

# **FWS** Geotechnical & Environmental Consultants

## **EMISSIONS MANAGEMENT PLAN FOR THE PROPOSED RECOVERY OPERATIONS AT THE FORMER HAUL ROAD AT STOBWOOD, NORTHUMBERLAND**

FWS Consultants Ltd  
Unit 2 City West Business Park  
St Johns Road  
Meadowfield Industrial Estate  
Durham  
DH7 8ER  
Company Registration No. 3944252

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admin@fwsconsultants.com  
www.fwsconsultants.com  
01388 420 633



<b>PROJECT NUMBER</b>	3865	
<b>PROJECT TITLE</b>	Waste Recovery Permit – Stobswood Haul Road	
<b>CLIENT</b>	Sanders Plant & Waste Management Ltd 40 Butterwell Drive Pegswood Morpeth NE61 6YE	
<b>REPORT TITLE</b>	Emissions Management Plan for the Proposed Recovery Operations at the Former Haul Road, Stobswood, Northumberland	
<b>REPORT REFERENCE</b>	3865OR05	
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# EMISSIONS MANAGEMENT PLAN FOR THE PROPOSED RECOVERY OPERATIONS AT THE FORMER HAUL ROAD, STOBWOOD, NORTHUMBERLAND

## 1 INTRODUCTION

FWS Consultants Ltd (FWS, the 'agent') were instructed by Sanders Plant and Waste Management Ltd (the 'operator') to prepare a Bespoke Environmental Permit Application for the proposed deposit for recovery scheme of the northern and western parts of the haul road (Sections A to F as illustrated in Drawing 21-144-002, Appendix 1) at a restored former opencast mine at Stobwood, Northumberland (the site). The site location is shown on Drawing 3865OD01, Appendix 1.

It is proposed to undertake restoration of the land to original ground level using imported clean landscape materials so the land may be used for a combination of agricultural purposes and the creation of publicly accessible bridleway.

This report presents the Emissions Management Plan (EMP) for the permitted waste recovery operations required to undertake restoration of the former haul road to original ground level using imported clean landscape materials.

This EMP has been prepared in accordance with the principles of the Environment Agency guidance:-

- Environment Agency webpage – Control and monitor emissions for your environmental permit (<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#emissions-that-do-not-have-set-limits>) accessed June 2023.

No point source emissions are proposed as part of the recovery operations, so this document identifies potential fugitive (principally dust, but can include mud, litter and releases to water and ground) emissions and the associated potential impacts, and details the measures to be implemented at the site to reduce these emissions.

## 2 SITE LOCATION AND DESCRIPTION

The site is located at approximate National Grid Reference 421415E, 591342N located to the south and west of Ulgham, Northumberland as shown in Drawing 3685OD01, Appendix 1.

The site comprises 6 sub-sections (A-F) of the northern and western asphalted haul road associated with a former (now restored) open cast coal mine as shown in Drawing 21-144- 002, Appendix 1. The Application Area is approximately two kilometres long and a 6 m wide section of the asphalted haul road. The road is generally set between 0.5 m to 6 m lower than the adjoining agricultural fields and a verge between 10 m to 30 m wide separates the road from the fields.

The haul road runs south from the site of the former Stobwood opencast mine over a metal Mabey Bridge over the River Lyne and continues under an underpass beneath the C129. The Application Site ends at a vehicle access point into the haul road from the C129 as shown in (Drawing 21-044-001, Appendix 1). The level of the road varies from 50 m AOD in its northern most

extent and exhibits a general southerly increase with a maximum elevation of 81 m AOD in the southwestern corner. The road was originally used to transport coal from the opencast mine site to the 'Butterwell Disposal Point'.

The haul road continues to the east of the current Application Site where the coal was loaded onto trains for transport around the country.

### 3 SENSITIVE RECEPTORS

#### 3.1 Onsite

Site personnel working on the site are the closest receptors, but due to the constantly changing working conditions they are unlikely to be particularly sensitive to fugitive emissions as detailed in the Risk Assessment (Ref. 1). However, all site personnel shall be trained and made aware of the contents of the Environmental Management System (Ref. 2), Waste Recovery Plan (Ref. 3) and this Emissions Management Plan.

#### 3.2 Offsite

Bricks Plantation, which is designated as a Protected Habitat, is located within 50 m of the proposed recovery works in Section D in the north of the site. Additionally, the River Lyne is located approximately 30 m to the north of the proposed recovery works in Section D. There are no proposed works to either Bricks Plantation or the River Lyne and, therefore, will be no direct impacts upon these receptors.

Although the Risk Assessment (Ref. 1) does not identify a significant risk to the residential property (Cockles Farm) to the southwest of the site, after Brick Plantation and the River Lyne (detailed above), this is likely to be the most sensitive receptor to fugitive emissions such as dust and noise.

### 4 ONSITE EMISSION SOURCES

#### 4.1 Aerial Emissions of Dusts, Fibres and Particulates

The main dust generating activities to be undertaken as part of the recovery operations include:-

- Vehicle movements in/out of the site;
- Handling and movement of materials;
- Wind-blown dust from stockpiled and recently placed materials during periods of strong winds and/or dry weather.

#### 4.2 Noise

The main noise generating activities to be undertaken as part of the recovery operations include:-

- Vehicle movements in/out of the site;
- Handling and movement of materials.

Although the Risk Assessment (Ref. 1) does not identify a significant risk the residential property to the southwest of the site, this are likely to be the most sensitive receptor to fugitive emissions such as noise.

### 4.3 Surface Water

No point source emissions of surface water are proposed as part of the recovery operations.

However, where localised surface water ponding occurs following periods of heavy rainfall this water shall be collected for reuse onsite as part of dampening down procedures or removed to a foul sewer or a licensed treatment facility, as appropriate.

## 5 LOCAL CONTRIBUTORS OF DUST AND OTHER EMISSIONS

As the site is located in a largely agricultural area there are unlikely to be other significant local contributors of dust or other emissions.

## 6 ABATEMENT SYSEMS AND CONTROL MEASURES

### 6.1 Aerial Emissions of Dusts, Fibres and Particulates

#### **Means of Prevention**

To minimise the potential for dust generation during the recovery operations, the following control measures shall be implemented (where considered necessary):-

- Vehicle Movements in/out of site
  - Sweeping and maintenance of site access roads and internal haul roads;
  - Mud and debris to be monitored daily and cleaned, where necessary;
  - During periods of strong winds/dry weather, roads to be sprayed using a water bowser;
  - All materials imported to site will be in fully enclosed trailers;
  - Prior to leaving site, haulage vehicles to be checked and, where necessary, cleaned of mud and debris;
  - Site speed limit of 10 mph.
- Handling and Movement of Materials
  - Materials imported to site are to be either deposited within a reception area (Temporary Stockpile area to be confirmed by the Site Manager) or, where possible, taken directly to the permanent placement area to minimise stockpiling and double handling of materials.
  - Operatives are to be instructed to lower the drop height of material from shovel excavators/loaders to minimise potential dust generation.
- General Measures
  - The Site Manager will carry out daily visual inspections of dust emissions within the site and at the downwind site boundaries. In the event of a dust nuisance being identified, then appropriate remedial actions will be implemented as soon as practicable such as spraying and dampening down of the source materials (as detailed below).
- Suspension of Activities
  - The Site Manager shall decide when site activities will have to cease due to excessive dust generation.

### **Dampening**

Dampening of site access roads, haul roads, stockpiles and active recovery operation areas will be carried out during the following:-

- periods of strong winds/dry weather;
- where dusty conditions have been identified or dust emissions have been observed leaving the site boundary in the daily inspections by the Site Manager;
- following a complaint regarding dust.

## **6.2 Protected Habitat and Surface Water**

The findings from the Risk Assessment (Ref. 1) are summarised below: -

- Potential hydrocarbon spillages from plant and machinery either from the former haul road use or from the proposed restoration presents a very low to low risk of pollution to groundwater and surface waters and Bricks Plantation (Protected Habitat), via leaching of contaminants. However, transport of these potential contaminants via surface runoff may present a moderate risk of pollution to surface waters and Bricks Plantation (Protected Habitat).
- Release of dust or silt via surface water runoff presents a moderate risk of pollution to surface waters and Bricks Plantation (Protected Habitat).
- Liberation of airborne dust in dry weather may present a moderate risk of pollution to Bricks Plantation (Protected Habitat) and a low risk of pollution to surface waters.

Therefore, in accordance with Section 7 (Accident Prevention and Management) of the Environmental Management System (Ref. 2), the following additional precautions will be adopted: -

- That the site shall be fenced and the fencing in the areas of the River Lyne, the unnamed drainage ditches and Bricks Plantation, will be protected to prevent surface water run-off and silt from entering surface waters during the restoration works.
- To reduce the potential for localised hydrocarbon spills, fuels and oils shall be stored in a suitably bunded area and spill kits should be carried by all vehicles. Vehicles shall maintain a good standard of repair to minimise the risk of leaks.
- During periods of hot, dry weather, the site should be dampened down to reduce the potential for dust to be generated by the works.
- Upon completion of the restoration works the site shall be topsoiled to promote retention of surface water and growth of vegetation for agricultural use

## **6.3 Noise**

Additional mitigation is recommended as a precaution, as summarised below:-

### **Routine Maintenance of Plant**

Site equipment and plant will be maintained in accordance with Section 5 (Site equipment and Maintenance Plan) of the Draft Environmental Management System (Ref. 2) in order to avoid unnecessary increased noise during the recovery operations.

### **Good Operational Site Practices**

To minimise noise emissions the following good practices should be adopted during the recovery operations:-

- ensuring that generator or vehicle engine hatches are kept closed
- locating mobile plant away from noise-sensitive receivers
- avoiding dropping materials from a height
- switching off plant when not in use
- stockpiling materials or planning of site compound areas so as to provide acoustic screening between noise sources and receivers
- arranging delivery or on-site vehicle routes away from sensitive receivers
- use of “smart” reversing alarms, which produce sound at a volume relative to the background level, for example 5 or 10 dB above, rather than at a fixed volume; or using other safe systems of work which obviate the need for reversing alarms

Although the noise-reduction benefits of these practices can be difficult to quantify, they should form a routine part of best practice to reduce overall noise emissions.

### **Restricting Operating Hours**

Restricting operating hours to generally between 0800 to 1800 hours Monday to Friday and 0800 to 1200 hours Saturday (or as defined in the planning consent).

## **6.4 Adverse Weather Conditions**

Adverse weather conditions impacting on dust control and surface water management has been identified and accounted for in Section 6 (Contingency Plans) of the Draft Environmental Management System (Ref. 2).

## **6.5 Accident Prevention and Management**

Accident prevention and management has been identified and accounted for in Section 7 of the Draft Environmental Management System (Ref. 2).

# **7 MONITORING AND REPORTING**

## **7.1 Monitoring**

By the implementation of this emission management plan, fugitive emissions from the site will be limited and, where possible, stopped entirely. The monitoring of fugitive emissions shall include:-

- Daily site inspections; and,



- Prompt response to any complaints.

Operatives shall be fully conversant with the contents of the Permit, the Management System and Emissions Management Plan and will be relied upon to remain observant and to draw attention to any non-conformances, adverse operating conditions and any mitigation or management failure.

No specific monitoring for dust (PM10) or noise, or of the nearby River Lyne surface water or Brick Plantation are considered necessary.

## 7.2 Monitoring Records

The Site Manager shall keep records of daily site inspections carried out, including (but not limited to) the following:-

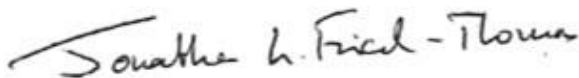
- Date, time, personnel undertaking inspections;
- Prevailing weather conditions (precipitation, wind direction and approximate wind speed);
- Active recovery works areas and details of any adverse operating conditions;
- Complaints received;
- Control measures implemented – dust control and surface water management;
- Records of any mitigation or management failures.

## 7.3 Records

The results of daily inspections and findings from any subsequent investigations/remedial mitigation implemented will be recorded in accordance with Section 9 (Record Keeping) of the Environmental Management System (Ref. 2).

## 7.4 Complaints

The complaints procedure is detailed in Section 7 (Accident Prevention and Management) of the Draft Environmental Management System (Ref. 2). All complaints received concerning dust, noise or surface water will be dealt with in accordance with the complaints procedure. The Environment Agency will be informed within 24 hours of any detection of emissions not controlled by an emissions limit which has caused or is causing significant pollution.



PRINCIPAL CONSULTANT



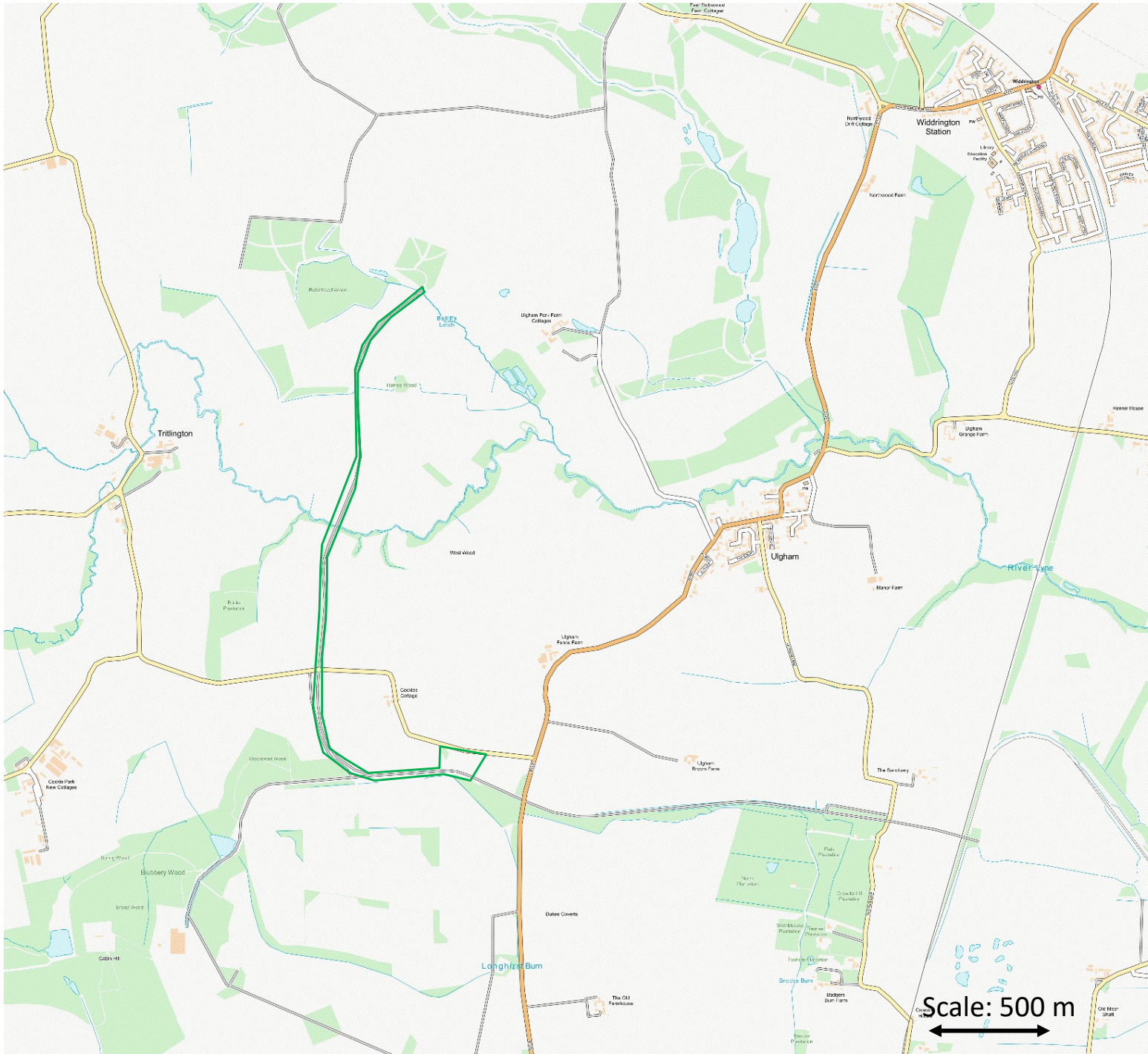
DIRECTOR

## 8 REFERENCES

- 1 FWS Consultants Ltd, June 2023. Environmental Setting and Site Design Report (ESSD) and Risk Assessment for a Bespoke Environmental Permit for the Proposed Deposit for Recovery of a Former Haul Road, Stobswood, Northumberland. Ref. 3865OR03Rev1.
- 2 FWS Consultants Ltd, June 2023. DRAFT Environmental Management System for the Proposed Recovery Operations at the Former Haul Road at Stobswood, Northumberland. Ref. 3865OR04.
- 3 FWS Consultants Ltd, June 2023. Waste Recovery Plan for the Proposed Recovery Operations of a Former Haul Road, at Stobswood, Northumberland. Ref. 3685OR01Rev2.

**APPENDIX 1**

**DRAWINGS**



**NOTES / KEY**

SITE BOUNDARY

**CLIENT**

Sanders Plant and Waste Management

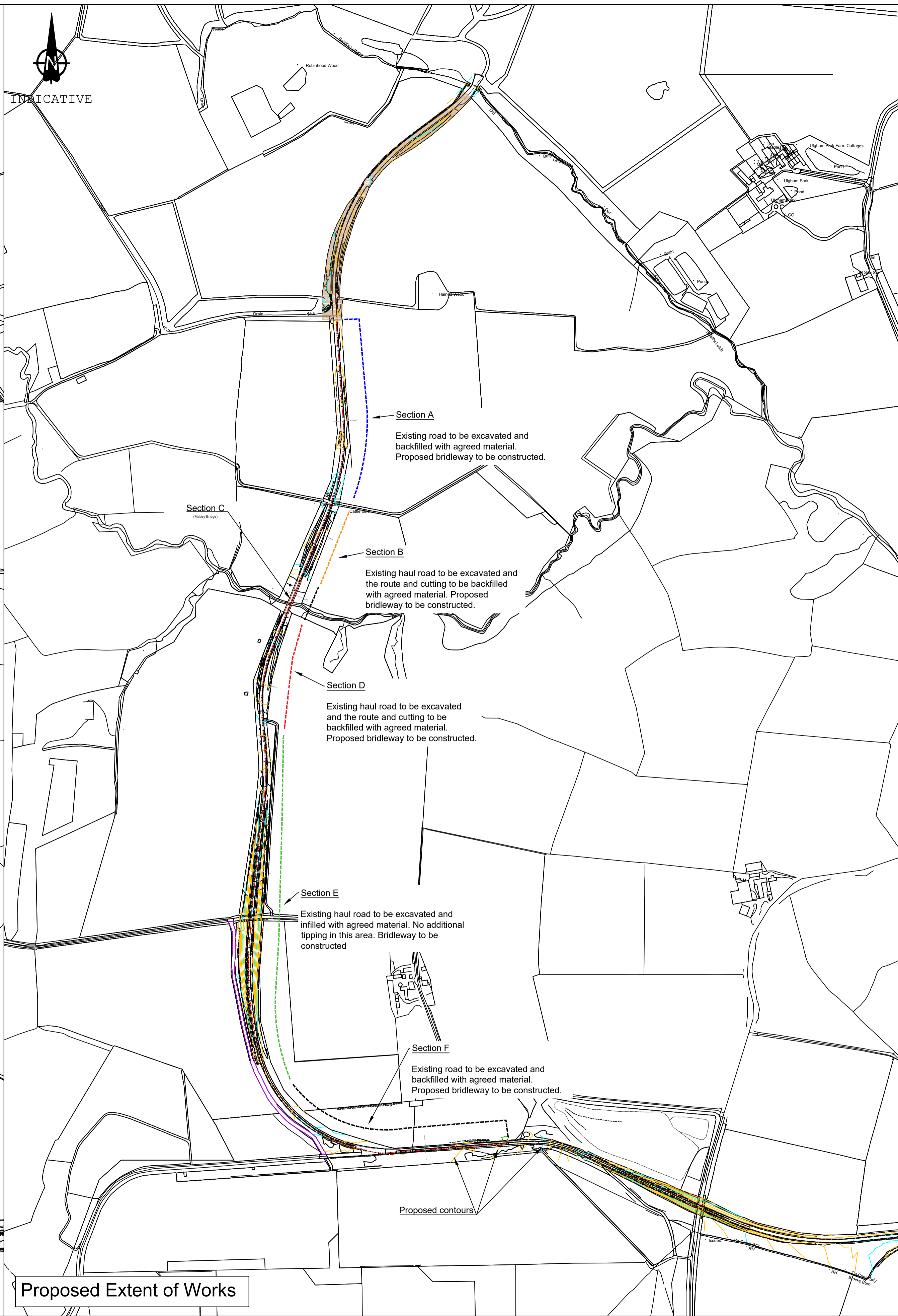
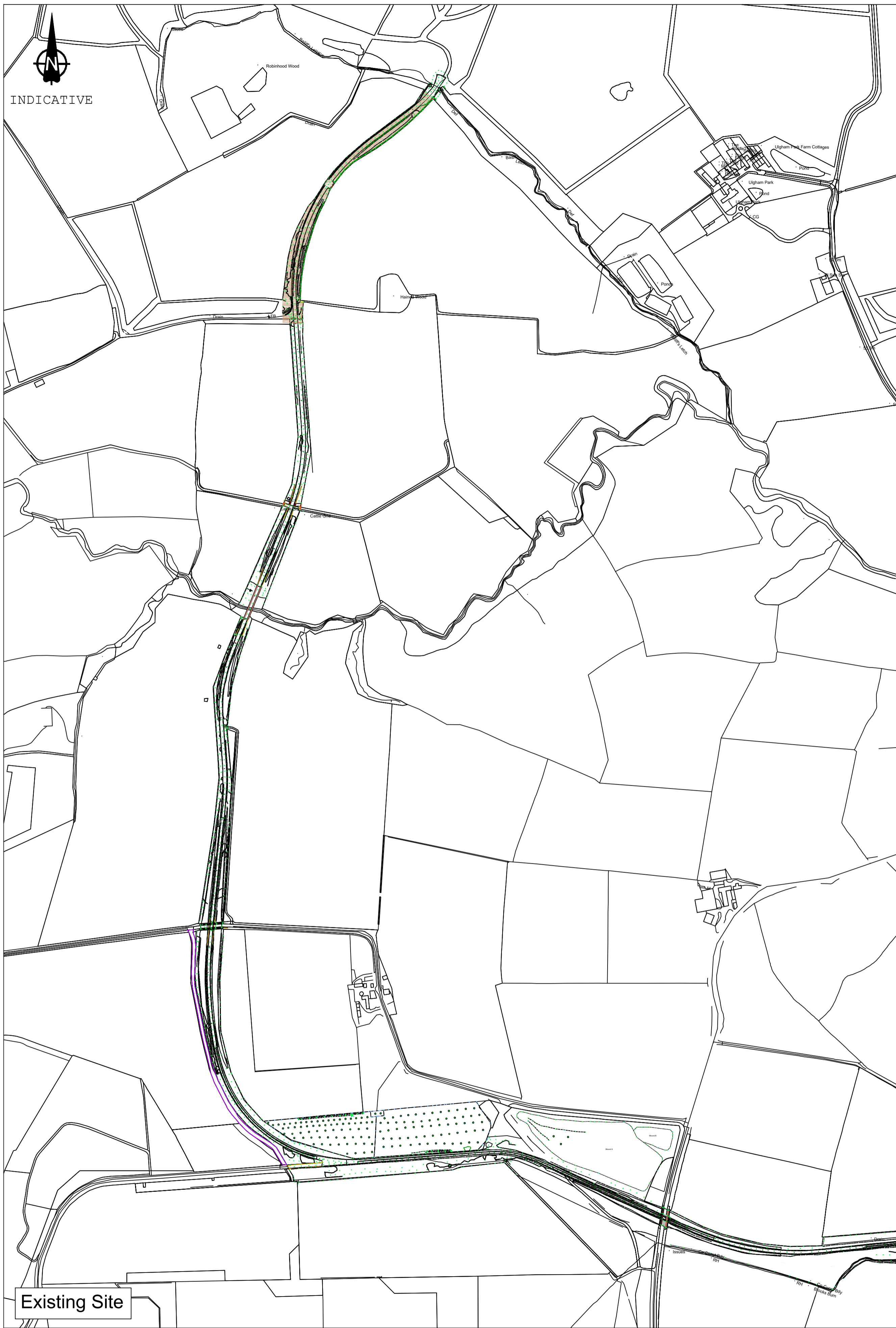
**DRAWING TITLE**

SITE LOCATION PLAN

**PROJECT TITLE**

STOBWOOD HAUL ROAD

<b>STATUS</b>	<b>PROJECT NUMBER</b>
FINAL	3865
<b>DRAWN BY</b>	<b>DATE</b>
JFT	Apr 2023
<b>SCALE</b>	<b>DRG. No.</b>
AS SHOWN	3865OD01



Existing Site

Proposed Extent of Works

- Notes
1. Do not scale from this drawing. All dimensions shown are in metres unless noted otherwise.
  2. This drawing has been based upon topographical survey information and Milestone Transport Planning cannot be held responsible for any discrepancies which may arise because of it.

Key:  
Proposed Contours -

Ordnance Survey Licence number: 100057360

Drawing Revisions				
Rev.	Drn.	Date	Details	Chk.
-	JW	28/04/2022	First issue	DK
A	JW	18/05/2022	Updated sections	DK
B	JW	23/05/2022	Updated sections	DK
C	JW	31/05/2022	Brideway detail added	DK

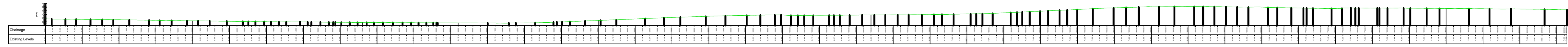
Client  
Sanders Plant & Waste Management Ltd

Project  
Stobswood Haul Road

Title  
Existing / Proposed Extent of Works

**MILESTONE**  
TRANSPORT PLANNING  
Abbey House, 282 Farnborough Rd, Farnborough, Hants GU14 7NA  
Tel: 01483 397888  
Gateshead IBC, Mulgrave Terrace, Gateshead, NE8 1AN  
Tel: 0191 338 7220  
web: www.milestonetp.co.uk

Drawing Number: 21-144-002  
Scale: 1:5000 @ A1  
Revision: C



## **APPENDIX 2**

### **NOTES ON LIMITATIONS**

## NOTES ON LIMITATIONS

- 1 FWS Consultants Ltd (“FWS”) has prepared this report solely for the use of the client and/or his agent (the “Client”) on the basis of exchange(s) of written proposals and instructions, and FWS accepts no responsibility or liability:-
  - a) for use of this report by any party other than the person for whom it was commissioned, or;
  - b) for the consequences of the report being used for any purpose other than that for which FWS was instructed to prepare it.

Should any third party wish to use or rely upon the contents of the report, written approval from FWS must be sought.

- 2 All information supplied by the Client, the Client’s staff and professional advisers, local authorities, other statutory bodies, investigation agencies and publicly accessible databases, shall be provided to FWS in writing, and is accepted as being correct unless otherwise specified in writing by the discloser of the information.
- 3 The conclusions and recommendations in this report represent the professional opinions of FWS derived from currently accepted industry practices, and through the exercising of reasonable skill and care to be expected of a professional geosciences and environmental consultancy of similar size and experience. The assessments and judgments given in this report are directed by and limited to both the finite data on which they are based and the proposed works to which they are addressed.
- 4 Environmental and geotechnical desk studies comprise a study of available information obtained from various identified sources, authorities and parties. The information reviewed cannot be exhaustive and has been accepted in good faith as providing representative and true data pertaining to site conditions. For clarity, no independent verification of this data is carried out by FWS and it is accepted at face value. Any identified risks in desk study reports are perceived risks based on the information available at the time. Actual risks can only be assessed after carrying out a thorough physical investigation of the site that serves to validate such identified risks.
- 5 Data acquisition during site investigations is subject to the limitations of the methods of investigation used, site conditions and access constraints. Exploratory holes undertaken during fieldwork, particularly boreholes and/or trial pits, investigate a small volume of ground in relation to the size of the site and thus can only provide an indication of site conditions. The opinions provided and recommendations given in this report are based on the desk study information and ground conditions apparent at the site of each of the exploratory holes. There may be ground conditions elsewhere onsite that have not been disclosed by the investigation and which therefore have not been taken into account in this report. FWS will take all due care and make commentary on the adequacy of data collection and therefore the ability to highlight the presence or otherwise of exceptional conditions.
- 6 Owing to the natural variation of the systems that are being investigated, and the anthropological impact similarly changing through time, the findings and opinions in this report are relevant to the dates of the site works and should not be relied upon to represent conditions after a reasonable passing of time. Site conditions will change over time due to natural variations and human activities. The comments made on groundwater, surface water and soil gas conditions are based on observations made at the time that the site work was carried out. It should be noted that these conditions will vary owing to seasonal, tidal and meteorological effects. Variation in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, or subsequent developments or activities on the site or adjacent area.
- 7 The scope of the investigation, as agreed between FWS and the Client, was undertaken based on the specific development proposals of the Client and may be inappropriate to another form of development or scheme.
- 8 The opinions expressed in this report regarding contamination, geotechnical and/or waste assessments are based on simple statistical analysis and comparison with available guidance values. No liability can be accepted for the retrospective effects of any changes or amendments to these values.