

# Chetwode Embankment Waste Recovery Permit Application

**Reference EPR/LB3404KN/A001**

Supporting Information

On behalf of EKFB JV

JER9490  
Supporting Information  
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2  
02 April 2025

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# NON-TECHNICAL SUMMARY

## Introduction

This document provides the supporting information for an application for a bespoke waste recovery permit at Chetwode Embankment, Preston Bissett Road, Chetwode, Buckinghamshire, MK18 4LF. Planning permission has been granted by Buckinghamshire Council for the development of Chetwode Embankment (21/03691/HS2).

HS2 is Britain's new high speed rail line which will link London to the North-West.

## Activity Description

The route of the rail line will intercept some historic landfill sites which will require partial or complete excavation and removal of the deposited waste. As the new route requires a number of landscape and visual bunds (landscape bunds) to be formed as part of the mitigation scheme, suitable waste from the excavated landfill sites will be treated (screening and manual picking) under a separate permit to enable its re-use to form the landscape bunds and will be placed using a bespoke deposit for recovery permit. It is proposed that a combination of waste and non-waste material will be used to form the landscape bund, the non-waste proving the majority of fill material.

This application supports the re-use of treated waste from the former Finmere Quarry historic landfill site to create a landscape bund as part of the required mitigation at the Chetwode Embankment section of the rail line.

## Site Operations

In order to progress the development, reprofiling and recontouring of the excavated workings is required. In total, 60,000 m<sup>3</sup> of waste will be used to form the landscape bund. Waste will have been treated off site at the Finmere Quarry site prior to delivery.

The waste types used to form part of the landscape bund at Chetwode Embankment will be limited to treated non-hazardous waste. The waste material will be placed in layer 100mm – 200mm thick and rolled in position. Non-waste is also being used in the construction of the landscape bund and will be used for approximately 80% of the bunds material with waste material being recovered making up the further 20%. The non-waste material will be virgin dug high plasticity clays with an attenuation layer below.

Hours of operation will be limited to 8am – 6pm Monday to Friday, and 8:00am – 6pm on Saturday to Sunday.

## Management Systems

An environmental management system (EMS) will be developed by EKFB JV prior to undertaking operations at the site. The EMS will contain a set of procedures describing what will be done to minimise the risk of pollution from the activities covered by the permit. It will contain but not be limited to the following:

- Waste acceptance procedures (which forms part of this application),
- Accident management plan,
- Fugitive emissions management including dealing with incidents and non-conformances.

A technically competent person will be appointed to manage the site operations.

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## Permit Application

The proposed operations, as summarised above are described in further detail within this document. Further supporting information is provided as follows:

- Appendix A– Application Forms
- Appendix B – Site Plans
- Appendix C – Environmental Risk Assessment
- Appendix D – ESSD Report
- Appendix E - Waste Acceptance Procedures
- Appendix F – Waste Recovery Plan
- Appendix G – Topographic Survey

In summary the proposed activity has been designed and will be carried out to ensure that significant impacts to the environment and human health do not arise as a result of its operation.

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- Appendix A** Application Forms
- Appendix B** Site Plan
- Appendix C** Environmental Risk Assessment
- Appendix D** ESSD Report
- Appendix E** Waste Acceptance Procedure
- Appendix F** Waste Recovery Plan
- Appendix G** Topographical Survey

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# 1 INTRODUCTION

- 1.1.1 This document forms the application for an environmental permit for a waste recovery operation to develop a landscape bund for the HS2 rail scheme. In order to develop the scheme a number of landscape and visual bunds (landscape bunds) alongside the HS2 line are required to be constructed, suitable waste from the excavated landfill sites will be treated<sup>1</sup> to enable its re-use to form these landscape bunds.

## 1.2 Background

- 1.2.1 HS2 is Britain's new high speed rail line which will link London to the North-West.
- 1.2.2 The route of the rail line will intercept some historic landfill sites which will require excavating and removal of the deposited waste. As the new route requires a number of landscape bunds to be formed, the suitable waste from the excavated landfill sites is to be treated under a separate permit<sup>1</sup> to enable its re-use to form these landscape bunds and will be placed using a bespoke deposit for recovery permit.
- 1.2.3 The High-Speed Rail (London - West Midlands) Act 2017 provides the powers to construct, operate and maintain Phase One of HS2. It grants 'development consent' for that project and the power to make necessary changes to existing legislation to facilitate construction and operation of HS2.
- 1.2.4 Under schedule paragraph 26(1) of Schedule 17 of the High Speed Rail Act 2017 the Secretary of State can issue statutory guidance ("the Guidance") to planning authorities about the exercise of their functions under Schedule 17 – Conditions of Deemed Planning Permission (the Planning Conditions Schedule). A planning authority is required to have regard to this Guidance when considering a request for approval made under Schedule 17 to the Act (paragraph 26(2) of Schedule 17).
- 1.2.5 For the works at Chetwode Embankment, AVDC P14 Schedule 17 has been approved by Buckinghamshire Council (BC Reference 21/03691/HS2). The landscape bund at Chetwode Embankment is included within this planning permission.

## 1.3 The Site

- 1.3.1 The site is located at Preston Bissett Road, Chetwode, Buckinghamshire, MK18 4LF. The site is centred National Grid Reference SP 64678 28638. A site plan can be found in Appendix B.
- 1.3.2 From the earliest historical maps, dating back to 1880, no development of the land is indicated. It is therefore assumed to have been in arable use since that time.
- 1.3.3 The site location is shown marked in Drawing 1 - Chetwode Embankment Location Plan in Appendix B.
- 1.3.4 To the north of the site is Preston Bissett Road. Fields that are associated with agriculture surround the site.

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<sup>1</sup> This treatment will be carried out at the Finmere Quarry historic landfill site under a separate mobile plant permit, see Section 3.4 for details.

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- 1.3.5 EA Nature and Heritage Conservation Screening Report (Bespoke Waste) EPR/LB3404KN/A001 (appended to the Environmental Risk Assessment (ERA) that forms part of this application) identified the following ecological receptors:
- Protected Species: Code 2 – within 500m.
  - Protected Habitats: Deciduous woodland – within 50m.
- 1.3.6 Upon further detailed screening by RPS (detailed within the Environmental Risk Assessment) none of the above identified receptors are within screening distances for environmental permitting and, therefore, are not expected to experience negative impacts from the operation of the scheme. See the RPS receptor plan in Appendix B.
- 1.3.7 According to the British Geological Society's 'Geology of Britain Viewer', the site is located on the bedrock geology of the site comprises Peterborough Member – Mudstone: sedimentary bedrock formed between 166.1 and 163.5 million years ago during the Jurassic period.
- 1.3.8 Superficial deposits are mapped adjacent to the site:
- To the west the bedrock is overlain with Till, Mid Pleistocene – Diamicton. Sedimentary superficial deposit formed between 860 and 116 thousand years ago during the Quaternary period. To the east are River Terrace Deposits - Sand and gravel. Sedimentary superficial deposit formed between 2.588 million years ago and the present during the Quaternary period.
  - To the south lie superficial deposits of Alluvium - Clay, silt, sand and gravel. Sedimentary superficial deposit formed between 11.8 thousand years ago and the present during the Quaternary period.
- 1.3.9 The Mudstone bedrock is considered unproductive as an aquifer, i.e., a rock layer or drift deposit with low permeability that has negligible significance for water supply or river base flow. The combined classification for the site is: Unproductive Bedrock Aquifer, No Superficial Aquifer.
- 1.3.10 To the north and west of the site lies a Secondary Undifferentiated Aquifer (assigned where it is not possible to attribute either category A or B to a rock type. In general, these layers have previously been designated as both minor and non-aquifer).
- 1.3.11 To the east and south lies a Secondary A Aquifer (permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers). Therefore, no groundwater flow is expected.
- 1.3.12 There are no identified Groundwater Source Protection Zones (GSPZ) within a 2 km radius of the site. The Groundwater Vulnerability Maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a single square kilometre. By virtue of lying over an unproductive aquifer with no superficial aquifer, groundwater vulnerability at this site is classified as low.
- 1.3.13 The nearest watercourse is Padbury Brook that flows adjacent to the southeast site boundary at its closest point. Padbury Brook has a "Moderate" overall rating, with "Fail" Chemical rating and "Moderate" ecological rating, according to Environment Agency (EA) records from 2019.

## 1.4 Operator Details

- 1.4.1 The EKFB joint venture is made up of 4 companies. These companies are: Eiffage, Kier, Ferrovial Construction and BAM Nuttall.
- 1.4.2 The Company Directors as listed on Companies House are provided in Appendix A.

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## 1.5 Structure of the Application Document

1.5.1 Supporting information in this document is set out as follows:

- Section 2 provides an overview of the management of the proposed activity.
- Section 3 details the activities and operational techniques to take place at the site.
- Section 4 describes the potential emissions from the activity.
- Section 5 identifies the potential environmental impacts and summarises the findings of the Environmental Risk Assessment and the Environmental Setting and Site Design reports.
- Section 6 describes the actions to be taken upon completion of the waste recovery activity to support the surrender of the environmental permit.

1.5.2 Other supporting information is provided in Appendices including the completed EA application forms (Part A, B2, B4 and F1 forms), Site Plans, Waste Acceptance Procedures, Waste Recovery Plan, Topographical Survey, Environmental Risk Assessment and Environmental Setting and Site Design reports.

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## 2 MANAGEMENT OF ACTIVITIES

### 2.1 Technical Ability

- 2.1.1 A Technically Competent Manager (TCM) has been appointed for the works to be undertaken under the permit, as follows:

**Table 2-1 TCM Details**

<b>Name</b>	Mr. John Hillyard
<b>Qualifications Held</b>	WAMITAB Level 4 Waste Management Operations – Managing Landfill Hazardous Waste (4LH) (
<b>Certificate Number</b>	Original: 14899/4LH/1 Continuing Competence: 5246222
<b>Date Issued</b>	Original: 01/12/2005 Continuing Competence: 19/02/2024

- 2.1.2 Copies of the original and continuing competency certificates for John Hillyard are included in Appendix A – Application Forms.

### 2.2 Environmental Management System

- 2.2.1 An environmental management system (EMS) will be established prior to commencement of operations at the site. The EMS will be developed in house or as a requirement of the appointed groundworks contractor to have a suitable EMS for the operations at the site. A ground works contractor will be appointed to undertake the development works.

- 2.2.2 The following procedures will be included as part of the site EMS:

- Waste acceptance (included in Appendix E),
- Waste storage and treatment,
- Waste rejection and quarantine,
- Staff competency and training,
- Servicing and maintenance,
- Fugitive emissions management,
- Accident management,
- Emergency and incident response including spillage and fire response,
- Record keeping and reporting,
- Complaints management.

- 2.2.3 A system for keeping of all relevant records including but not limited to the following, will be developed and implemented prior to operation:

- Waste movement and placements.
- records of incidents, accidents and emergencies including details of follow-up; and
- any other records required to be kept by the permit.

- 2.2.4 The site-based EMS will be implemented before the site becomes operational.

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## 2.3 Staff Competence and Training

- 2.3.1 The site manager will have day to day control and be responsible for compliance with the Waste Recovery Permit. Sufficient competent staff will manage and operate the site. All staff will receive training to ensure the facility is managed and operated by a fully trained workforce. Training will not only address normal operations but will also include those actions required in the event of abnormal operations and emergencies.
- 2.3.2 Training records for all staff will be kept demonstrating competency. These will be available for inspection as required.

## 2.4 Accident Management

- 2.4.1 As part of the site EMS, an accident management plan will be produced which will include the following:
- Identification of potential accidents,
  - How accidents or breaches of the permit will be recorded, investigated and responded to,
  - The date it was reviewed,
  - When it will next be reviewed,
  - A list of emergency contacts and how to reach them,
  - A list of substances stored at the site, and the storage facilities,
  - Forms to record accidents on.
- 2.4.2 Procedures will be developed to address those operations deemed a risk, this includes emergency scenarios such as spills or leaks and fire response.
- 2.4.3 Additionally, an incident reporting and investigation procedure will be produced as part of the EMS. This will cover incidents on site or reported to site by external parties such as neighbours and ensures all incidents are investigated and appropriate corrective and preventative actions put in place.
- 2.4.4 Further details of the potential risks associated with the proposed activities can be found in the Environmental Risk Assessment in Appendix C.

## 2.5 Site Security

- 2.5.1 The hours of operation will be limited to 8:00 – 18:00 Monday to Friday, and 8:00 – 18:00 on Saturday to Sunday. Outside of these hours the gated site entrance site will remain locked.
- 2.5.2 Security is provided by fencing around the perimeter of the site. It is not currently proposed to have additional security features such as CCTV or site security patrols, however, once operational, this will be considered if vandalism and/or trespassing becomes an issue.
- 2.5.3 Site security infrastructure will be inspected as part of the daily inspections. Should any defects or issues be identified, these will be rectified as soon as possible.

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## **2.6 Avoidance, Recovery and Disposal of Wastes**

- 2.6.1 The operations at the facility are unlikely to give rise to a significant amount of waste. The only anticipated waste from the operations will be general waste from packaging of any products, chemicals or fuels to be used in the site plant and general waste produced by staff.
- 2.6.2 Where possible, waste will be kept to a minimum with packaging materials re-used where possible.

## **2.7 Reporting Non-compliances and Taking Corrective Actions**

- 2.7.1 Staff will be fully trained in the requirements of the permit relating to reporting non-compliances and taking corrective actions. EMS procedures will ensure that appropriate corrective actions are taken should an issue be identified at the site or following notification from a member of the public or other body. The procedures will be produced as part of the EMS and will ensure that non-conformances are reported to senior management and the EA (as required by the permit), investigated and any lessons learnt are used to update procedures / staff training etc. as required to ensure future non-conformances are minimised and prevented.

## **2.8 Servicing and Maintenance**

- 2.8.1 The management system will include servicing and maintenance requirements to ensure that all relevant plant and equipment is subject to a planned programme of servicing and maintenance following manufacturers recommendations to minimise any downtime and risk of pollution through faulty equipment.

## **2.9 Design and Construction Quality Assurance**

- 2.9.1 Construction Quality Assurance (CQA) plans will govern all construction activities necessary in the development including those relevant to the formation of the landscaping bunds. These CQA plans will be prepared by competent and suitably qualified persons. A competent and suitably qualified person will supervise the construction activities.
- 2.9.2 The CQA plan preparation, along with the competent and suitably qualified person to supervise the construction activities will be a requirement of the groundwork's contractor.

## **2.10 Reporting and Notification**

- 2.10.1 Within one month of the end of each quarter, the operator shall submit to the EA using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.
- 2.10.2 A topographical survey of the site referenced to ordnance datum has been/will be carried out:
- a. prior to commencement of the recovery activity (already undertaken); and
  - b. on completion of the recovery activity to show final waste levels.
- 2.10.3 The topographical surveys will be used to produce a plan of a scale adequate to show the surveyed features of the site. The plan will be produced within 1 month of the completion of the survey. Upon commencement of the waste recovery operation a topographic survey will be completed to show the final levels of the landscape bund at Chetwode Embankment.

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- 2.10.4 The operator will notify the EA in writing:
- a. at least 14 days before the commencement of the recovery operation; and
  - b. within 14 days of completion of the recovery operation.
- 2.10.5 The EA will be notified without delay in the event of any circumstance that is notifiable under the conditions of the environmental permit.
- 2.10.6 Written confirmation of actual or potential pollution incidents and breaches of emissions will be submitted within the timescales set out in the environmental permit.
- 2.10.7 Any other reports or notifications specified within the permit will be provided in the format required by and within the timescale specified in the permit.

## 3 SITE OPERATIONS

### 3.1 Waste Management Activities

3.1.1 The specified waste management activities that will be carried out at the site are shown in.

**Table 3-1: Activities**

Description of Activities	Limits of Activities	Non-hazardous Waste Recovery Capacity
R5: Recycling/reclamation of other inorganic compounds	The use for recovery of a maximum of 60,000 m <sup>3</sup> of waste for the purposes of the construction of a landscape bund. In any event the total quantity of waste used will not exceed the amount needed to complete the recovery operation as described in section 2 of the approved waste recovery plan. Only the waste types that are specified in the approved waste recovery plan will be accepted. Such wastes shall only be used as specified in the approved waste recovery plan. Restoration, reclamation, and land improvement activities will only be carried out in relation to the specified landscape bund. No waste will be deposited into a water body or subwater table.	60,000 m <sup>3</sup>
R10: Land treatment resulting in benefit to agriculture or ecological improvement		
Total Throughput		~102,100 tonnes (based on 1.8 tonne per m <sup>3</sup> )

### 3.2 Waste Recovery

3.2.1 A Waste Recovery Plan (WRP) for the above site was submitted to the EA for assessment detailing the required criteria as detailed in the EA guidance on waste recovery<sup>2</sup>. The applicant confirms it will implement the scheme and meet all commitments set out in the WRP.

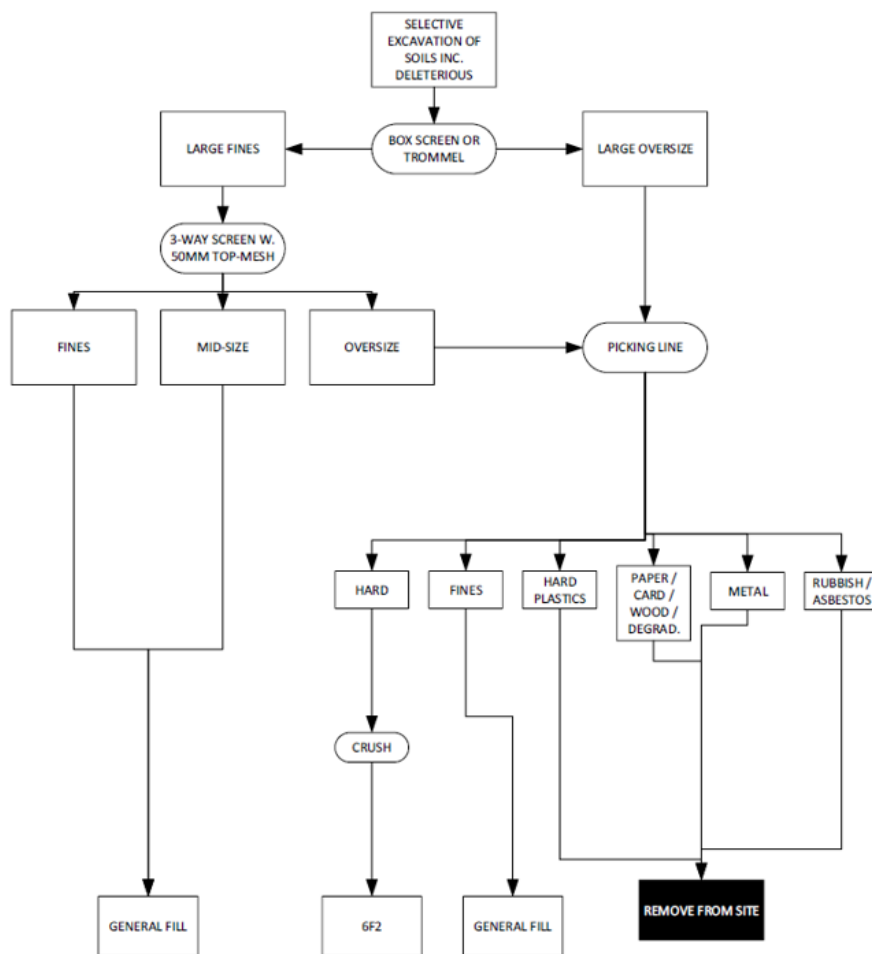
<sup>2</sup> <https://www.gov.uk/guidance/waste-recovery-plans-and-permits>

- 3.2.2 The activity has been accepted during pre-application discussions and acceptance of the Waste Recovery Plan as a waste recovery activity.

### 3.3 Waste Types and Quantities

- 3.3.1 The waste to be deposited for recovery within the landscape bund at Chetwode Embankment will have been excavated from the Finmere Quarry historic landfill site. Prior to transport and acceptances at the site the waste will be screened/ treated under a separate mobile plant permit at Finmere Quarry. Only suitably treated material will be transferred. The waste types accepted at the site are limited to non-hazardous wastes.
- 3.3.2 The Waste Classification Report (Appendix B) has identified that the wastes from Finmere Quarry to be used at the site are non-hazardous and would be classified as European Waste Catalogue (EWC) code 17 05 04. However, prior to arriving at the site the waste will have been subject to mechanical treatment (as per Figure 3-1) at Finmere Quarry. Therefore, the waste would be classified as a Chapter 19 waste from a waste management facility and would fall under EWC code 19 12 12 - other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned 19 12 11.

**Figure 3-1: Waste Treatment Process at Finmere Quarry.**



3.3.3 The waste proposed for acceptance and use in the waste recovery activity are detailed in Table 3-2, below:

**Table 3-2: Waste Types Permitted for Deposition**

EWC Code	Description
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11

3.3.4 The precise waste fill areas are yet to confirmed, pending testing. The waste recovery plan will be updated with the exact position of the waste within the landfill bund once it is known. In total, approximately 60,000 m<sup>3</sup> of waste will be used to form the landscape bund.

3.3.5 The waste to be used will be excavated from the Finmere Quarry historic landfill site and screened/treated prior to use in the deposit for recovery activity. This will be undertaken using a separate mobile plant treatment permit. The treatment of the waste will be completed at Finmere Quarry. No further treatment will take place at the Chetwode Embankment site.

### 3.4 Waste Storage

3.4.1 Waste will not be stored at the site prior to incorporation into the landscape bund at Chetwode Embankment. The waste will be excavated from Finmere Quarry historic landfill, treated before leaving the Finmere Quarry site, and placed directly into the landscape bund.

3.4.2 A dedicated quarantine area will be allocated for any non-conforming waste identified during operations, see Waste Acceptance Procedure for further details (Appendix E). Any non-conforming waste will be managed in accordance with this procedure.

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## **4 EMISSIONS AND MONITORING**

### **4.1 Groundwater**

- 4.1.1 There will be no point source emissions to groundwater. The landscape bund will be constructed using non-hazardous treated material as stated in section 3.3 which will not contain any hazardous pollutants.

### **4.2 Gas**

- 4.2.1 A ground gas management plan is not required as the wastes to be accepted at the site are not expected to generate gas.

### **4.3 Fugitive Emissions**

- 4.3.1 Fugitive emissions, including dust and spillages, are assessed as part of the environmental risk assessment in Appendix C.
- 4.3.2 The Environmental Risk Assessment concluded that with the measures identified in the ERA, the risks from the operations range from low to very low and, therefore, are not likely to be significant.
- 4.3.3 Daily site inspections will take place to monitor for any issues such as noise, odour, dust, mud on the roads etc. This will be detailed in the site EMS.

### **4.4 Topography**

- 4.4.1 A topographical survey has been undertaken to show the levels prior to the works. A final topographic survey will be undertaken upon completion of the works.

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## 5 ENVIRONMENTAL IMPACTS

### 5.1 Environmental Risk Assessments (ERA)

- 5.1.1 An ERA is included as Appendix C. This has assessed that the risks from the operations and activities are considered low or very low.

### 5.2 Environmental Setting and Site Design (ESSD)

- 5.2.1 An Environmental Setting and Site Design (ESSD) report has been prepared using the guidance<sup>3</sup> provided by the EA (Appendix D). The ESSD includes the site's conceptual model in terms of the potential source, pathway, and receptor linkages. It provides details on the site's environmental setting and the proposed design of the site.
- 5.2.2 Superficial geology underlying the site on this section of the route is indicated to be Glacial Till, comprising soft to stiff silty clay with limited discontinuous pockets of sand. River Terrace Deposits are indicated to be present immediately south east of the site, and generally comprise silts, sands and gravels. Alluvium is indicated to be present immediately south of the site which is heterogenous in nature and can comprise varying proportions of granular and cohesive soils.
- 5.2.3 The bedrock geology of the site comprises firm to stiff clays of Oxford Clay Formation (typically 2.5m thick) underlain by clayey sand and gravels and stiff clays of the Kellaways Formation (about 5m thick). This is underlain sequentially by the Cornbrash, Forest Marble and White Limestone Formations of the Great Oolite Group (15m+ thick) with base at 20 m+ bgl.
- 5.2.4 Geotechnical and hydrogeological testing of the Glacial Till and Oxford Clay indicates that the units generally have similar physical properties (composition, plasticity and permeability). The combined thickness of the two units ranges between 5 and 9 metres from south to north.
- 5.2.5 The nearest surface water receptor Padbury Brook, which is located adjacent to the southeast site boundary. There are two surface water abstractions within 1 km of the site for "spray irrigation", at 116 m to the west and 174 m to the south. Both are granted under the same licence.
- 5.2.6 The EA flood risk maps have been consulted and it is shown that the site is in flood zone 1, an area with a low probability of flooding.
- 5.2.7 Underlying the Oxford Clay Formation, the Kellaways Formation is classified as a Secondary A Aquifer. These formations are formed of permeable layers capable of supporting water supplies at a local scale, in some cases forming an important source of base flow to rivers. intragranular flow.
- 5.2.8 There are no identified Groundwater Source Protection Zones (GSPZ) within a 2 km radius of the site. The Groundwater Vulnerability Maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a single square kilometre. By virtue of lying over an unproductive aquifer with no superficial aquifer, groundwater vulnerability at this site is classified as low.
- 5.2.9 Average groundwater levels for the Twyford Viaduct to Barton Hartshorn Embankment study area which includes the area for the landscape bund at Chetwode Embankment range from

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<sup>3</sup> [Landfill operators: environmental permits - What to include in your environmental setting and site design report - Guidance - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/landfill-operators-environmental-permits-what-to-include-in-your-environmental-setting-and-site-design-report-guidance)

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approximately 0.05 m bgl to 19 m bgl. Given the linear nature of ground investigation monitoring points it is not possible to accurately provide a groundwater contour plan due to the large degree of interpolation outside of the immediate line of monitoring. The available data suggests that groundwater flow directions broadly follow topographical gradients.

- 5.2.10 Groundwater flow through the superficial deposits will be limited due to the largely clay dominated nature of the deposits. Intergranular flow will occur through the Alluvium and River Terrace Deposits where locally present.
- 5.2.11 The ESSD report is enclosed as Appendix D.

### **5.3 Hydrogeological Risk Assessment (HRA)**

- 5.3.1 Groundwater Vulnerability Maps show the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a single square kilometre.
- 5.3.2 The conceptual site model which is appended to the ESSD (Appendix D) concludes that migration of contaminants to groundwater is not considered to be a viable pathway given the thick underlying low permeability strata. On this basis and given the nature of the wastes to be accepted at the site are non-hazardous a HRA is not required.

### **5.4 Stability Risk Assessment (SRA)**

- 5.4.1 Slope stability has been considered in the Chetwode Embankment Geotechnical Design Report (GDR), reference: 1MC06-CEK-GT-REP-CS06\_CL10-000032, particularly in section 4.5.3. The GDR forms Appendix B to the ESSD report (Appendix D).
- 5.4.2 Table 3-9 of the GDR presents the geohazards that might impact upon slope stability and assesses the risk.
- 5.4.3 Stability calculations are provided within the Appendix C of the GDR.

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## 6 SITE CLOSURE

- 6.1.1 There is no requirement for a Closure and Aftercare Plan for recovery activities.
- 6.1.2 Upon completion of the recovery activity, a completion report will be prepared detailing the waste accepted as part of the recovery activity, outcomes of monitoring throughout the life of the permit and confirmation that no pollution incidents or contamination have occurred at the site. If any pollution incidents or contamination are identified, details of any investigation and remediation shall be confirmed.
- 6.1.3 Following completion of the development, an application to surrender the permit will be prepared and submitted to the EA. This will take account of records of the waste deposited at the site.
- 6.1.4 No gas generating wastes will be accepted on site. Therefore, it is not proposed to undertake any period of gas monitoring following completion and prior to permit surrender.

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## REFERENCES

1. British Geological Society's 'Geology of Britain Viewer' - [BGS Geology Viewer \(BETA\)](#)
2. EA flood risk maps - <https://flood-map-for-planning.service.gov.uk/confirm-location?easting=575103&northing=154110&nationalGridReference=TQ7510354110>
3. DEFRA data services platform - <https://environment.data.gov.uk/DefraDataDownload/?mapService=EA/HistoricLandfill&Mode=spatial>
4. EA Waste recovery plans and permits Guidance - <https://www.gov.uk/guidance/waste-recovery-plans-and-permits>
5. Environmental Setting and Site Design template - <https://www.gov.uk/government/publications/report-template-environmental-setting-and-site-design>

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## Appendices

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## Appendix A Application Forms

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## **Appendix B** **Site Drawings**

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## Appendix C

### Environmental Risk Assessment

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## Appendix D ESSD Report

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## **Appendix E**

### **Waste Acceptance Procedure**

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## **Appendix F**

### **Waste Recovery Plan**

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## **Appendix G**

### **Topographical Survey**

