DESIGN MIDLANDS in South Derbyshire Design Review Panel

DMDR048 Strategic Site, Former Drakelow Power Station STRA 3

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SOUTH ANNEX, PERA BUSINESS PARK, NOTTINGHAM ROAD, MELTON MOWBRAY, LEICESTERSHIRE LE13 0PB

20th January 2025

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1. Introduction

- **1.1** This Design Review is one of a series of three looking at a possible strategic-scale land releases. Each Design Review will cover a site as one of a number of possible land releases being considered under the emerging Local Plan for South Derbyshire District Council currently at Phase Three towards a preferred strategy (Reg. 18).
- **1.2** The sites that are subject to review are:

Infinity Garden Village (DMDR047)
South Mickleover (DRDR046)
Former Drakelow Power Station (DMDR048)

- **1.3** SDDC seeks Panel scrutiny and challenge on how the site being proposed will:
- Deliver a **well-designed employment** scheme that minimises its impact on the landscape and enhances the biodiversity assets within and adjacent to the site.
- Deliver a multiuser cycle route through the site that connects to the greenway that would be provided within the adjoining Drakelow Park development.
- Consider heritage assets.
- Respond to highways challenges associated with the employment use and provide an appraisal of **sustainable transport interventions** to minimise the reliance on private cars.
- Consider sustainable transport implications in the event of a delay of the bridge delivery over the River Trent.
- **Mitigate the impact of flooding** and protect the residential amenity of occupiers of the Drakelow Park development.
- Ensure that development proposals for this site accord with both BNE12 (of the Part 2 Local Plan) and STRA3 of the Draft Local Plan Part 1 Review.
- **1.4** For each Design Review the panel receive information from the South Derbyshire District Council and the project team/s prior to the meeting. Each review is then preceded by an accompanied site visit and a presentation from South Derbyshire District Council and the project team/s. We are grateful for the information provided prior to the meeting, the presentations and the well-organised accompanied site visit and the helpful way in which participants have engaged in the meeting discussions.

As ever, the Panel's aim is to help maximise the value associated with the development through good design, and by considering potential value holistically, in terms of environmental, societal and economic benefits.

The Panel comprised a mix of disciplines to meet the needs of the site as follows:

Laura Alvarez Urban Design and social structures

Juliet Bidgood Architecture/Urban Design/Sustainability (Chair)

Andrew Cameron Transport/Active Travel

Nick Corbett Conservation
Chris Dodd Hydrology

Fiona Heron Landscape/POS

2. Scheme Context

2.1 The scheme is outlined as:

Former Drakelow Power Station (STRA3) is proposed to be allocated for up to 68ha of employment use within Use Classes E(g), B2 and B8.

Policy STRA3: Former Drakelow Power Station

Development within the strategic allocation boundary will be expected to deliver up to 68ha of employment use within Use Classes E(g), B2 and B8, subject to the following:

A Development Requirements

- i) A range of unit sizes shall be provided including accommodation for small to medium sized enterprises;
- ii) Use of the existing main site entrance at Drakelow Road as the primary vehicular access;

B Green Infrastructure.

A network of interconnected Green Infrastructure which as a minimum shall include the following.

- A green infrastructure network, habitat creation and management should complement the preservation and enhancement of the ecological features identified in point (II);
- ii) The safeguarding and protection of key biodiversity and ecological assets, including the Drakelow Nature Reserve, Drakelow Wildfowl Reserve Local Wildlife Site and Tree Preservation Order 122. Development should not negatively impact nearby assets such as the Branston Water Park Local Nature Site, the Grove Wood Local Wildlife Site and the River Trent. Mitigation measures should be employed to minimise unavoidable impacts. In addition to National Forest planting requirements, existing trees and hedgerows should be retained and development designed around existing natural features.
- iii) The provision of a multiuser greenway, representing part of the Derbyshire Key Cycle Network, across the former Drakelow

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power station site linking the south western boundary of that site to the north eastern boundary, connecting to the greenway to be provided within the adjoining Drakelow Park mixed use development;

C Mitigation

- i) Appropriate flood risk management shall be provided in accordance with policy SD2 and shall ensure that all more vulnerable development is located wholly within flood zone 1. A detailed Flood Risk Assessment must be provided with any application;
- The layout, form and height of development shall respect the character of the landscape, minimising visual intrusion.
 Appropriate mitigation shall be provided through the provision of additional and/or retention of existing landscape screening.
- iii) The layout and form of development shall respect the character, significance and setting of heritage assets including the adjacent Grade II Listed gate piers, adjoining walls and attached piers at Drakelow Lodge
- iv) Measures necessary to mitigate the traffic impact of the site, including the use of travel plans to encourage the use of more sustainable transport modes, shall be provided in accordance with policy INF2.
- v) High quality, frequent and conveniently accessible, public transport services, including connections to Burton-on-Trent and Swadlincote, shall be provided.
- vi) High quality continuous pedestrian and cycle links shall be provided, connecting to all units within the site to the main vehicular entrance, to the Key Cycle Network multiuser greenway identified in point (xi) and to the adjoining Drakelow Park mixed use development.
- vii) Residential amenity and safety on the adjoining Drakelow Park development shall be protected, including in relation to noise, vibration, odours, dust, light pollution and traffic generation in accordance with Policy SD1. Measures to achieve this shall include the provision of a landscape buffer between the employment site and the Drakelow Park development.
- **D** No phase of development shall be occupied until:
- i) The necessary Green Infrastructure, including open space; active travel provision; connectivity, public transport provision; hard infrastructure, including access points and highway improvements where required, is provided to service that phase. This is to enable businesses and employees to access the full suite of services and facilities to support the delivery of the site in a safe and convenient manner, utilising active travel wherever possible.
- **E** The development shall be provided in broad conformity with the plan below. With the details to be confirmed in a Development Framework Document, as set out in policy BNE12.

3. Site Context

3.1 The former Drakelow Power Station site is located to the south of **Burton on Trent.** The power station was commissioned in 1955 and generated electricity from three coal-fired power stations supported by 10 cooling towers. The power station closed in 1993, decommissioned in 2003 and the structures demolished including the cooling towers.

The site is irregular in shape. It is bound to the west and northeast by the River Trent, a railway line and the residential area of Branston. To the north and east by the continuation of the River Trent, Branston Golf Club and Drakelow Hall sunken gardens and by Drakelow Park development which is partially completed. To the south by Walton Road there is a belt of mature trees which are subject to a Tree Preservation Order (TPO). Here there are grade II listed gate piers to the former Drakelow Hall. Drakelow Nature Reserve which is owned by Derbyshire Wildlife Trust occupies the north of the site and is currently accessed along the southern site boundary. The site includes a proposed greenway as an extension of the cycle network that runs along the river boundary through the Drakelow Park development and will link south towards Walton on Trent.

The site itself includes established and mature landscape to the site boundaries including the aforementioned TPO's tree to the southern boundary, water bodies and mature landscape to the north of the site adjacent to the River Trent. The remainder of the site is cleared land which is predominantly flat including the footprints of three of the cooling towers. Recent development within the site includes a renewable energy centre central to the site and solar farm to the west of the site which has a 25 year lease arrangement.

Access to the site is from Walton Road.

This is an attractive site with good potential. Key features include the green and blue infrastructure including established and dense belts of trees to the site boundaries, established water bodies etc. The site is of a scale and character to enable the creation of an exemplary employment scheme.

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4. Vision and Placemaking Principles

- **4.1** The Panel emphasised the significant opportunity that this site presents at both the local and regional level. What is the role of the site? What can it offer to the existing and new community? What can it deliver?
- **4.2** The Panel recommended a Vision be developed which is **ambitious**, **site specific** and supported by a robust set of design and place-making principles. This would reflect the special riverside location of the site and aim to contribute to and make good use of its existing natural qualities and heritage. The vision should include a set of ambitions and **strategic design/placemaking principles** for the green and blue infrastructure, recreation and heritage context, street design, land use, massing, connectivity and sustainability (which needs to be clearly communicated from the outset), etc.

5. Integration with Drakelow Park

- **5.1** To ensure a truly sustainable development, the employment site must be integrated with its neighbouring uses. The scheme presents a significant opportunity to **reimagine the approach** to this type of employment use which is usually predominantly large buildings/sheds surrounded by surface parking. This includes connecting and integrating the employment use with the neighbouring Drakelow Park development.
- **5.2** The 'Greenway' is a cycle and pedestrian route from Drakelow Park into the site which utilises the existing bridge over the watercourse. The design of the route is crucial to its success and must be designed as **an active travel route which is safe, attractive and direct**. This should include positioning the route to the foreground, not to the background, of the scheme making sure it is overlooked and surveyed and well lit. To ensure the usage of the Greenway it needs to connect to facilities outside of the site as well as the employment uses for example Drakelow Nature Reserve etc.
- **5.3** While the 'Greenway' will provide an active travel route connecting the two sites, the opportunity must be taken to draw / encourage residents into the employment site why use the Greenway? This will assist in activating and animating the development. The employment site should be considered as **part of a wider / comprehensive development which includes Drakelow Park**, reference was made to Bournville which had a strong connection physically and visually between the housing and employment. As stated above, an approach which reimagines and integrates the role of the employment site is recommended.
- **5.4** This should include facilities within the employment site to **benefit both workers, residents and the wider community**; the Panel noted previously there was a football pitch on the site which was used by

workers and locals. This should include the provision of safe, attractive and direct walking and cycling routes between the housing and employment uses. As an extension of the wildlife site **recreational routes** within the site could offer 'circular' dog walking routes, woodland walks etc. (rather than trim trails) and other **recreational facilities** enabling workers and residents to benefit from the blue and green infrastructure in particular the riverside setting of the site. Making new and existing facilities accessible will assist in reducing car journeys by residents and workers. Creating **an attractive environment to work in with things to do** at lunchtime and after work could support staff retention and wellbeing. The provision of a café and / or a visitor centre/ work hub associated with the business park could also facilitate school visits exploring past and current uses as a site for generating energy etc.

6. Designing for Active Travel

- **6.1** To encourage workers and visitors to travel to and within Drakelow sustainably, cycle and pedestrian routes must be **direct**, **safe**, **attractive and well connected**, forming part of a network of routes. Opportunities for walking and cycling should be key drivers in informing the scheme and act as a catalyst for change.
- **6.2** Employment schemes are characteristically car-orientated developments. A workforce of 2000 3000 employees is estimated for the development. To ensure a truly sustainable and exemplary development, the ambition should be to aim for journeys undertaken by **public transport and active travel modes** (cycling and walking), rather than the car. The Panel believes that access and movement must be considered at a strategic / wider level, in particular with the adjacent Drakelow Park housing development to ensure a joined-up approach. As stated above the Greenway is key to achieving the above.
- **6.3** The opportunity for the site to be served by public transport needs to be explored at the masterplan stage. It is understood there will be a bus service for Drakelow Park. The opportunity for the bus to also serve this site, potentially using the secondary access should be explored.
- **6.4** The Panel also recommended rather than surface parking provided for each employment unit, a site wide and shared approach should be undertaken for the development. The provision of a multi-storey car park, integrated within the development with a **'park and stride'** for the workforce would be positive and assist greatly in the creation of attractive and safe streets for pedestrians and cyclists, minimising the number of on plot parking spaces and creating a stronger sense of place. The need to design in features to support proven and emerging technologies, specifically car charging points, should also be considered at this early stage.

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6.5 The provision of a **Travel Plan** detailing how people will travel to the site, a range of measures which encourage people to walk, cycle, use public transport car share etc. and highlighting any travel issues to be addressed etc. will need to be provided for the development.

7. Drakelow Nature Reserve

- **7.1** Drakelow Nature Reserve is owned by Derbyshire Wildlife Trust and located to the north of the site. The development presents a real opportunity to work in collaboration with **Derbyshire Wildlife Trust** and bring the nature reserve into the site. For example what are the special qualities of the nature reserve and how this can be reinforced and referenced as part of the landscape infrastructure (blue and green) for the development? The existing landscape is highly distinctive and can be drawn upon and inform the landscape proposed between the buildings and across the site. It's important for landscape architect, ecologist and master planner to **work collaboratively and early on to develop a strategy**. An evaluation of the landscape character and nature recovery potential of the site should inform the approach. It should also include examining the need to create a buffer zone to the nature reserve what has informed the buffer including the extent? Is it needed?
- **7.2** Access to the Drakelow Nature Reserve is from Walton Road. The opportunity to provide walking and cycling connections to the nature reserve from the site for workers and residents should be explored as part of a network of connected and integrated active travel routes within the site.

8. Water Management

- **8.1** Effective surface water management (blue infrastructure) will be an important component to the successful development of the site. The Panel raised the importance of the water/drainage strategy informing the blue/green infrastructure for the development, with a strong emphasis on 'place-making', maximising opportunities for biodiversity net gain (BNG) and creating a range of spaces with amenity value, as well as dealing with flood attenuation. It was felt that a more considered approach to water management should be undertaken with climate resilience as a key factor.
- **8.2** While the Panel appreciated the flood risk associated with river and the watercourse, the response to drainage is a series of water bodies to the north of the site only. The waterbodies were considered to be somewhat isolated. A more strategic approach to water management is required, rather than by parcel. The site is flat and a blank canvas, the opportunity to provide a range of drainage measures throughout the site should be maximised.
- 8.3 This should include waterbodies which reference and reinforce those

adjacent to the site specifically Drakelow Wildlife Reserve enabling the character of the reserve into the site and provide **a well-considered transition between the two uses**; extend the principle and character of the ash lagoons / pits into the site. Water within the streets i.e. linear swales would animate and add interest to the street, strengthen the street hierarchy in particular in connecting open spaces and support water attenuation.

8.4 In addition to providing water management, the above will assist in providing a range of **character areas** within the development that are drawn from context, support legibility and support a range of habitats.

9. Biodiversity Net Gain

- **9.1** The proposals will need to improve the biodiversity net gain (BNG) of the site. BNG will need to be developed in conjunction with the landscape and water strategy to ensure a collaborative, integrated and sensitive approach.
- **9.2** The provision of a range of habitats within the site habitats for example **woodland, wetland etc.** for different fauna and flora to support existing and encourage new wildlife across the wider area is recommended for example which parts of the site have been designed to get wet. Enjoyment and engagement of the local ecology should also form part of the wider recreational strategies of the development. Collaboration with Derbyshire Wildlife Trust in undertaking an approach which supports Drakelow Nature Reserve is recommended.

10. Landscape Character

- **10.1** The existing landscape infrastructure (green and blue) is an important characteristic of the site from the **waterbodies** to the north of the site, the established **belts of trees** to the site edges, **blocks of trees** within the site etc. The Panel recommended a strategic and site wide approach be undertaken for the green and blue infrastructure. This approach will greatly assist in creating a development with a strong sense of character and identity.
- **10.2** The site is of a significant scale and has huge potential. The site comprises of a number of **character zones** from the wetland / water bodies to the north, established block of trees to the south etc. The provision of **a strategic landscape strategy** which reference and reinforce the landscape character is required, for example extending / bringing the nature reserve into the site as a character defining feature. Referencing the adjacent **Drakelow Hall sunken gardens** which were noted as having an enigmatic quality which would also draw on the heritage of the site as parkland for the former Elizabethan mansion and potentially the character of the National Forest which forms part of the wider context.

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10.3 The site is bound by tree planting which encloses the site and limits views of the buildings. The proposals for the site need to consider the approach to the existing trees which may not be here in the next 20 – 30 years as well as new tree planting. The Panel recommended a 'Tree Strategy' be produced as part of the landscape strategy which should include specific proposals to demonstrate how key elements of the strategy can be realised. The provision of a **Tree Strategy** to inform future tree planting was recommended. This should include a strong rationale for the siting of new trees to create focal points, aid navigation, break up the skyline and roofline, reinforce existing trees for example extend the existing woodland; proposed species of trees which reference and reinforce the site context; reinforce the form of tree planting for example the pattern of silver birch trees within the site.

10.4 The approach to tree planting to the existing energy facility is suburban in character comprising groups of small trees to the building, this approach is unsuccessful and not in keeping with the character of the site. Planting **larger specimen trees** can assist in breaking up and interrupting views of large scale buildings which cannot be buffered. The Panel did not consider it necessary to screen / hide the proposed buildings. Large trees also give structure to spaces for example large feature trees at key nodal points and viewpoints.

10.5 An integrated approach with green and blue infrastructure working together is recommended.

11. Heritage Opportunities

11.1 The site comprises **grade II listed gate piers to Walton Road** which formed the entrance to the former Drakelow Hall there is **an attractive and distinctive view** into the site through these gates. The sunken gardens to the east of the site have been retained. A holistic and strategic approach should be undertaken for the heritage assets which looks at how the listed gate piers might be re-connected to the wider landscape in future. There should be a focus on how heritage can benefit the site – what are the opportunities?

11.2 Drakelow Hall comprised designed gardens by Reginald Longfield who was a notable figure in the Arts and Crafts movement. The provision of a **Heritage Assessment** is recommended to provide an in depth and greater understanding of the heritage assets (both designated and non-designated) and to inform the proposals in particular the landscape.

11.3 Reference was also made to the former functions of the site as a power station with the footprints of the former chimneys visible on site and to explore the opportunity to celebrate these features as a memory of the former use of the site.

12. Well-designed employment

12.1 As noted above employment sites historically comprise buildings set within individual plots, with a large proportion of each 'plot' set aside for surface parking. This approach prioritises the car and creates barriers to access and difficulties for those walking and cycling. The Panel believe this approach is problematic for pedestrians and cyclists who have to use indirect and poorly surveilled routes through the car parks to access the buildings. It also results in a poor / weak frontage to the street and a series of isolated buildings which do not connect with the street or each other. This will serve to discourage connectivity.

12.2 In contrast to the car dominated 'parcel' approach, the Panel recommended an approach where buildings directly front onto and are accessed from the streets, **creating a stronger sense of place and community**. This should include the 'active' office element fronting onto the street, cycle parking to the frontage and car parking to the back and side. This approach will enable **a main street with a sense of place** to be achieved. This principle should be embedded within the Framework / Design Code for the site and could be articulated with a simple diagram and supporting text.

13. Design Code

13.1 The Panel acknowledged that the precise unit sizes and form of the development blocks has not been determined at this stage and over time the type of accommodation required may change. However, this in the Panel's view, underlines the importance attached to the design of the streets, open spaces, green and blue infrastructure that will determine the overall development's success in creating a high quality, safe, healthy and attractive place to work and determine the urban form of the site over many years into the future. To inform the street design it would be good to see further evaluation of how urban grain and massing could vary to the north and south of the allocation to suit the context.

13.2 The provision of a Design Code for the streets and space in between the plots and identifying key interfaces, frontages and landmarks was recommended for the development. This will ensure the strategic drivers for the site i.e. green and blue infrastructure, active travel, active streets etc. are provided as envisaged key in integrating and connect the uses are delivered.

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14. Examples

14.1 We offer some examples of schemes we admire that may have aspects of interest and encouragement for you in the next stages:

Gravity Development - Somerset
Poundbury - Dorset
Alder Hey Children's Hospital - Liverpool

15. Conclusions

15.1 We appreciated seeing the scheme at an early stage and applaud SDDC for pressing this. We would be glad to see the scheme once progressed in due course.

- **15.2** The former Drakelow Power Station site forms part of the extension / significant growth within Drakelow including Drakelow Park. The site includes character-defining features such as mature tree belts, woodlands, waterbodies, designated and non-designated heritage assets associated with Drakelow Hall and the neighbouring Drakelow Nature Reserve, providing an opportunity to create an employment a site with a strong sense of place and identity.
- **15.3** The Panel sees potential on this site for a new, forward-looking employment area which is integrated within its context including making the most of the natural environment with the provision of recreational opportunities for both workers and residents and integrating and connecting with existing and new communities including those neighbouring / Drakelow Park and those further afield. We wish you well and look forward to further deliberations as the scheme develops.

STRA 3: Draft Former Drakelow Power Station Allocation Illustration broadly locating site features discussed in the Design Review.

