RENEWABLE ENERGY CENTRE
LAND OFF FARADAY AVENUE, HAMS HALL DISTRIBUTION PARK,
COLESWICH, WARWICKSHIRE

DESIGN AND ACCESS STATEMENT
“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.”

(PARA. 56 & 57, NPPF 2012).
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NOTE: THIS DOCUMENT IS DESIGNED TO BE VIEWED AS A3 DOUBLE SIDED
INTRODUCTION

1.1 This Statement has been prepared by Pegasus Urban Design on behalf of Rolton Kilbride to accompany the full planning application for a proposed Renewable Energy Centre (REC) using an advanced conversion technology called gasification to generate power and heat from Refuse Derived Fuel on land off Faraday Avenue, Hams Hall Distribution Park, Coleshill, Warwickshire.

1.2 The proposed development would generate up to 14.5MW gross of electricity – the equivalent of powering 26,000 homes on a continual basis. The plant is capable of accepting 150,000 tonnes of waste per annum which would otherwise go to landfill.

PURPOSE OF THE STATEMENT

1.3 This statement has been prepared in accordance with Article 9 of the Town and Country Planning (Development Management Procedure) (England) Order 2015, which requires certain applications to be accompanied by a Design and Access Statement.

1.4 The purpose of this statement is to explain:

“how the proposed development is a suitable response to the site and its setting and demonstrate that it can be adequately accessed by prospective users”


1.5 The Town and Country Planning (Development Management Procedure) (England) Order 2015 also states the following requirements:

“(2) An application for planning permission to which this paragraph applies must, except where paragraph (4) applies, be accompanied by a statement (“a design and access statement”) about:

(a) the design principles and concepts that have been applied to the development; and
(b) how issues relating to access to the development have been dealt with.

(3) A design and access statement must:

(a) explain the design principles and concepts that have been applied to the development;
(b) demonstrate the steps taken to appraise the context of the development and how the design of the development takes that context into account;
(c) explain the policy adopted as to access, and how policies relating to access in relevant local development documents have been taken into account;
(d) state what, if any, consultation has been undertaken on issues relating to access to the development and what account has been taken of the outcome of any such consultation; and
(e) explain how specific issues which might affect access to the development have been addressed.”

1.6 This document achieves this within the following sections:

Section 1: Introduction – outlines the purpose of the document;
Section 2: Assessment – considers the site and its surroundings in terms of the physical, social and planning context;
Section 3: Involvement and Evolution – outlines the stakeholder participation and consultation undertaken as well as its key findings;
Section 4: Design Proposals – presentation of the design proposals including uses and amount proposed, access arrangements, layout of the development, scale of buildings, landscaping treatments and appearance.
2.1 This section provides a summary of the assessment of the site and its surroundings that has been undertaken.

SITE CONTEXT AND LOCATION

2.2 The Application site is located off Faraday Avenue, Hams Halls, North Warwickshire. Faraday Avenue adjoins the A446, which leads directly to the M42 (junction 9) motorway. The Application Site falls within the Hams Hall Distribution Park, an industrial area located either side of Faraday Avenue. It is currently owned by the National Grid and once contained a large scale substation infrastructure, associated with the Hams Hall Power Plant, demolished in the 1990s.

2.3 The Hams Hall Distribution Park is wedged between a railway line corridor to the north west and north, with the River Thame corridor and various small waterbodies enclosing it to the north east and east, and continuing south and to the west effectively enclosing it. Further south the railway line with the Coleshill Train Station characterises the area with various business premises continuing south along Station Road and forming the northern outskirts of Grimstock Hill. The settlement of Coleshill lies further south. The closest settlement is Lea Marston which is located approximately 1.2km northeast of the application site.
2.4 The site is predominantly flat measuring 2.67Ha, surrounded by various forms of development. The south-eastern and south-western perimeter of the Application Site, and along Faraday Avenue, is secured by a (approximately) 2.4m high solid concrete wall, which restricts views in. The access gate and the fence to the left of it is palisade fencing and allows for restricted views into and across the Application Site. There is also Palisade fencing to the north-western boundary.

2.5 The surface is partially tarmacked with some loose rubble / gravel and being gradually colonised by pioneer species, mostly grass. Part of the Application Site is used as a car park. There are no notable areas of shrub or tree vegetation. Mature trees are however present outside and adjacent to the boundaries of the Application Site. There are no obvious or notable water features within or adjacent to the Application Site.

2.6 Topographically, the Application Site appears level with little change to the contours across the site. Its south eastern corner is located at approximately 79.22m Above Ordnance Datum (AOD) with the contours rising to approximately 81m AOD in the south western corner, near the existing access gate. The north eastern boundary is located slightly lower and between 79.80m to 78.60m AOD.

2.7 Views in and out are restricted by the perimeter wall and tree vegetation in the adjacent plots. Large scale and relatively tall industrial buildings, located to the east restrict views further. The Application Site feels isolated with no inter-visibility except for views of Faraday Avenue, through the access gate.

2.8 There are no Public Rights of Way (PRoWs) within or adjacent to the Application Site. A public highway, which is located to the north west leads to a car park and has a restricted access.
2.9 The constraints and opportunities presented by the site are utilised to inform and structure the development proposals. These are outlined below and illustrated, where appropriate, on the Constraints and Opportunities Plan shown opposite.

**OPPORTUNITIES:**
- The site is already well connected to the wider transport network.
- There is already a significant level of operational/background noise generated from nearby traffic, railway and business operations.
- The current access arrangement and location will be sufficient to accommodate the proposed development.
- Vehicles accessing the site are of a similar size and specification of neighbouring businesses.
- A predominantly flat site meaning minimal ground works are necessary.

**CONSTRAINTS**
- Nearby electricity pylons/overhead wires
- Nearby electricity substations
2.10 This section provides a summary of the key relevant national planning policy, strategy and guidance that may be material to the determination of the planning application. These comprise:

• National Planning Policy Framework (NPPF), published 27 March 2012;
• Waste Management Plan for England (WMPE), published December 2013;
• National Planning Practice Guidance (NPPG), initially published 6 March 2014 and dynamically updated;
• National Planning Policy for Waste (NPPW), published October 2014;
• Overarching National Policy Statement for Energy (EN-1), published July 2011; and

2.11 National guidance in the form of Planning Practice Guidance, published in March 2014 further reinforces the NPPF’s commitment to requiring good design by stating: “Achieving good design is about creating places, buildings, or spaces that work well for everyone, look good, last well, and will adapt to the needs of future generations.

Good design responds in a practical and creative way to both the function and identity of a place” (para 001, Planning Practice Guidance, ID 26-001-20140306, March 2014).

2.12 Whilst the National Planning Policy Framework (NPPF) and the subsequent publication of Planning Policy Guidance (March 2014) has replaced the Planning Policy Statements, the following design guidance documents are still relevant to creating good design:

• Design and Access Statements – How to write, read and use them (CABE 2006).

2.13 This section provides a summary of the key relevant policies of the local Development Plan, emerging Development Plan and other local policy, strategy and guidance that may be material to the determination of the planning application. These comprise:

2.14 The extant Development Plan as relevant to waste management planning applications comprises:

• Warwickshire Waste Core Strategy 2013-2028, adopted 9 July 2013;
• North Warwickshire Core Strategy, adopted 9 October 2014; and
• North Warwickshire Local Plan, adopted July 2006.

2.15 Other material considerations at the local level comprise:

• North Warwickshire Draft Pre-Submission Site Allocations Plan, published June 2014; and
LOCAL DESIGN GUIDANCE

2.16 This section provides a summary of the key relevant supplementary planning documents that may be material to the determination of the planning application. These comprise:

- North Warwickshire Local Plan - Policy ENV12 - Urban Design sets criteria with: Part 1 ensuring all elements of the proposals are well related to each other and harmonise with both the immediate setting and wider surroundings to present a visually attractive environment. Another relevant part refers to a design and layout that reduces opportunities for crime.
- North Warwickshire Local Plan - Policy ENV13: Building Design sets criteria for new buildings and extensions to achieve, such that they would only be permitted if, inter alia, “Part 1. … (i) The scale, massing, height and appearance of the proposal positively integrates into its surroundings and (ii) The materials and detailing used respect and enhance local distinctiveness.”
- North Warwickshire Local Plan - Policy ENV14: Access Design sets criteria with: Part 1 providing for access to non-vehicular traffic; Part 2 requiring safe vehicular access to the local road network and that it is able to accommodate the additional traffic without congestion, danger or intimidation to road users; and Part 3 that development will provide safe and easy access for all potential users including those with particular access requirements.
- North Warwickshire Local Plan - Policy TPT3: Access and Sustainable Travel and Transport requires provision for save and convenient pedestrian and vehicular access and circulation, and maximises practicable opportunities for the use of sustainable means of travel and transport, including by non-vehicular means.
- North Warwickshire Local Plan - Policy TPF6: Vehicle Parking requires parking provision in accordance with Appendix 4.

SUMMARY

2.17 The planning application for the proposed Renewable Energy Centre has been made in the context of the Government’s aim to work towards a ‘zero waste economy’ in which material resources are reused, recycled or recovered wherever possible and only disposed of as the option of last resort. The recovery of non-recyclable materials which would otherwise go to landfill, accords with the principles of the waste hierarchy. Furthermore, the energy recovered in the process will contribute towards the United Kingdom’s legally binding obligation to produce 15% of all electricity used from renewable sources by 2020.

2.18 The proposed REC will result in a number of specific benefits, including the recovery of up to 150,000 tonnes per annum of non-recyclable waste and the generation of renewable energy which has the capability to meet the needs of local businesses. The proposed facility would produce 14.5 MW of electricity, the equivalent of powering over 26,000 homes and therefore a significant contribution. The REC will offer economic benefits to the area through employment opportunities during the construction and operational phases of the respective developments. The development has also been shown to be acceptable in all other technical aspects, i.e. transport and highways, air quality and heritage.
PRE-APPLICATION DISCUSSIONS

3.1 The Applicant has engaged in a pre-application consultation process with Warwickshire County Council (WCC) as the waste planning authority with responsibility for determining planning applications for waste-related development. The advice received was broadly supportive of the Proposed Development in principle and that the Application Site is allocated as a ‘key employment area’ and therefore appropriate to the Proposed Development. WCC also provided guidance as to the planning policy context against which the Proposed Development would be considered and identified the documentation necessary to support the planning application.
INITIAL DRAFT PROPOSAL:
- One access point
- Single Use; REC Plant
- New planting to the southern boundary

DESIGN DEVELOPMENT:
- Turbine room and ACC's moved to allow for better movement around the site.
- Water Tank re-located
- Staff and Visitor car park relocated to Faraday Avenue frontage
- Weighbridge re-located
INITIAL DRAFT PROPOSAL:
- REC rotated. This keeps the majority of ancillary plant and machinery away from the street elevation.
- Weighbridge re-located
- Parking layout amended with increased landscaping

DESIGN DEVELOPMENT:
- Landscaping amended
- Cycle stand added
- Redline amendment
- Ancillary tanks moved to allow better access to the withdrawal area
- Red Line amendment
- Substation added
- Gates and Security hut added
USE & AMOUNT OF DEVELOPMENT

4.1 The proposed development comprises a Renewable Energy Centre powered by an advanced conversion technology plant to generate power and heat.

RENEWABLE ENERGY CENTRE AND ASSOCIATED WORKS

4.2 The proposed development consists of an energy plant and associated ancillary buildings comprising 76,223sqft of floor space. This will include:

4.3 An Energy Plant located within the centre of the site to allow good vehicular circulation around the building;

• Weighbridge;
• Separate staff and visitor entrance with car parking facilities;
• Retained and enhanced perimeter landscaping and tree screening; and
• Safe and protective staff and visitor footways to building entrances.

ARRANGEMENT

4.4 The proposed Energy Plant will include a number of ancillary buildings located on the arrangement plan. These will house the industrial processes associated with the waste management.

4.5 The plant employs a two stage system that first gasifies the waste to produce a synthetic gas which is then transferred to a second stage where it is oxidised. Changing the waste to a gas fuel, means the process can be finely controlled, dioxins thoroughly destroyed and nitrous oxides (NOx) emissions minimised which can achieve emissions levels that are compliant with the Industrial Emissions Directive (IED).

• The Key stages of the process are as follows
  • Fuel bunker and transport system;
  • Thermal conversion;
  • Heat recovery system;
  • Heat recovery steam generator;
  • Energy utilisation system;
  • Flue gas cleaning system; and
  • Control and monitoring system.

• Proposed Movement and Access
REC ELEVATIONS
VEHICLE MOVEMENTS

4.6 The waste will be delivered to the site via refuse collection vehicles (RCV’s), which will typically be 18-22 tonnes (gross weight), or in large articulated bulk haulage vehicles from nearby waste transfer stations.

4.7 The REC is expected to generate up to 90 heavy goods vehicles (HGV’s) trips per day, which is the equivalent of 38 deliveries and 7 collections per day to site, plus trips associated with 20 staff.

4.8 The proposed REC will be operational for 24 hours a day, 7 days a week. The facility will be open for deliveries between 07:00 and 19:00 Monday to Friday including bank and public holidays (excluding Christmas Day and New Years’ Day) and 07:00 to 14:00 on Saturdays. There will be no waste received on Sundays. It is expected that HGV’s importing and exporting materials from the site will do so evenly throughout the 12 hour period and there is unlikely to be a peak in movements associated with these operations.

4.9 It is expected that 20 operational staff would be required to operate the plant on a 3 shift pattern, comprising of 13 full time employees directly on site with a further 7 people providing services from local specials businesses. On a worst case basis, all staff would travel to the site by car giving rise to the generation of a total of 40 trips per day (20 in/20 out) by private motor vehicle.

4.10 A separate staff and visitor entrance is provided to keep a clear separation between the large heavy good vehicles and cars. Barriers and fences will also ensure traffic moving through the site is kept to the intended areas.

4.11 The access point is located directly off Faraday Avenue. During the operational hours there will be unobstructed access to the site. This is to prevent large vehicles needing to queue on the adopted highway. Each lorry will need to be weighed once on site and once before it leaves. This will be controlled by the gatehouse.

4.12 Emergency vehicle access to the site will be via the operational access. This will allow full access to all facades of the building.
PARKING

4.13 The proposed level of car parking has been based upon the expected number of users at the site and in this regard, the REC will provide a total of 19 spaces, inclusive of 2 disabled bays. A Sheffield Stand will provide space for 14 cycles.
Brick Base:
The lower section of the EFW building will be faced in an engineering brick.

Metal Cladding:
The remainder of the building will be clad in a coloured architectural wall panel similar to above. A lighter colour cladding above the brick base will allow the top section of the building to blend in to an overcast skyline.

Metal Tanks, Silos & Stack:
Due to a range of different processes, the energy plant requires ancillary silos, tanks & a stack. The silos and tanks will remain in their grey metal colour which will play down their part, allowing the building to sit in the forefront.

Roller-shutter Doors:
Operational doors will be coloured in the same feature green colour which runs through the proposals. This helps to highlight the operational entrances.

Brise Soleil:
Metal horizontal brise soleil will be located to the window heads to help control solar gain. This also gives the elevation some shadow relief.

Stack:
The stack will be faced in a grey coated metal finish, similar to the photo above.

Roof Ventilation:
Roof ventilation is required as part of the energy plants functional process. These will take the form of metallic grain bins.

Gatehouse:
The Gatehouse will be a small lightweight structure that can be placed directly onto the ground without requiring dug foundations. This will be faced in the feature blue colour.

Weightbridges:
The weightbridges will be a ‘surface’ style bridge and will not require foundations.

Ventilation Louvres:
Ventilation louvres have been incorporated into the elevations as part of the functional requirements for the plant to run efficiently. These will be as discrete as possible, faced in the same colour panels that are adjacent.
ARCHITECTURAL DETAILING AND MATERIALS

4.14 In terms of architectural detailing and materials, The REC building will follow a simple palette. Due to the large mass of the REC, it is important to use a cladding system that achieves both the functional needs, as well as aesthetic ones too. The proposals feature a dark grey engineering brick base, with a smooth lightweight architectural cladding above. The cladding will be banded in a gradient of greys, from dark to light from the bottom to the top of the façade. A contrasting blue will highlight the operational doors. The stack will be faced in a muted grey metal which will sit and almost blend into the typical overcast skyline of the UK. External machinery will be faced in a grey coated metal, emphasising their subservient nature to the main plant.

SCALE AND MASSING

4.15 The height and massing of the proposed development varies across the site with the main REC building measuring 24.0m tall and the chimney stack 52.0m tall.

4.16 The general massing of the building form is somewhat derived from the functional requirements of the Energy Plant, however, this has been carefully designed to ensure the building does not sit out of place within the surrounding context.

TOWNSCAPE & VISUAL

4.17 The nature of the Proposed Development, together with the context provided by the land uses surrounding the Application Site, would mean that the Proposed Development is considered to be appropriate to the setting and townscape character of the site and the Hams Hall Distribution Park. The introduction of the Proposed Development would not result in any significant effects on local landscape or townscape features or elements, or the character of the landscape / townscape within and around it.

4.18 Effects upon visual amenity would also be generally not significant with only one location assessed as subject to significant visual effects. Such higher degree of effects reflects close proximity and relatively open views towards the Proposed Development.

ECOLOGY & NATURE

4.19 The ecological impact assessment and accompany reports have concluded that there are no overriding reasons why the Proposed Development should not proceed subject to the recommended mitigation
**ADAPTABILITY**

4.21 The development should be flexible enough to respond to future changes in use, lifestyle and demography. This means creating flexibility in the use of property, public spaces and service infrastructure and introducing new approaches to transportation, traffic management and parking. The development should therefore be flexible in order to accommodate future changes of use and circumstances through evolving social, technological and economic conditions.

**SUSTAINABLE DESIGN**

4.20 The presumption in favour of sustainable development is at the heart of the planning system. Government drives legislative change through the Localism Act 2011 and subsequently through the National Planning Policy Framework (NPPF) and Local Policy Frameworks. Resolution 24/187 of the United Nations General Assembly define sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED Report “Our Common Future” (1987)) and is captured within the NPPF. As set out within paragraph 6 of the NPPF, the policies in paragraphs 18 to 210, taken as a whole, constitute the Government’s view of what sustainable development in England means in practice for the planning system. The NPPF goes on to describe a presumption in favour of sustainable development should be seen as a golden thread running through both plan making and decision taking.
SUSTAINABLE BUILDING TECHNIQUES

4.22 Where appropriate, sustainable building construction techniques will be used in line with current building regulations. Sustainable construction measures typically comprise a combination of the following:

- Improved energy efficiency through siting, design and orientation;
- Water conservation measures;
- Considering fabric efficiency in the design of buildings;
- Use of building materials capable of being recycled; and
- An element of construction waste reduction or recycling.

CRIME PREVENTION

4.23 One of the design objectives within item 58 of the National Planning Policy Framework (NPPF) states that developments should:

“create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion;” (point 5, item 58, NPPF 2012)

4.24 The design proposals for the site are based on an understanding of best practice guidance and reference has been made to the relevant documents including “Safer Places: the Planning System.”

4.25 When designing new developments, these should create areas that are attractive and contain clearly defined public and private areas that relate well with one another and create no ambiguity. In addition, the development should enable residents to take pride in their surroundings without the fear of crime, which in turn will create a sense of shared ownership and responsibility.

4.26 Landscape design is essential in achieving an environment that creates a sense of place and community safety. In this context, landscape design encompasses the planning, design and management of external, public spaces. Well-designed public lighting increases the opportunity for surveillance at night.

4.27 Natural surveillance in the form of doors and windows overlooking streets, pedestrian routes and public open spaces will create activity throughout the day and evening and will be an essential element in creating a safe environment for all users, whilst discouraging criminal activity by increasing the risk of detection.

4.28 In forming the design proposals, the following key attributes have been included:

- The ownerships and responsibilities for external spaces will be clearly identified and the proposals facilitate ease of maintenance and management;
- Natural surveillance is promoted wherever possible; and
- CCTV and 24 hour on site surveillance will ensure the site is secure at all times.