Cringle Road Methane Stripping Plant Facility: Design and Access Statement

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1. Introduction

Entec UK Ltd has been appointed by Greater Manchester Waste Disposal Authority (GMWDA) to prepare a planning application for a proposed methane stripping plant (MSP) facility at the former Cringle Road landfill site.

This Design and Access Statement has been produced to accompany the application being made by Entec UK Ltd on behalf of GMWDA and in accordance with the requirements of DCLG Circular 01/2006 *Guidance on Changes to the Development Control System*, and with reference to the Commission for Architecture and the Built Environment (CABE) publication *Design and Access Statements – how to write, read and use them* (2006). Together with the Supporting Statement, this Design and Aceess Statement forms an integral part of the planning application for the proposed development.

The overall architectural design for the proposed development is to integrate the proposed Cringle Road MSP facility into the site and its wider landscape context to minimise any effects on the main potential visual receptors and to avoid degradation of landscape character, whilst meeting the operational needs of the facility. A detailed understanding of the existing environment (including land use, ecology, hydrology and water quality, and noise) has contributed to the design process. This has ensured a holistie design approach to the MSP facility.

The Design and Access Statement illustrates the manner in which the above aim has been met and sets out the principles and details of the proposed design.

In preparing this statement, consideration has been given to the following documents, publications and policies:

- DCLG Circular 01/2006 – *Guidance on the Changes to the Development Control System*, 12 June 2006;
- Commission for Architecture and the Built Environment (CABE) – *Design and Access Statements*, 2006;
- DCLG (ODPM) – *Planning & Access for Disabled People: A Good Practise Guide*, 2003;
- DCLG (ODPM) – PPS1 *Delivering Sustainable Development*, 2005;
- DCLG (ODPM) – PPS10 *Planning for Sustainable Waste Management*, 2005;
- North West Regional Assembly – *Regional Spatial Strategy for the North West* Submitted Draft, March 2006 (policies: DP1, EM1) and Proposed Changes, March 2008 (policies: DP1, DP7, EM1);

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- Manchester City Council – *Manchester Unitary Development Plan*, adopted 1995 (policies: E1.2, E1.3, E2.6, E3.5, DC26.4, and DC27.1)
- Manchester City Council – *Design for Access 2*.

In addition, Section 4 of the Supporting Statement appraises all relevant national, regional and local planning policies which relate to the proposed development.

2. The Site

2.1 Overview

The location of the proposed Cringle Road MSP facility is shown on Figure 2.1. The former Cringle Road landfill site is located to the east of the A6 in the Levenshulme area of Manchester. The site of the proposed development covers an area of approximately 0.03 hectares, which lies immediately adjacent to the existing leachate pumping station compound. The existing site access from Broom Avenue will be utilised.

2.2 The Site and Surrounding Area

The application site consists of predominantly rough grassland with some trees and shrubs, which make up the landform of the restored former landfill site. The site is located in the northern part of the former landfill which is used by local residents as informal open space and forms part of the Highfield Country Park which has recently been designated a Local Nature Reserve (LNR).

3. The Design

3.1 The Design Proposal

The proposed development comprises a small area of hardstanding on which will be located the processing equipment associated with removing methane from leachate.

The main elements of the MSP facility are:

- x8-10 Methane stripping tanks for the treatment of the leachate;
- x3 Air blowers to power the movement of the leachate through the methane stripping tanks;
- x2 Below ground chambers (inlet pumping chamber and sewer discharge pumping chamber).

In addition the MSP facility will include:

- A control kiosk;
- Lighting columns;
- Appropriate security fencing.

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Discussions have taken place to ensure that the height of the methane stripping tanks is the minimum required to meet the physical, operational and maintenance requirements of the treatment process. Note that some details of the project may need to change following the procurement of the facility, although the changes are likely to be relatively minor. As such, they are not expected to affect the design of the MSP facility.

3.2 The Site Layout

The site for the location for the Cringle Road MSP facility is fully described in the planning application documentation submitted by Entec on behalf of GMWDA.

In summary, the MSP facility is to be located within the northern part of the former Cringle Road landfill site, immediate adjacent to the existing leachate pumping station compound. The facility is positioned such that use can be made of the existing access to the leachate pumping station compound and that as far as possible, the woodland surrounding the site can be retained for screening.

The site layout of the proposed facility is shown on Figure 2.2. The layout has been designed so as to facilitate ease of access to the site.

The key design issues addressed by the site layout are:

- The setting of the facility adjacent to the existing leachate pumping station to minimise impacts on visual receptors and landscape character;
- The positioning of the facility to ensure optimal vehicle access to the site, when required, and to utilise the existing access therefore minimising potential impact;
- The positioning of the facility in relation the existing leachate pumping station and sewer discharge point to ensure optimal efficiency of the plant therefore minimising potential impact.

3.3 Landscape Issues

A landscape and visual assessment of the proposed development has been undertaken and is fully described in the planning application documentation submitted on behalf of GMWDA. The assessment concludes that the MSP facility would be consistent with the existing land use of the site and immediate local landscape context, which is defined by the site's history as a landfill. The proposal is considered to be largely consistent with the type and scale of development currently evident on site and therefore any incremental weakening of the open character of the area is unlikely. Furthermore, the presence of the perimeter trees belts ensure that there is limited intervisibility with the wider residential area or the recreational routes which pass through the area.

4. Access

4.1 Access Arrangements

The proposed Cringle Road MSP facility will be accessed using the existing access to the former landfill site.

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For health and safety reasons there is currently no unrestricted public access to the former landfill site and this policy is to be continued for the proposed MSP facility. It is envisaged that access to the proposed development site will generally be restricted to staff, services and maintenance.

4.2 Site Security

To prevent unauthorised access to the site, the proposed MSP facility will be contained within a steel palisade fence approximately 2.75 m high and will have a locked gated entrance. Furthermore, access to the control kiosk will be through a reinforced and bolted door. Lighting columns will be located within the site, although these will predominantly used in conjunction with any site maintenance, which wherever possible will be carried out during the day time.

4.3 Community Considerations

The proposed Cringle Road MSP facility is a specialised treatment facility and as such will not be accessible to the public. As a result community considerations and related consultation has not been considered appropriate.

In designing the proposed development, great importance has been placed to ensure the site is secure and not accessible to the public and measures include appropriate security fencing and lighting. Design details relating to these elements are addressed in Section 3 above.

5. Conclusions

The development of a functional design solution has been integral to the siting and design of the proposed Cringle Road MSP facility, whilst providing safe and non discriminatory access to the users, within the operating constraints of the site.

The process has resulted in a facility that meets the design aims and is successful in minimising the impact on human and other environmental receptors.

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Reviewer: Ian Cromie

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Figures

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Figure 2.1
Site Location

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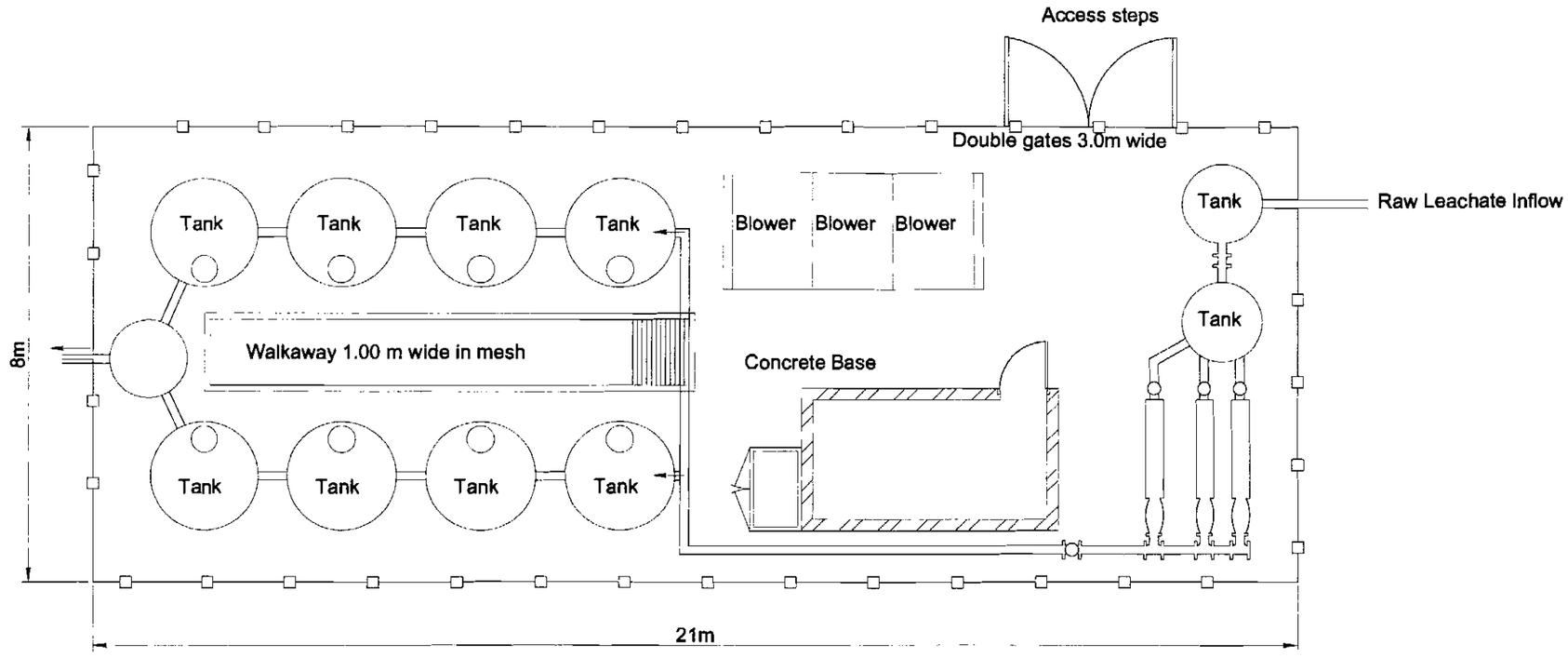
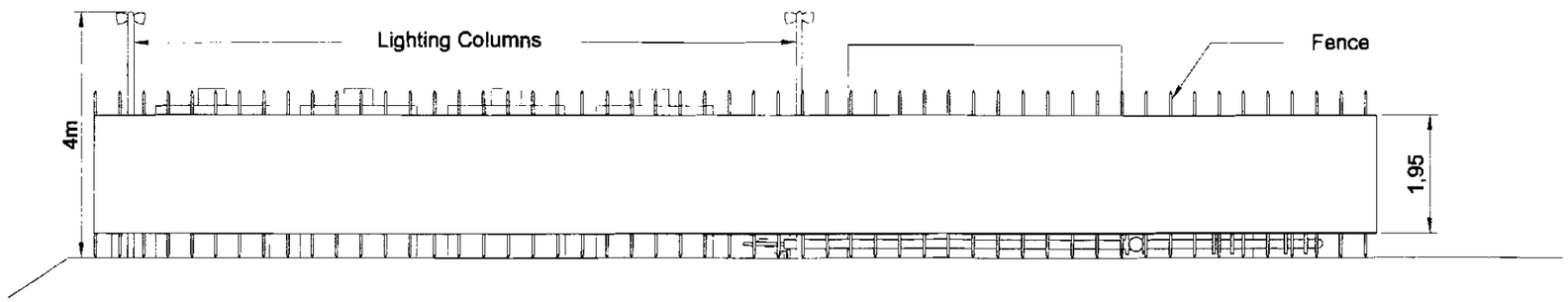


Methane Stripping Plant: Typical Plan



Methane Stripping Plant: Typical Elevation

0 m 5m

Scale 1:100 @ A3

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Figure 2.2
Indicative MSP Site Layout and Elevations

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