Energy Strategy

Construction and use of a waste transfer station and provision of site office, container storage, vehicle parking and ancillary infrastructure for a temporary period

at

Old Coal Depot, Tavistock Road, West Drayton, London Borough of Hillingdon

On behalf of

PUNJAB SKIPS

May 2024

by

Heatons

Planning Environment Design

CONTENTS

1 INTRODUCTION & BACKGROUND 1
2 THE DEVELOPMENT PROPOSALS AND ENERGY REDUCTION 2
3 PREDICTED ENERGY DEMAND 3
4 ENERGY EFFICIENCY STANDARDS.....4
5 METHODS OF ENERGY REDUCTION 5

1 INTRODUCTION & BACKGROUND

1.1.1 This Energy Strategy has been prepared by Heatons on behalf of Punjab Skips Limited (the Applicant) as part of a planning application which seeks planning permission for a waste transfer station, site office, parking and ancillary infrastructure for a temporary period. It is proposed that the development would be for a period of five years.

1.1.2 With respect to the requirement for an Energy Strategy, the London Borough of Hillingdon local validation checklist (February 2024) states: '*All major developments will be required to provide an energy strategy. As set out in the London Plan, an energy strategy should include:*

A. *Calculations of the energy demand and carbon dioxide emissions*

B. *Proposals to reduce carbon dioxide emissions through the energy efficient design of the site*

C. *Proposals to further reduce carbon dioxide emissions through the use of decentralised energy where feasible*

D. *Proposals to further reduce carbon dioxide emissions through the use of on-site renewable energy technologies'.*

2 THE DEVELOPMENT PROPOSALS AND ENERGY REDUCTION

2.1.1 The proposed development comprises the construction of a waste transfer station, the siting of a modular portacabin and storage (shipping) container, container storage, vehicle parking and ancillary infrastructure (including the siting of an above ground foul water treatment tank/cesspool) for a temporary period of five years. The main element of the proposal is a steel portal framed waste transfer station building, which would have pitched roof and three sides with an open front on the southern elevation. This building would have an electrical connection to provide low voltage LED flood lighting but would not be heated. Static plant (trommel and conveyor) would be diesel powered from a generator. This building would have no other energy requirement.

2.1.2 The site office would be relocated from another site which is currently used by the Applicant. The office has the following energy requirements:

- Lighting – LED strip lighting;
- Electrical sockets;
- Water heater;
- Heating.

2.1.3 External lighting within the site boundary will comprise directional low voltage LED floodlights within the yard and at the site entrance.

2.1.4 Mobile plant would be diesel powered. Fuel would be stored within bunded tanks on site.

3 PREDICTED ENERGY DEMAND

3.1.1 The nature of the proposed development requires a very low power consumption. The estimated electricity consumption for operating the proposed waste transfer station and site office would be approximately 1400 – 1600 units (kWh) per year.

3.1.2 The annual consumption of water, fuel and other consumables are also likely to be low. Water will be collected from the waste transfer building roof and used in dust suppression and general house-keeping within the yard. This will reduce the quantity of water required from the mains connection.

4 ENERGY EFFICIENCY STANDARDS

4.1.1 The site would operate under the requirements of an Environmental Permit. The Applicant is currently preparing an application for a Standard Rules Permit. The Permit requires that the operator has an Environmental Management System (EMS).

4.1.2 The EMS provides a framework within which the site activities can be carried out whilst minimising potential effects on the environment. It can be used to reduce an organisation's environmental impacts and improve operating efficiencies whilst demonstrating to stakeholders and interested parties that real action is being taken. The EMS requires the operator to commit to continual improvement in the management of its activities and have an Environmental Policy which sets out goals and objectives for the future.

4.1.3 The site's EMS considers the management of energy within its day-to-day operations. The site would ensure that its activities are undertaken in an energy efficient manner in order to minimise carbon emissions and operate in an environmental friendly and cost effective manner.

5 METHODS OF ENERGY REDUCTION

5.1.1 Methods of energy reduction would be employed in both the construction of the site and the ongoing operation of the site. The Applicant is committed to fulfilling its responsibility to minimise the impact that its activities may have on the environment and climate change, including energy use and carbon emissions.

5.1.2 The site's energy requirements are minimal and principally relate to lighting within the waste transfer building, site office and external yard. As the waste transfer station building is open fronted, the building would not be heated. The site office is small and only has a minimal energy requirement associated with lighting, electrical sockets and heating. Mobile and static plant would be diesel powered. However, as plant and equipment needs upgrading or replacing, electric equivalents would be considered.

5.1.3 Given the proposed short timeframe for the development, and the likely costs and pay back periods of the equipment, it is not considered to be financially viable to include photo voltaic panels on the site buildings. However, a number of other energy reduction measures are proposed.

5.1.4 The Applicant's Environmental Management System provides a framework that underpins a commitment to the prevention of pollution and the continual improvement in the environmental performance of the site and its operations. The management system would be used as the primary mechanism for the setting, measuring and monitoring of environmental objectives to drive continual improvement, including with regards to energy.

5.1.5 The EMS includes procedural documents that set out the process for each element of the site operations, which would be followed so that the site operates in an environmentally responsible manner and that energy consumption and management are considered at all stages of the site's activities.

5.1.6 All staff employed at the site would be suitably trained and would work to the standards set out within the EMS.

5.1.7 The EMS includes a site maintenance procedure and schedule. This defines how frequently plant, equipment and machinery would be inspected and would ensure that maintenance would be undertaken when required. This would ensure that the plant and machinery is operating efficiently in accordance with the manufacturer's instructions,

thereby minimising the potential for excessive energy consumption or for pollution of the environment.

5.1.8 The EMS includes a policy statement (an Environmental Policy) which demonstrates that the Applicant is committed to operating in accordance with all environmental legislation and Regulations. The Environmental Policy includes a statement on the businesses' objectives with regards to energy consumption and management.

5.1.9 This EMS will be internally reviewed on an annual basis, and amendments will be made as required by legislation, changes in the site activities or external requirements.

5.1.10 Energy efficiency would be given a high priority within the day-to-day operation of the site. Good practice energy management measures would be used in all aspects of the site activities. Such measures may include, but not be limited to the following:

- Ensuring that energy efficiency performance is considered when procuring electrical and electronic equipment and other plant and machinery;
- Replacing equipment, plant and machinery with more energy efficient models when they reach the end of their life;
- Switching equipment, plant and machinery off when not in regular use, where appropriate to do so;
- Heating – to be only used as needed and switched off when not required and at the end of the working day;
- Using low energy / LED lighting where possible and switching it off when not in use;
- Considering electric vehicles and plant in lieu of diesel powered models, as technology makes these a viable option.