The proposals have been revised since their original submission and comprise of the following:

- 58no. containers. The containers would be arranged largely in twin blocks. Each container will measure 9.33m in length, by 1.78m width and attain a maximum height of 3m;
- 14 PCS MV stations measuring 6m length by 2.43m width and attaining a maximum height of 3.3m;
- 2.4m weldmesh fence and fire wall;
- Auxiliary transformer compound;
- Control room measuring 6m in length by 3m depth and attain a maximum height of 3.43m;
- Switch gear container measuring 9.73m in length by 4.5m width and attaining a maximum height of 4.33m. An open staircase would connect to the container;
- 5no. lighting and cctv columns reaching a maximum height of 6m; and
- New internal t junction road layout.

The proposed development would be capable of storing electricity from the grid at times of excess supply and exporting it back to the grid at times of high demand/reduced energy capacity.

Consultations

Highways – No objection subject to condition.

United Utilities – No objections subject to condition.

Environment Agency – No objection subject to condition.

Merseyside Fire & Rescue – Neither support or object to development. Response highlights that the application is not in accordance with guidance and is further detailed below. Requests informative to be added to decision notice.

Environmental Health – No objection in principle subject to conditions.

Local Plans – No objections.

Tree Officer – No objection subject to tree replacement.

MEAS – No objection subject to conditions and request clarity on information provided.

National Grid – No response received.

LLFA – No response received.

Representations

A total of 31 neighbours were consulted concerning the proposed development and was advertised via site notice. No representations have been received.

Planning History

Ref: 19/00147/FUL – Installation of 11no. 4.5km gas engines with associated 33kv transformer, 11kv transformer, switchgear housing, lubrication tanks, site office, metering and gas kiosts and associated cctv, car parking, hardstanding and fencing. Granted 10th October 2019.

Ref: 74/04611/HIST – Proposed industrial factory units. Refused 29th January 1980.

Relevant Policy

Paragraph 11 of the National Planning Policy Framework (NPPF) states that planning decisions should apply a presumption in favour of sustainable development. This means approving development proposals that accord with an up-to-date development plan without delay; or where the development plan is absent, silent or out of date planning permission should be granted unless the application of policies in the NPPF that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF taken as a whole.

Paragraph 12 of the NPPF clarifies that the presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision making. Where a planning application conflicts with an up-to-date development plan, permission should not normally be granted. Local planning authorities may take decisions that depart from an up-to-date development plan, but only if material considerations in a particular case indicate that the plan should not be followed.

The development plan in Knowsley comprises the Saved Policies of the Replacement Unitary Development Plan, the Core Strategy Local Plan and the Joint Waste Local Plan. The following policies are relevant to the determination of this application.

SD1 – Sustainable Development
CS2 - Development Principles
CS7 – Transport Networks
CS8 – Green Infrastructure
CS19 – Design Quality and Accessibility in New Development
SUE1 – Sustainable Urban Extensions and Safeguarded Land
SUE2 – Sustainable Urban Extensions – Development Principles
CS22 – Sustainable and Low Carbon Development
CS23 – Renewable and Low Carbon Infrastructure
EC2 – Sites Allocated for Employment Development
ENV2 – Noise and Vibration

The site is identified as forming part of the Sustainable Urban Extension 'East of Knowsley Industrial and Business Parks, Kirkby for employment development. Policy SUE2 of the Local Plan Core Strategy (2016) sets out development principles for the SUEs. It states that development should take into account the considerations listed in Appendix E of the Local Plan Core Strategy which identifies that the parcel of land north of the A580 contains an electricity substation and associated infrastructure.

The application site was subject to a previous planning consent for the installation of 11no. 4.5kw gas engines under application 19/00147/FUL. The Officer Report relating to that decision considered that although the site would not increase employment land provision it would result in the loss of a relatively small parcel of land in the context of the wider application.

Permission was granted for the erection of 3no. commercial units to the south of the A580 under application reference 22/00348/FUL on 12th May 2023.

Taking the above into account, given the principle set by application 19/00147/FUL, the proposed development subject to this application would be utilitarian in nature and theoretically provides a natural extension to the substation use and would be effectively screened by the natural environment. As such, there are mitigating factors which mean that on balance the proposal is acceptable with regards to the policies contained in the adopted Development Plan despite the loss of employment land provision given that it has not prevented the wider delivery of employment land identified within the SUE site.

Article 35 Statement

The Local Planning Authority has acted positively and proactively in determining this application by identifying matters of concern within the application (as originally

submitted) and negotiating with the applicant, acceptable amendments to the proposal to address those concerns. As a result, the Local Planning Authority has been able to grant planning permission for an acceptable proposal, in accordance with the presumption in favour of sustainable development, as set out within the National Planning Policy Framework.

Assessment

Principle of Development

The application site is located on land identified for employment development in the adopted Development Plan. As referred to above, permission has already been approved for gas plant works on the site and the application site subject to this condition falls within the same red line boundary.

The proposed BESS will appear subordinate and a natural extension to the existing National Grid Substation which is of strategic and regional importance. The proposed development would import and store electricity from the grid at times of excess supply in the system and exporting it back at times of high demand providing a 'balancing service' to National Grid. It would therefore assist in balancing grid frequency and voltage times of system stress and help provide a reliable and consistent supply of electricity across National Grid's transmission network.

Given the current energy crisis and the need to move towards more renewable energy services and low carbon development the proposed development is acceptable in principle subject to compliance with Development Plan policies.

Design and Layout

The development has been revised since its original submission to include, fire protection measures including 2.4m weldmesh fence, firewall and T Junction.

The proposals would include 54no. battery unit containers in a twin arrangement with 4no. individual units at the southern boundary. The development is utilitarian in nature and would not look out of place within the context of its immediate surroundings i.e. National Grid Substation. In addition, the development would be largely obscured by existing vegetation which forms the site boundary and would therefore not be readily visible from Coopers Lane. However, it is accepted that in winter months the development would be more visible from the public highway. The Local Planning Authority attempted to negotiate the colour of external facing materials for containers/plant equipment etc. and was advised that this could limit the choice of technology and also the ability to use the most efficient and quietest running equipment. Taking this into consideration given that the BESS units will be subject to further information on safety discussed below the Local Planning Authority consider it necessary that a condition relating to materials is placed on this application in the interest of visual amenity.

The PPG states applications for developments of BESS of 1MWH are encouraged to engage with the local fire and rescue service before submitting an application to the Local Planning Authority. This guidance was issued following the submission of the application however the applicant has liaised with Merseyside Fire and Rescue (MFR) throughout the application process.

Paragraph 34 of the PPG (reference ID: 5-034-20230814) states that applicants are

encouraged to consider guidance produced by the National Fire Chiefs Council (NFCC) set out in Grid Scale Battery Energy Storage System Planning – Guidance for FRS published 21st April 2023. As such, NFCC guidance forms a material consideration in respect of this application.

The NFCC guidance sets out a list of measures for the safe operation and principles associated with BESS systems in terms of fire safety and their design. Concerns were raised by MFR as the proposed scheme does not follow the guidance issued by NFCC.

The key concern relates to the proposed one point access arrangement, unit spacing below the recommended 6m distance and distance between proposed boundary prior to any mitigation factors.

Whilst the Local Planning Authority recognise these concerns, with the exception of the site access the fire wall which encloses the BESS site measures 42.9m away from Coopers Lane providing adequate interface distance.

Although a two point access arrangement would have been preferred it would not be possible due to the existing National Grid Substation and lack of access due to surrounding land use. The internal arrangements have been altered to provide a T junction to allow more utilisation of space and also turning point for emergency service should the need arise. Although the containers are arranged largely in a twin facing arrangement, they have a separation distance of at least 2.8m – 3m. Whilst this falls below the standards recommended by NFCC it must be remembered that this is guidance only and not planning policy and arguably a larger container could be used to accommodate the same level of battery units.

The guidance does allow for reduced distances if supported by evidence. Given the nature of this form of development the safety protocols and battery make up are subject to change. The Local Planning Authority have agreed with the applicant a number of specific conditions including the submission of a Battery Safety Management Plan and Fire Safety Plan in line with the recommendations of the NFCC guidance necessary to make the development acceptable. Indeed, such mechanism has been supported by the Planning Inspectorate concerning a similar development (PINS Ref: APP/W3520/W/23/3319970). These conditions allows full consideration of the technical specification of units and safety protocols that will be implemented and will be consulted with MFR prior to development commencing ensuring the safe operation of the site.

Other issues relate to the need for further information relating to details of hydrant supply, suppression system and details of battery specifications. These later matters can be dealt with via condition through the Emergency Response Plan and Management Operation Plans.

Overall, given the unique circumstances of the site which sits in an isolated position and adjacent to infrastructure which is of strategic significance the development is considered acceptable in terms of design.

Residential Amenity

An updated Noise Assessment was submitted for consideration which demonstrates that the rates are largely below the 5dB background sound levels except at NSR1 and NSR2. It is accepted that this represents the worse-case scenario but given the

nature of development they will be operational at all times particularly at night when energy demand is low meaning that more energy will be drawn to the BESS and therefore have the potential to run at full capacity.

The noise generated may therefore impact nearby residents. A condition is placed on this application to ensure that all the rating levels are below 5dB in the interest of residential amenity.

In terms of lighting 5no. lighting and CCTV columns are proposed. No details of luminance levels were provided as part of the application but lighting of the site would be kept to a minimum given its remote operation. However, a condition is attached to application should permission be granted which will set out the lighting specification to be used on site.

Given that the site will be controlled remotely and that they would be screened by existing natural boundaries it will unlikely adverse residential amenity of nearby properties.

Other Matters

Flood Risk

The site is situated above a principal aquifer within a Groundwater Source Protection Zone for a public water supply. As such, the development needs to be considered as sensitive to discharges to the ground, such as through a compromised geotextile layer. The Environment Agency has advised that further information is needed relating to surface water drainage in the event of potential contaminants that may be given off in the event of an incident. A condition will secure the need for additional drainage scheme for the disposal of surface water.

Similar concerns were raised by United Utilities due to the ground water protection zone. Further details were provided by the applicant however United Utilities were unable to provide a response due to staffing issues and thereby agreed that these matters can be secured via condition relating to the submission of a fire prevention plan, the submission of a Construction Environment Management Plan and protection of United Utilities infrastructure.

Subject to these conditions the development is considered acceptable and would not increase the risk of flooding.

Natural Environment

The proposal would result in the felling of trees together with scrub land. Merseyside Environmental Advisory Service (MEAS) were consulted and requested habitat compensation for neutral semi-improved grassland due to the Environment Act being enacted. However, the application was submitted prior to the implementation of the national requirement to provide 10% biodiversity net gain. As such, habitat replacement to provide net biodiversity gains is not required in this instance.

More generally, MEAS requested that the applicant demonstrate they had the correct licenses to support the data provided. This was provided by the applicant and MEAS raised no objection to this.

Notwithstanding the position concerning BNG, the Tree Officer noted the loss of trees and requested on site tree replacement at a 1:1 basis to mitigate against the loss of

trees. These trees were not subject to a Tree Protection Order.

During the course of this application tree works were undertaken which included the removal of scrub trees located on site under the umbrella that these were associated with the previous gas plant application. However, these works appear to fall outside the 3 year period of this application. Notwithstanding this, the trees/groups effected are the same as the approved gas plant scheme meaning that no greater impacts would occur as a result of the proposed development under consideration. It would therefore be unreasonable to request financial contribution for the loss of trees when none was previously requested for low level scrub trees. The previous permission relating to the erection of a gas plant considered the provision of 10no. bird boxes and 6no. bat boxes to be provided to be acceptable form of mitigation for the proposed loss. The Local Planning Authority consider that the same level of mitigation should be applied to this application.

Given the mitigation measures proposed under the gas plant application were previously accepted and that energy storage is more environmentally friendly than gas emissions it is considered acceptable in this instance to apply the same mitigation measures that were previously accepted. Therefore replacement planting is therefore not requested.

Highways

The Highways Team were consulted as part of the application raising no objection highlighting that the point of a second access is a matter for other consultees. The access arrangement has been previously accepted given the previous consent. Notwithstanding this, the Highways Team have also requested a condition for the submission of a Construction Management Plan. Subject to this condition, the development will not have an adverse impact to highways safety.

Conclusion

The proposal would be acceptable in terms of design, residential amenity and highways (subject to condition attached). The proposal also complies with the relevant Core Strategy, Replacement UDP policies and guidance in the NPPF and is therefore recommended for approval subject to conditions.

Recommendation

That planning permission will be granted subject to the following condition(s):-

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

Reason: In order to comply with the requirements of Section 91 of the Town and Country Planning Act 1990 (as amended).

- 2) The development hereby permitted shall be carried out in accordance with the approved plans and documents listed in Schedule 1.

Reason: For the avoidance of doubt.

- 3) Notwithstanding the submitted drainage assessment, the development hereby permitted shall not be commenced until such time as a scheme to dispose of

surface water has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be implemented as approved.

Reason: To prevent increased risk of flooding by ensuring the satisfactory storage of / disposal of surface water from the site and to comply with saved Policies CS2 and CS24 of the Knowsley Local Plan: Core Strategy, adopted January 2016.

- 4) Notwithstanding the Fire Statement document reference B2468900_JAC_FIRE_01_FIRE_STATEMENT, no development shall take place until a Fire Prevention Plan has been submitted to, and approved in writing by the local planning authority. The Fire Prevention Plan must consider the design and permitting requirements for the management of used firewater / fire suppression foams and chemicals, to avoid release of pollutants to the environment.

Prior to completion of the proposed development, the Fire Prevention Plan shall be completed in accordance with the approved details and retained thereafter for the lifetime of the development.

Reason: To protect Controlled Waters (Groundwater) in the event of a battery fire.

- 5) Prior to first use of the development hereby approved a scheme for the provision of 10no. bird boxes and 6no. bat boxes shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include details of the boxes, where they would be sited and at what height they would be located. The boxes shall be implemented prior to first use and retained at all times that the development is in use.

Reason: In the interests of biodiversity and mitigation and to comply with Policies CS2 and CS8 of the Knowsley Local Plan Core Strategy adopted January 2016.

- 6) Fixed plant and machinery associated with the development shall be designed to have a rating level that is at least 5dB(A) below the LA₉₀ background noise level, during the relevant time period, as measured and assessed in accordance with BS4142: 2014.

Reason: To ensue that the occupiers of neighbouring properties do not suffer noise nuisance in the interests of residential amenity and to comply with Policies CS2 and CS19 of the Knowsley Local Plan Core Strategy and Saved Policy ENV2 of the Knowsley Replacement Unitary Development Plan adopted June 2006

- 7) Prior to commencement of development a Construction Environment Management Plan, including Pollution Risk Assessment and Method Statements, shall be submitted to, and agreed in writing by the Local Planning Authority that details the means of mitigation of construction effects. This shall include but not be limited to the following:

- a. Layout of the site compound including identification of areas for the storage of plant and materials, loading/unloading and turning areas for delivery vehicles [for each phase as necessary];
- b. Management of deliveries including prevention of waiting/layover of construction related traffic on the highway, measures for the control of traffic to and from the site and consideration of any temporary traffic management arrangements which may be necessary during periods of construction. Note reversing on the highway is not permitted without a trained Banksman (RoSPA or equivalent);
- c. Construction staff parking arrangements;
- d. Control of transfer of mud out of the site - details of wheel washing facilities including location and type;
- e. Methods for dust control and suppression;
- f. A programme of works including phasing, if applicable;
- g. Details of proposed temporary highway modifications to facilitate access into the site by construction vehicles, including adequate provision for addressing any abnormal wear and tear to the highway, if applicable;
- h. Methods for the mitigation of noise and vibration from building works, including any piling works, and also from the operation of any temporary power generation or pumping plant which will operate overnight;
- i. Protection of Surface and groundwater resources;
- J. Best Practice on the use and storage of fuels, oils and chemicals, to remove the risk of causing pollution during construction; and
- k. A scheme for recycling/disposing of waste resulting from demolition and construction works.

All site works shall then be carried out in accordance with the approved Plan unless otherwise agreed in writing beforehand with the Local Planning Authority

Reason: To prevent pollution of groundwater and ensure there is no contamination to public water supply during construction. To ensure the satisfactory development of the site and in the interests of protecting the amenity of neighbouring occupiers and to comply with Policies CS2 and CS19 of the Knowsley Local Plan Core Strategy adopted January 2016 and saved Polic ENV2 of the Knowsley Replacement Unitary Development Plan adopted June 2006.

- 8) Prior to commencement of development (including demolition, site clearance and any earth works), details of the means of ensuring the water main infrastructure within the site boundary is protected from damage shall be submitted to and approved by the Local Planning Authority in writing.

In the event that a diversion/diversions of the infrastructure or a build over agreement is required, the developer shall submit evidence to the Local Planning Authority that a diversion or build over has been agreed with the relevant statutory undertaker and that the approved works have been undertaken prior to commencement of development, or in the event of a build over, that agreement has been reached with the relevant statutory undertaker prior to commencement of development.

Reason: In the interest of public health and to ensure protection of the public water supply.

- 9) No construction work shall take place outside the hours of 08:00-18:00 hours Monday to Friday, 08:00-13:00 hours Saturday and not at all on Sundays/Public Holidays without the prior written permission of the Local Planning Authority.

Reason: In the interests of residential amenities of neighbouring properties and to comply with Policies CS2 and CS19 of the Knowsley Local Plan Core Strategy adopted January 2016 and saved Policy ENV2 of the Knowsley Replacement Unitary Development Plan adopted June 2006.

- 10) The development hereby permitted is granted for a temporary period of 40 years from the first export of electricity from the site. The development shall cease on or before expiry of this period and the site shall be decommissioned and restored in accordance with a previously submitted and approved scheme of decommissioning work (a Decommissioning Scheme) which shall include the details set out in condition 11. Written confirmation of date of first electricity export to the National Grid shall be provided to the Local Planning Authority within one month of the date of this taking place.

Reason: The development is granted for temporary period and to ensure appropriate decommissioning of the site at the end of the operation of the facility, in the interests of visual amenity and landscape character of the area and to enable the Local Planning Authority to re-assess the proposal on the expiry of the permission.

- 11) In the event that the site is no longer required for the purposes of electricity storage, or ceases to operate for a continuous period of 12 months prior to the expiring of the 40 year period, a Decommissioning Scheme shall be submitted to and approved in writing by the Local Planning Authority no later than 6 months from the end of the 12 month cessation period. The Decommissioning Scheme shall include the following:

- The removal of the battery storage, ancillary equipment and structures;
- Works for the restoration of the site (including retention of landscape and ecological features);
- A traffic management plan
- Decommissioning management plan including a programme of implementation; and
- An environmental and ecological management plan to incorporate measures for protecting habitat and wildlife during decommissioning works. The decommissioning works shall be implemented in accordance with the approved scheme.

Reason: In the interests of visual amenity and to comply with Policy CS19 of the Knowsley Local Plan Core Strategy, adopted January 2016, and the National Planning Policy Framework

- 12) Notwithstanding the lighting details provided, details of any external lighting shall be submitted to and approved in writing by the Local Planning Authority prior to its installation. The lighting shall be installed and used in accordance with the approved details.

Reason: In the interests of residential amenity and to comply with Policy CS19 of the Knowsley Local Plan Core Strategy, adopted January 2016

- 13) Development shall not commence until a Battery Safety Management Plan (BSMP) has been submitted to and approved in writing by the Local Planning Authority. The BSMP shall incorporate best practice guidance as set out in the National Fire Chiefs Council 'Grid Scale Battery Energy Storage System planning – Guidance for FRS or its successor and demonstrate how the operator has consulted with the Fire and Rescue Service in prescribing and implementing the measures set out in the BSMP, which shall facilitate safety during the construction, operation and decommissioning of the battery storage facility, including the transport of new, used and replacement battery cells both to and from the development hereby permitted.

The BSMP shall be implemented as approved. Thereafter, an updated BSMP, incorporating best practice guidance, policy and/or regulation at that time, shall be submitted to the Local Planning Authority for written approval every five years throughout the lifetime of the development. The most up to date approved BSMP shall be fully implemented at all times.

Reason: In the interest of public safety in accordance with National Planning Policy Framework (2023).

- 14) Notwithstanding the details shown on the approved drawings, no part of the development shall be occupied until full details of both hard and soft landscaping works have been submitted to and approved in writing by the Local Planning Authority.

The details shall relate to all land surfaces not built upon and shall include:

- a) Land-levels and gradients resulting in the formation of any banks, terraces or other earthworks
- b) hard surfaced areas and materials,

The approved landscaping works shall be implemented and completed prior to the occupation of the dwelling to which it relates unless otherwise agreed in writing by the Local Planning Authority.

Reason: To ensure that the site is satisfactorily landscaped having regard to its location and the nature of the proposed development in accordance with Policy CS19 of the Knowsley Local Plan Core Strategy, adopted January 2016, and the National Planning Policy Framework.

- 15) Notwithstanding any description of materials in the application, no above ground construction works shall take place until samples and / or full specification of materials to be used externally have been submitted to and approved in writing by the Local Planning Authority. Such details shall include the type and colour of the materials. The development shall be carried out only in accordance with the agreed schedule of materials.

Reason: In the interests of visual amenity and to ensure the development complies with Policies CS2 and CS19 of the Knowsley Local Plan Core Strategy, adopted January 2016.

SCHEDULE 1

Date Received	Ref. No	Version	Drawing/Document Title
12.12.2023	2569-02-002	REV B	STATUTORY PLAN
21.11.2023	2569-02-003	REV F	PROPOSED GENERAL ARRANGEMENT PLAN
08.08.2023	2569-02-007	REV A	PROPOSED PLANS AND ELEVATIONS – SWITCH GEAR CONTAINER
08.08.2023	2569-02-008	REV A	PROPOSED FLOOR PLANS AND ELEVATIONS – CONTROL ROOM
25.07.2023	2569-02-005	REV A	PROPOSED FLOOR PLANS AND ELEVATIONS – BATTERY STORAGE CONTAINERS
25.07.2023	2569-02-006	REV A	PROPOSED ELEVATIONS – INVERTER TRANSFORMER STATIONS
08.08.2023	2569-02-009	REV B	PROPOSED FENCING AND SECURING
08.02.2024	PRO-983-KIBY-XXXX		PROPOSED FIREWALL
10.11.2023	2569-02-012		PROPOSED SITE ACCESS ARRANGEMENT
08.08.2023	--		LIGHTING SPECIFICATION
21.11.2023	B2468900		FIRE STATEMENT
19.02.2024	KRS.0653.006.R.0 01.B		DRAINAGE ASSESMENT
10.11.2023	AXISL-043-003339		ECOLOGICAL ASSESSMENT REPORT
25.07.2023	ARBTECH TPP 01		TREE PROTECTION PLAN
25.07.2023	--		PLANNING STATEMENT – APPENDIX FII – ARB METHOD STATEMENT
25.07.2023	ARBTECH AIA 01	REV D	ARBORICULTURAL IMPACT ASSESSMENT
01.08.2023	--		UPDATED NOISE IMPACT ASSESSMENT

Signed Case Officer¹: John Fleming

Signed Authorising Officer²: K Foster

Date: 29 April 2024

¹ I confirm that I do not have a personal relationship with the applicant, agent or other interested parties; I also confirm that I do not have a financial interest in the site or the development proposed.

² I confirm that I do not have a personal relationship with the applicant, agent or other interested parties; I also confirm that I do not have a financial interest in the site or the development proposed.

INFORMATIVES

Environmental Health

Based on the information available to this division we are not aware of any contamination on this site. However, the responsibility to properly address contaminated land issues lies with the owner/developer of the site, irrespective of any involvement by this Authority. The applicant/developer is requested to contact the Council's Environmental Protection Unit (Tel: 0151 443 4712) as soon as is practicable should contamination be encountered during the development of the site.

If contaminated material is encountered the applicant/developer is required to dispose of the contaminated arisings appropriately. They should also be aware of their health and safety responsibilities to workers in respect of handling such materials. The developer should also ensure that no pathways are created by which any contamination may either migrate off-site or affect site users.

Highways

This permission does not entitle the developer to obstruct or carry out works within the Adopted Highway or across a Public Right of Way whatsoever. Any proposed temporary closure or works affecting either will require consent which must be obtained from the Streetworks team. Please email NRSWA.TeamDRES@knowsley.gov.uk for further information.

Merseyside Fire and Rescue

Appendix A - Grid Scale Battery Energy Storage System planning and design considerations as given in The National Fire Chiefs Council (NFCC) guidance - Grid Scale Battery Energy Storage System planning (Version 1.0 November 2022), published 21/04/23 - <https://nfcc.org.uk/wp-content/uploads/2023/10/Grid-Scale-Battery-EnergyStorage-System-planning-Guidance-for-FRS.pdf> Please note: This guidance relates specifically to grid scale (typically 1 MW or larger) BESS in open air environments, using lithium-ion batteries. System design, construction, testing and decommissioning: Information is required as early as possible from the applicant / developer / designer / manufacturer etc., to allow an initial appraisal of the BESS to be made. This information should be provided to the Fire & Rescue Service (via the Local Authority Planners in the first instance), with appropriate evidence provided to support any claims made on performance, and with appropriate standards cited for installation. Access: Site access Suitable facilities for safely accessing and egressing the site should be provided. Designs should be developed in close liaison with the local FRS as specific requirements may apply due to variations in vehicles and equipment. This should include: • At least 2 separate access points to the site to account for opposite wind conditions/direction. • Roads/hard standing capable of accommodating fire service vehicles in all weather conditions. As such there should be no extremes of grade. • A perimeter road or roads with passing places suitable for fire service vehicles. • Road networks on sites must enable unobstructed access to all areas of the facility. • Turning circles, passing places etc. size to be advised by FRS depending on fleet. For information - current MFRS fire appliance maximum dimensions: Pump appliance maximums: Width: 2.54 m (mirrors closed) / Width: 3.2 m (mirrors open) / Height: 3.25 m / Length: 9.41 m Weight: 17 tonnes High reach appliance maximums: Width: 2.6 m (mirrors closed) / Width: 6.2 m (extended) / Height: 3.6 m / Length: 10.4 m Weight: 26 tonnes Access between BESS units and unit spacing In the event of a fire involving a BESS unit, one of the primary tactics employed will be to prevent further unit to unit fire spread. Suitable access for firefighters to operate unimpeded between units will therefore be required. This should allow for the laying and movement of hose lines and, as such, access should be free of restrictions and obstacles. The presence of High Voltage DC Electrical Systems is a risk and their location should be identified. Exclusion zones should be identified. A standard minimum spacing between units of 6 metres is suggested unless suitable design features can be introduced to reduce that spacing. If reducing distances a clear, evidence based, case for the reduction should

be shown. Any reduction in this separation distance should be design based by a competent fire engineer. There should be consideration for the fire separation internally and the total realistic load of fire. Proposed distances should be based on radiant heat flux (output) as an ignition source. The NFCC does not support the stacking of containers/units on top of one another on the basis of the level of risk in relation to fire loading, potential fire spread, and restrictions on access. Distance from BESS units to occupied buildings & site boundaries Individual site designs will mean that distances between BESS units and occupied buildings/site boundaries will vary. Proposed distances should take into account risk and mitigation factors. However, an initial minimum distance of 25 metres is proposed prior to any mitigation such as blast walls. Reduction of distances may be possible in areas of lower risk (e.g. rural settings). Where possible buildings should be located upwind. Site Conditions Sites should be maintained in order that, in the event of fire, the risk of propagation between units is reduced. This will include ensuring that combustibles are not stored adjacent to units and access is clear and maintained. Areas within 10 metres of BESS units should be cleared of combustible vegetation and any other vegetation on site should be kept in a condition such that they do not increase the risk of fire on site. Areas with wildfire risk or vegetation that would result in significant size fires should be factored into this assessment and additional cleared distances maintained as required. Water Supplies: Water supplies will depend on the size of the installation. In the majority of cases, initial firefighting intervention will focus on defensive firefighting measures to prevent fire spread to adjacent containers. As a result, proposals for water supplies on site should be developed following liaison with the local fire and rescue service taking into account the likely flow rates required to achieve tactical priorities. This should also take account of the ability of/anticipated time for the fire and rescue service to bring larger volumes of water to site (for example through the provision of High Volume Pumps). IP ratings of units should be known so that risks associated with boundary cooling can be understood. As a minimum, it is recommended that hydrant supplies for boundary cooling purposes should be located close to BESS containers (but considering safe access in the event of a fire) and should be capable of delivering no less than 1,900 litres per minute for at least 2 hours. Fire and rescue services may wish to increase this requirement dependant on location and their ability to bring supplementary supplies to site in a timely fashion. Water supply for any automatic suppression system will be covered by the relevant standard/design depending on which system chosen as appropriate for the risk. For manual water, amounts should come from performance based requirement rather than a reference to a code, unless it can be proven that the code specifically covers BESS. Regarding water storage tanks, volumes will again need to be informed on a performance-based need. Isolation points should be identified. Any static water storage tanks designed to be used for firefighting must be located at least 10 metres away from any BESS container/cabinet. They must be clearly marked with appropriate signage. They must be easily accessible to FRS vehicles and their siting should be considered as part of a risk assessed approach that considers potential fire development/impacts. Outlets and connections should be agreed with the local FRS. Any outlets and hard suction points should be protected from mechanical damage (e.g. through use of bollards). Consideration should be given, within the site design, to the management of water run-off (e.g. drainage systems, interceptors, bunded lagoons etc). Signage: Signage should be installed in a suitable and visible location on the outside of BESS units identifying the presence of a BESS system. Signage should also include details of: • Relevant hazards posed • The type of technology associated with the BESS • Any suppression system fitted • 24/7 Emergency Contact Information Signs on the exterior of a building or enclosure should be sized such that at least one sign is legible at night at a distance of 30 metres or from the site boundary, whichever is closer. 10. Adherence to the Dangerous Substances (Notification and Marking of Sites) Regulations 1990 (NAMOS) should be considered where the total quantity of dangerous substances exceeded 25 tonnes. Emergency Plans: Site operators should develop emergency plans and share these with the Fire and Rescue Service. These include: A Risk Management Plan should be developed by the operator, which provides advice in relation to potential emergency response implications including: • The hazards and risks at and to the facility and their proposed management. • Any safety issues for firefighters responding to emergencies at the facility. • Safe access to and within the facility for emergency vehicles and responders, including to key site infrastructure and fire protection systems. • The adequacy of proposed fire detection and suppression systems (eg., water supply) onsite. • Natural and built infrastructure and on-site processes that may impact or delay effective emergency response. An Emergency Response Plan should be developed to facilitate effective and safe emergency response and should include: • How the fire service will be alerted • A facility description, including

infrastructure details, operations, number of personnel, and operating hours. • A site plan depicting key infrastructure: site access points and internal roads; firefighting facilities (water tanks, pumps, booster systems, fire hydrants, fire hose reels etc); drainage; and neighbouring properties. • Details of emergency resources, including fire detection and suppression systems and equipment; gas detection; emergency eye-wash and shower facilities; spill containment systems and equipment; emergency warning systems; communication systems; personal protective equipment; first aid. • Up-to-date contact details for facility personnel, and any relevant off-site personnel that could provide technical support during an emergency. • A list of dangerous goods stored on site. • Site evacuation procedures. • Emergency procedures for all credible hazards and risks, including building, infrastructure and vehicle fire, grassfire and bushfire. Environmental impacts: Suitable environmental protection measures should be provided. This should include systems for containing and managing water runoff. System capability/capacity should be based on anticipated water application rates, including the impact of water based fixed suppression systems. Sites located in flood zones should have details of flood protection or mitigation measures. Recovery: The operator should develop a post-incident recovery plan that addresses the potential for reignition of ESS and de-energizing the system, as well as removal and disposal of damaged equipment. Appendix B - Access and Facilities for the Fire Service as given in Section B5 of Approved Document B Commercial Buildings Small buildings (up to 2000m², with a top occupied storey a maximum of 11m above ground level), require access for a pump appliance to 15% of the perimeter, or within 45m of every point of the footprint of the building, whichever is the less onerous. Larger buildings will require access to a percentage of the perimeter that increases incrementally with size of the total floor area and height of building – please see details in Approved Document B Volume 2 Section 15. Elevations to which vehicle access is provided will require a door, to give access into the building. The maximum distance between doors, or between a door and the end of the elevation, is 60m (ie a 150m elevation would need a minimum of two doors). All Buildings Access routes and hardstanding should comply with Table 13.1 ADB Volume 1 / Table 15.2 ADB Volume 2. Please note: MFRS appliances are 17 tonnes (pump) and 26 tonnes (high reach). Dead-end access routes longer than 20m require turning facilities (eg a turning circle or hammer head, or other turning point). Where fire mains are fitted, access should be provided for a pumping appliance to within 18m of each fire main inlet connection point. Inlets should be on the face of the building and visible from the parking position of the appliance. The run of horizontal internal connecting pipe should be a maximum of 18m in length. Buildings with a storey more than 18m above the fire service vehicle access level, or a basement more than 10m below, should have one or more firefighting shafts containing firefighting lifts and fire mains (a minimum of two fire-fighting shafts will be required for buildings with a floor area of 900 m² or more). Buildings in the ‘shop and commercial’, ‘assembly and recreation’ or ‘industrial’ purpose groups (Groups 4, 5, or 6), with a storey area of 900m² or more and a storey height of 7.5m or more above fire service vehicle access level will require at least two firefighting shafts (firefighting lifts may not be needed). Entry to a firefighting shaft at fire service access level should be available either directly from the open air or by way of a protected corridor not exceeding 18m in length. The corridor is deemed to be part of the firefighting shaft, and any access to it from the accommodation should be by way of protected lobbies. Hydrants Where a building has a compartment with an area of more than 280m² and is being erected more than 100m from an existing fire hydrant, additional hydrants are required as follows: Buildings with fire main – hydrant within 90m of dry fire main inlet; Buildings without fire main – hydrant within 90m of an entrance to the building; and a maximum of 90m apart. Appendix C - Guidelines on flow requirements for firefighting The following flows represent the ideal requirements on new developments and during permanent system changes. Housing Housing developments with units of detached or semidetached houses of not more than two floors should have a water supply capable of delivering a minimum of eight litres per second through any single hydrant. Multi occupied housing developments with units of more than two floors should have a water supply capable of delivering a minimum of 20 to 35 litres per second through any single hydrant on the development. Transportation Lorry/coach parks - multi-storey car parks - service stations. All of these amenities should have a water supply capable of delivering a minimum of 25 litres per second through any single hydrant on the development or within a vehicular distance of 90 metres from the complex. Industry The water supply infrastructure to any industrial estate should be as follows with the mains network on site being normally at least 150 mm nominal diameter – • Up to one hectare 20 litres per second. • One to two hectares 35 litres per second. • Two to three hectares 50 litres per second. • Over three

hectares 75 litres per second. Shopping, offices, recreation and tourism Commercial developments of this type should have a water supply capable of delivering a minimum flow of 20 to 75 litres per second to the development site. Education, health and community facilities Village halls— Should have a water supply capable of delivering a minimum flow of 15 litres per second through any single hydrant on the development or within a vehicular distance of 100 metres from the complex. Primary schools and single storey health centre's— Should have a water supply capable of delivering a minimum flow of 20 litres per second through any single hydrant on the development or within a vehicular distance of 70 metres from the complex. Secondary schools, colleges, large health and community facilities— Should have a water supply capable of delivering a minimum flow of 35 litres per second through any single hydrant on the development or within a vehicular distance of 70 metres from the complex