



# Dust Management Plan

Buckton Vale Quarry Access Road

Report No. K4859-ENV-R008-00

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Churchill Enviro Limited

# Document Control

## Project

Buckton Vale Quarry Access Road

## Client

Churchill Enviro Limited

## Document

Dust Management Plan

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# Contents

<b>[1] Introduction.....</b>	<b>1</b>
[1.1] Report Objectives .....	1
<b>[2] Site Operations .....</b>	<b>1</b>
[2.1] Site Location, History and Proposed Site Activities.....	1
[2.2] Site Access & Primary Infrastructure.....	4
<b>[3] Potential Dust Emission Sources .....</b>	<b>4</b>
[3.1] On-Site Emission Sources.....	4
[3.2] Control Measures for On Site Dust Emissions .....	5
[3.3] Remedial Actions for On-Site Dust Emissions .....	6
[3.4] Airborne Pathways.....	7
[3.4.1] Meteorological Conditions .....	7
<b>[4] Potential Sensitive Receptors.....</b>	<b>8</b>
[4.1] Receptor Locations.....	8
[4.2] Receptor Types .....	11
[4.2.1] Protected Species, Habitats, Watercourses and Waterbodies.....	11
[4.2.2] Residential, recreational, industrial and commercial premises. ....	11
[4.2.3] Highways and Footpaths .....	11
<b>[5] Dust Risk Assessment .....</b>	<b>12</b>
[5.1] Site Dust Emissions.....	12
<b>[6] Community Engagement, Reporting and Contingencies.....</b>	<b>15</b>
[6.1] Overview.....	15
[6.2] Monitoring.....	15
[6.2.1] Off-Site Dust .....	15
[6.2.2] PM <sub>10</sub> Monitoring .....	16
[6.3] Complaints Process.....	16
[6.4] Means of Contact.....	17
[6.5] Complaints Investigation.....	18
[6.6] Contingency and Emergency Plans .....	18

[6.7]	Abnormal Events .....	18
[6.7.1]	Strong Winds .....	18
[6.7.2]	Hot/Dry Conditions.....	18
[6.7.3]	Implementation of the Contingency Plan and/or Emergency Plan .....	19
[6.8]	Records and Reviews .....	19
[6.9]	Communication Tools .....	19

**Appendices**

- Appendix A Particulate Monitoring Check and Action Report
- Appendix B Complaint Form

**Drawings**

- 4859/1/004 Site Location
- 4859/1/002 Proposed Upper Bench Access Road
- 2164-01-08 Indicative Phasing

## [1] Introduction

### [1.1] Report Objectives

This Dust Management Plan (DMP) has been prepared in support of a bespoke permit application for a recovery activity which will be operated by Churchill Enviro Ltd (the Operator) to construct an access road at Buckton Vale Quarry, Carrbrook, Stalybridge, Greater Manchester, SK15 3RD (the Site).

Planning Permission 18/00826/FUL was approved on 14<sup>th</sup> December 2020 to extend the timescale for extraction of the remaining mineral reserve at Buckton Vale Quarry until 2042. The majority of the remaining reserve is located adjacent to the northern boundary of the site. The full depth of this material (approximately 32 m) has yet to be quarried and this represents a significant volume of valuable undisturbed material (approximately 960,000 m<sup>3</sup>).

The sole purpose of this DMP is to identify which aspects of the recovery activity are likely to cause a potentially harmful emission of uncontrolled dust and how these emissions will be minimised. This document follows current Environment Agency guidance<sup>1</sup> for the control and monitoring of emissions and the Dust Emissions Management Plan template (version 10, 2018) compiled by the Environment Agency's Waste and Air Quality Working Group.

A copy of the DMPs will be included in the Site's Environmental Management System (EMS) held electronically on the company's internal database and all members of staff will have access to this document.

This DMP makes reference to the following documentation submitted as part of the Permit application:

- ByrneLooby (November 2021) Waste Recovery Plan (WRP) report ref. K4859/ENV/R001/00
- ByrneLooby (August 2022) Environmental Risk Assessment (ERA) report ref. K4859/ENV/R005/00.

## [2] Site Operations

### [2.1] Site Location, History and Proposed Site Activities

The Site is situated in Carrbrook, approximately 4km Northeast of Stalybridge, Tameside. The Site is located at Grid Reference SD992327 01457 and is a well-established gritstone and sandstone quarry operating under permission reference 04/01800/FUL. It is characterised by two large voids described as the eastern and western voids. The Site office and weighbridge are located in the western void close to the Site entrance. The Site entrance is a private road linking the Site to Castle Lane. The Site location is shown on drawing referenced 4859/1/004.

<sup>1</sup> Control and monitor emissions for your environmental permit - GOV.UK ([www.gov.uk](http://www.gov.uk))

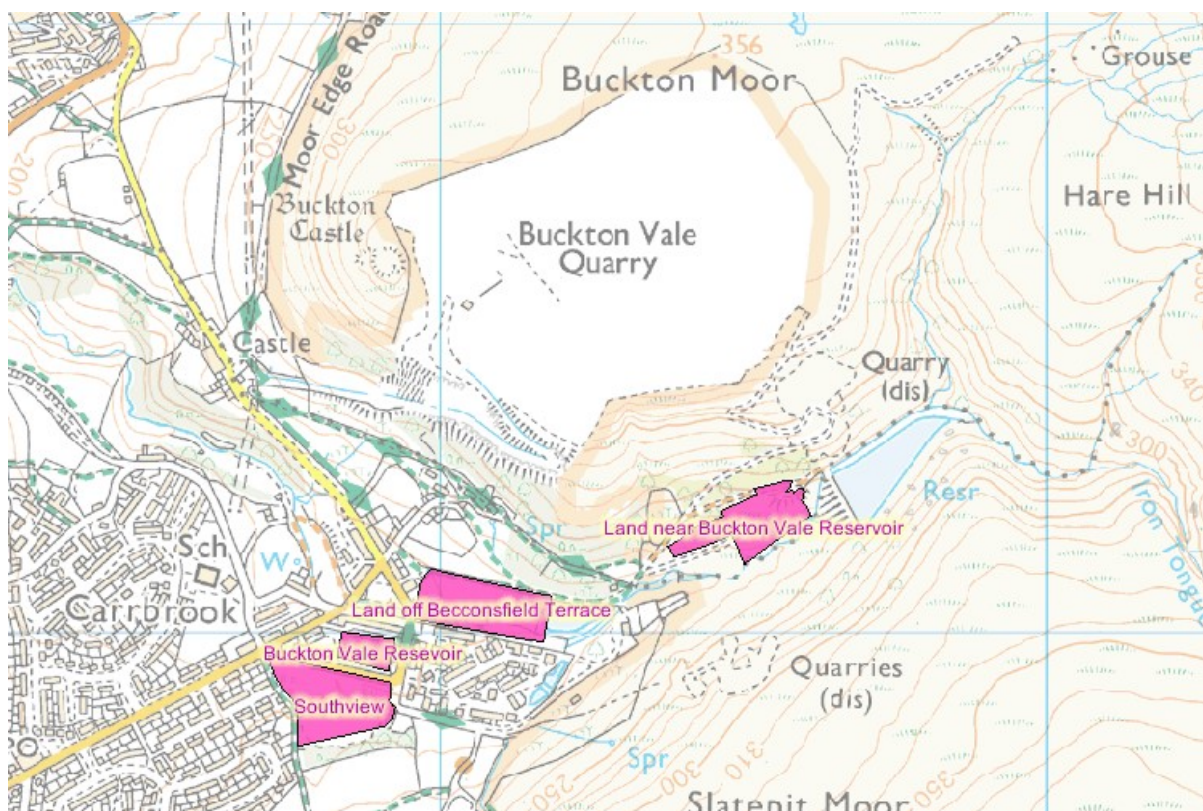
The Site is located in a largely rural location approximately 40m from the Alpine Pike and Buckton Moor (South) on it's northern, eastern and western boundaries. Footpaths are located within 70m of the site to the west. The nearest residential properties are located off Car Lane ~325m to the south of the site.

Drawing reference 4859/1/002 shows the current ground levels around the proposed access road. The elevation of the lowest point of the proposed road is approximately 299 mAOD. This inclines in a north-east direction to around 342 mAOD.

The Site has three existing Standard Rules (SR) 2015 No.39 permits (referenced EPR/WE0949AB/A001, EPR/CB3301TX and EPR/GB3004XN) which allow the construction of a surface water retaining bund, stabilisation works and a rock trap. The Operator proposes to surrender permits EPR/CB3301TX prior to construction of the access road to avoid uncertainty about the extent of each deposit. Permit EPR/WE0949AB was issued in March 2022 and will be an independent feature to the access road.

The Operator is not aware of any other former waste management activities within the Site. Information gained previously from the Agency's website indicates there are records of historic landfilling (unspecified) to the South of the Site immediately to the West of Buckton Vale Reservoir. Additionally, a further three areas have been highlighted to the south, on the eastern edge of Carrbrook. The areas of historic landfilling are highlighted on Figure 1 below.

**Figure 1 – Site Location and Surrounding Features**

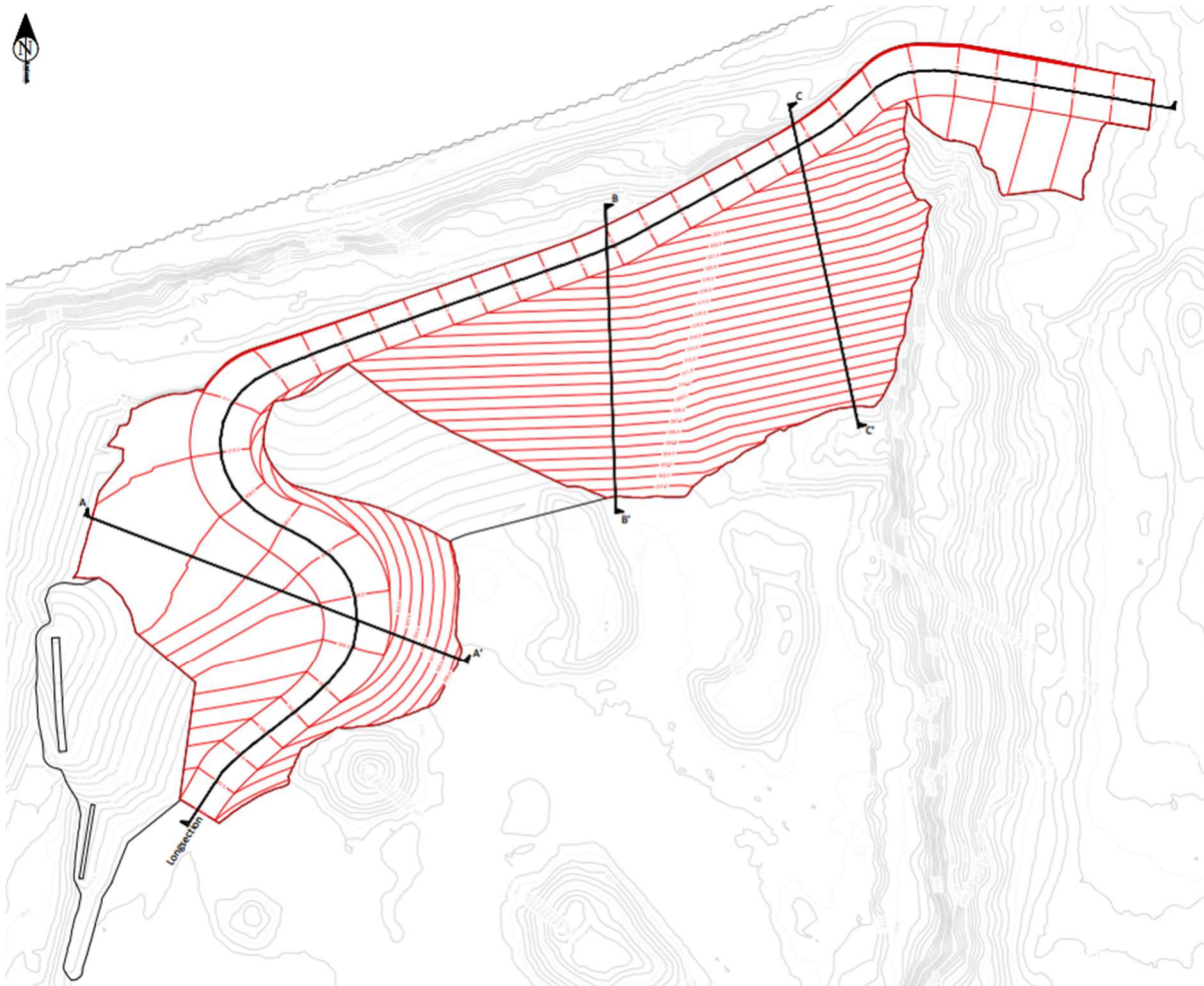


A substantial quantity of overburden from elsewhere in the quarry was placed on the northern boundary of the Site over the area of remaining mineral reserve. Previous access roads have since been removed with progression of the quarrying activities and it is no longer possible to access the

overburden which must be removed prior to quarrying the mineral. The overburden will ultimately be used in the low-level restoration scheme for the site.

To access the overburden and the mineral underneath the proposed access road is to be constructed within the north-western area. This road will ascend along the northwest and north quarry wall following existing quarry features where possible, as shown on drawing reference 4859/1/002.

**Figure 2 – Buckton Vale Access Road**



The proposed access road will be used to extract the quarry overburden which will be placed in stockpiles elsewhere in the quarry. The Operator will then either blast or mechanically extract the remaining reserve downwards. This will require the access road to also be gradually reduced in level assuming it will continue to be used to access the mineral. The material in the road will also be stockpiled on site with the overburden for eventual use in the low-level restoration scheme. The types of material needed to construct the road will require similar geotechnical and chemical properties (i.e. inert) as the overburden which will also make it suitable for use onsite.

The Site will be operated and managed by Churchill Enviro Ltd with a well-established Site Environmental Management System (EMS) in place which includes procedures for the maintenance and cleaning of access routes to and from the Site in addition to waste acceptance procedures and handling techniques.

The site is not located within 2km of an air quality management area (AQMA) for PM<sub>10</sub>.

## [2.2] Site Access & Primary Infrastructure

The site has a single point of access via Castle Lane public highway with a wheel washing and underside chassis cleaning facility provided for all outgoing haulage vehicles, prior to the site exit to ensure mud or dust are not carried onto the public highway. All haulage vehicles will travel along Castle Lane, onto Buckton Vale Road before reaching the B6175 at Carrbrook.

## [3] Potential Dust Emission Sources

### [3.1] On-Site Emission Sources

A summary of the materials to be brought onto site as part of the recovery activity and where it is to be delivered is shown below in Table 1.

**Table 1 – Destination and Proposed Waste Types**

General Waste Description		Tonnage	Location
<b>01 Waste resulting from exploration, mining, quarrying and physical and chemical treatment of minerals</b>		266,700	Direct to Access Road
01 01 02	Wastes from mineral non metalliferous excavation		
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 06		
01 04 09	Waste sand and clays		
<b>10 wastes from thermal processes</b>			
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)		
10 13 14	Waste concrete		
<b>17 Construction and demolition wastes</b>			
17 01 01	Concrete		
17 01 02	Bricks		
17 01 03	Tiles and ceramics		
17 01 07	Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06		
17 05 04	Soil and stones other than those mentioned in 17 05 03		
<b>19 Wastes from waste management facilities</b>			
19 12 09	Minerals (for example sand, stones) only		
<b>20 Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>			
20 02 02	Soil and stones		

As far as reasonably practicable, wastes will be deposited directly to the access road. Stockpiling of incoming wastes will occur only under exceptional circumstances and on a temporary basis, with all waste stockpiling to be undertaken within the quarry void where suitable.



The waste materials to be used for the access road will be predominantly sourced from local development projects. It is anticipated that a significant proportion of the material accepted will originate from greenfield excavations. The bulk of the wastes to be accepted at the site for the recovery activity, will comprise the EWC codes currently permitted by Standard Rules permit reference SR2015 No.39 as displayed in Table 1.

Fugitive dust emissions can potentially arise from the following site activities:

- Transport of waste to site;
- Unloading / deposition of waste material;
- Wind-blown dust accumulated on site surfaces; and,
- Vehicle movements on dusty roads.

Fugitive dust emissions may present a dust nuisance to surrounding human receptors or cause an adverse impact if excessive deposits settle on sensitive habitats. Additionally, smothering of sensitive plant life or surface water receptors can occur if sediment is able to accumulate.

The potential for fugitive emissions during recovery operations are expected to be consistent with emissions during quarrying operations.

All incoming materials will be subject to strict waste acceptance procedures as outlined in the Site's Environmental Management System (EMS). Waste acceptance is a structured hierarchy with appropriate points of control for the identification and validation of wastes for recovery at the site and is summarised as follows:

### **[3.2] Control Measures for On Site Dust Emissions**

Staff at the weighbridge will enforce strict waste acceptance protocols to manage the deposit of potentially dusty materials. On-site verification of wastes will also be undertaken as loads arrive on site consisting primarily of reviewing associated paperwork. If the load is suspected of containing potentially dusty waste, an inspection of the load will be carried out if possible. Any excessively dusty or friable materials that could potentially cause emissions of fugitive dust will only be accepted if the waste is conditioned with water prior to or during deposition.

The operator may restrict or suspend activities most likely to generate dust, or refuse inputs that may contain excessive quantities of loose, light material.

All vehicles will use wheel and underside chassis cleaning facilities to prevent mud and dust being deposited on the public highway. The facility will be appropriately maintained to ensure its effectiveness. Staff at the weighbridge will check departing vehicles to ensure correct use of the vehicle washing facilities occurs at all times and will direct vehicles back through the wheel wash if they do not consider the vehicle to be clean.

All vehicles transporting materials to and from Site will be arrive at site sheeted and remain so until tipping. Internal haul roads will consist of compacted material, regularly maintained by grading to minimise the generation of dust.

The on-site speed limit of 10mph will be enforced and internal site roads will be maintained, with signage clearly visible along all access roads. If necessary, a tractor with a water bowser and/or road sweeper will be used to help minimise dust emissions from the operation, with access to all areas of the site to be maintained. The condition of the site haul road

and entrance road will be observed as part of the regular site walkover checks. Any problems observed will immediately be reported to the Site Manager (or nominated deputy) who will be responsible for implementing any necessary remedial plan.

Limited stockpiling will be conducted with the incoming material to be placed directly and compacted upon arrival. Where stockpiling is deemed necessary, this will occur only within the quarry void.

Consideration will be given to the selection of the deposition area in respect of the prevailing wind direction so as to minimise exposed areas. Site operatives supervising deposit of the material will be in constant communication with the weighbridge to advise them if dusty loads incorrectly described by the supplier have been accepted. Restrictions will be imposed on the deposition during excessively dry and windy conditions for example, if during dry conditions wind-blown dust is observed to be a problem, haul roads and areas of waste deposition will be wetted down.

Any problems observed will immediately be reported to the Site Manager (or nominated deputy) who will be responsible for implementing any necessary remedial plan.

Implementation of the DMP will be the responsibility of the Site Manager (or nominated deputy). It will form part of the Site Environmental Management System (EMS) and will therefore be part of the staff induction process ensuring staff competency. Internal audits of the management system will be undertaken regularly to ensure the training needs of site staff are met. All employees will receive formal training of the contents of this DMP.

The DMP Plan will be subject to periodic review should it be required.

### **[3.3] Remedial Actions for On-Site Dust Emissions**

In the unlikely event that unacceptable dust emissions arise from site operations or vehicle movements, the following remedial actions will be considered and where deemed appropriate, undertaken:

- Operations deemed to be generating excessive off-site dust will be reduced or suspended until effective remedial actions have been taken or weather conditions deemed to be causing the unacceptable dust levels, improve;
- Additional dust suppression including use of tractor and water bowser will be employed onto affected areas of the site;
- Speed limits may be reduced;
- Where practicable, alternative routes for vehicular movement will be considered to reduce the impact of dust on receptors at risk;
- Additional cleaning of vehicles at the site wheel wash will be required where deemed necessary to avoid dust being emitted onto public highways. A mobile pressure washer will be made available for drivers;
- Waste acceptance and handling procedures will be reviewed if re-consideration of incoming wastes and/or its placement is required;
- Should a complaint be received, the complaints process detailed in Section [6.3] below will be implemented and the appropriate investigation and corrective actions will be undertaken. Checks will be undertaken during the regular site walkover surveys;

- The management and monitoring of dust and associated checks will be maintained in the site log for periods of adverse weather and the appropriate check sheet. A copy of the 'Particulate Monitoring Check and Action Report' is provided in Appendix A. This record will include the following details: a record of all dust events including date, meteorological conditions at the time of the observation and the cause of the problem; a record of all complaints; use of site dust suppression, speed limit checks, haul road quality check and details on action taken and any subsequent changes to operational procedures.

Should a complaint be received, monitoring of dust emissions using a frisbee type deposit dust gauge may be undertaken, should it be deemed necessary.

### **[3.4] Airborne Pathways**

#### **[3.4.1] Meteorological Conditions**

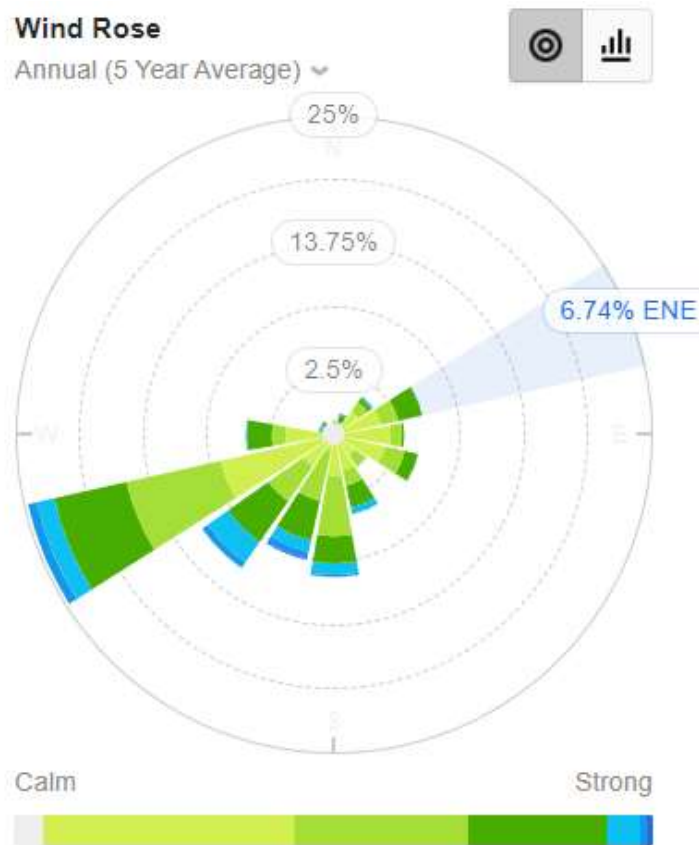
The potential pathways for dust and particulates to reach sensitive receptors are via the air or over land, namely via the wind. Transit of airborne emissions will be determined by the prevailing wind direction and physical obstructions.

Wind statistics for a 5-year period have been taken from the closest weather station, Bingley<sup>2</sup> (Figure 3). The data has been used to determine the prevailing wind direction for the Site. The windrose shows that the dominant wind direction is from the west-southwest towards the east-northeast.

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<sup>2</sup> Bingley Wind Forecast, West Yorkshire BD16 2 - WillyWeather

Figure 3 – Wind Rose for Bingley Samos



## [4] Potential Sensitive Receptors

### [4.1] Receptor Locations

When identifying the receptors, the closest and the most sensitive (if different from the closest) have been considered in each direction from the hazard. Account has been taken of the mechanism of transport to the sensitive receptor e.g. proximity to highway access / egress points for mud and wind direction for airborne dust. Recent wind direction from Bingley has been used to establish hazard pathways to adjacent to the site.

The probability of exposure is determined by the distance of the receptor to the site and the likelihood of the hazard reaching the receptor i.e. frequency of prevailing wind in that direction. The probability of exposure is irrespective of the type of hazard presented.

A review of the sensitive receptors has been completed in relation to the site and have been listed in Table 2 below. The nearest sensitive receptors to the site are identified in Figure 4.

The frequency the wind blows toward potentially sensitive receptors is detailed in Table 2.

In accordance with the Environment Agency guidance template<sup>3</sup> for dust management, receptors within a 1km of the site boundary are likely to be impacted by dust emissions have been considered.

A review of other local sources of dust and particulates has been completed in relation to the proposed access road is shown in Table 3. These are considered low risk receptors due to their nature and potential to generate dust.

**Table 2 – Sensitive Receptors within 1km of Buckton Vale Quarry Access Road**

Receptor Reference	Receptor	Category	Direction from Site	Approximate distance from the site boundary (m)	Frequency Downwind (%)
1	Alphine Pike & Buckton Moor (South)	Local Wildlife Site / Protected Habitat (Upland Heath)	40	N, E & W	1.7-23.4
2	Footpaths	Public Right of Way	65 - .365	E – W	6.7 – 5.2
3	Buckton Castle Ruins	Scheduled Monuments	70	W	5.2
4	Moor Edge Road	Road	290	W	5.2
5	Properties off Car Lane	Residential	325	S	1.0
6	Castle Lane	Road	420	SW	3.5
7	Properties off Castle Lane	Agriculture / Residential	430	SW	3.5
8	Castle Clough & Cowbury Dale	Local Nature Reserve	420 - 470	SW - S	3.5 – 1.0
9	Stayley Brook	Water Course	475	SW	3.5
10	Intake Cottage	Residential	490	NNW	6.0
11	Tamyon Brook	Water Course	360	NW	2.9
12	Carr Lane Animal Farm	Commercial/Agriculture	380	SE	1.3
13	New Harehill Clough	Water Course	450	E	6.7
14	Bowling Green	Public Recreation	464	S	1.0
15	Deciduous Woodland	Protected Habitat	510	S&W	1.0-5.2
16	Properties off Calico Crescent	Residential	545	S	1.0
17	Properties off Swallow Lane	Residential	598	SW	3.5
18	Properties off School Lane	Residential	610	SW	3.5
19	Properties off Moorgate Road	Residential	634	SW	3.5
20	Properties off South View	Residential	634	S	1.0
21	Huddersfield Road	Road	560	NW	2.9
22	Residential and Commercial Properties in Mossley	Residential/Commercial	620	NW	2.9
23	Slatepit Moor	Public Recreation	727	SE	1.3

<sup>3</sup> Environment Agency Example Dust and Emissions Management Plan vr 9.

Figure 4 – Location of Sensitive Receptors<sup>4</sup>

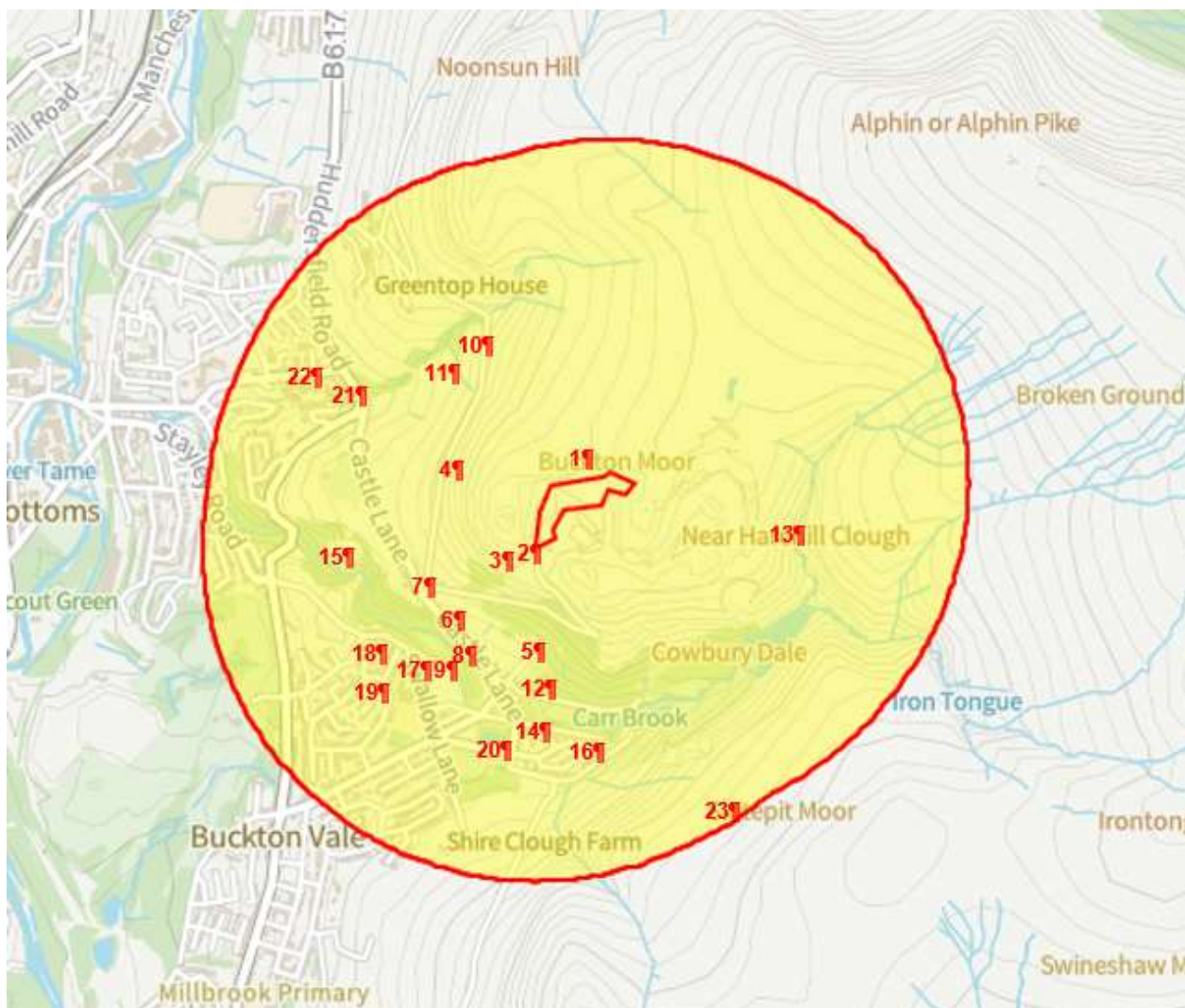


Table 3 – Other Local Sources of Dust and Particulates

Address and Table 2 Receptor Reference	Type of Business	Approximate distance from the site boundary (m)
Moor Edge Road (4)	N/A-Road	290
Castle Lane (6)	N/A-Road	420
Farmland off Castle Lane (7)	Agriculture	430
Carr Lane Animal Farm (12)	Commercial/Agricultural	380
Huddersfield Road (21)	N/A-Road	560

<sup>4</sup> MAGIC (defra.gov.uk)

## [4.2] Receptor Types

### [4.2.1] Protected Species, Habitats, Watercourses and Waterbodies

A 'Conservation & Heritage Screen' was provided by the Agency (reference: EPR/JB3104KX/A001). No European Sites, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserves (LNR), Ancient Woodland, Scheduled Ancient Monument or Great Crested Newts were identified. It did establish a Local Wildlife Site (LWS) Alpine Pike & Buckton Moor (South) and protected habitats (Upland Heath) surrounding the Site. Both are included in Table 2.

A search of designated sites within 2km of the site was conducted using the Environment Agency's Magic Maps website<sup>4</sup> established that the Huddersfield Narrow Canal SSSI is situated ~1.2km to the east of the site. Priority deciduous woodland habitats were identified to the west and south of the site as identified in Table 2.

### [4.2.2] Residential, recreational, industrial and commercial premises.

The potential emissions from the site are likely to have a similar impact on persons occupying residential, recreational, industrial and commercial premises within 1km of the Site.

Exposure of emissions to persons at industrial / agricultural or commercial premises may be lower as they are more likely to be inside during the working day or they may be transient visitors to the premises. Certain industrial / agricultural premises may generate similar emissions similar to the site as specified in Table 3.

Fine dust particulates may be able to travel further than larger particles that may settle on surfaces nearby. Finer particulates may elicit an unpleasant or harmful respiratory effect from sensitive individuals, whilst settlement of dust may be unsightly or damaging by smothering to sensitive flora. Dust is less likely to affect internal spaces; however, a sustained source of fine suspended particulates may eventually permeate inside buildings.

The proposed permitted activities are unlikely to generate dust in such sufficient quantities that a plume would be visible beyond the site boundary. The proposed working hours will be similar to surrounding business and may affect persons in residential housing but have little effect on persons in businesses operating to normal working hours e.g. 0900 to 1700.

The only receptors that are classed as significant, (i.e. residential) are located >325m from the site and are downwind of the proposed activity ≤6.0% of the time. For conservatism this management plan assumes the residences are occupied during the operational hours of the site by members of the public most sensitive to emissions from the site. It is likely that the combination of waste type and operational controls listed in Table 4, distance and the prevailing wind direction prevent most potentially harmful emissions from reaching receptors. Consequently, residential properties surrounding the site are considered to be at low risk of being affected by dust emissions.

### [4.2.3] Highways and Footpaths

The closest receptors to the Site with regards to pedestrians are the footpaths surrounding the site >65m from the east to the west. These footpaths are downwind at a frequency of just 5.2-6.7% of the time, however pedestrians will be most at risk of dust emissions whilst traversing the Alpine Pike & Buckton Moor. Moor Edge Road users 290m west of the site, present their own source of

dust and particulates and therefore are unlikely to be sensitive to dust emissions, however users could be at risk of reduced visibility created by dust emissions from the site.

The control measures listed in Table 4 are designed to reduce the risk of exposure to these most sensitive receptors, with the risk reduced from high to low with their implementation as part of the recovery scheme.

## **[5] Dust Risk Assessment**

### **[5.1] Site Dust Emissions**

The risk potential to each receptor as identified in Section [4] from dust potentially generated from the site is presented in Table 4 below. This table evaluates the unmitigated risk to sensitive receptors from uncontrolled dust emissions and the control measures to be implemented at the site in order to minimise and mitigate this risk, producing a revised residual risk to receptors.

A low “residual risk” is detailed for all potential receptors in the vicinity of the site based on the appropriate risk management measures adopted.



**Table 4 - Fugitive Dust Emission Risk Assessment and Management Plan**

Hazard / Pathway	Receptor				Probability of Exposure	Unmitigated Consequence	Unmitigated Risk	Risk Management	Mitigated Risk
	No.	Dist* (m)	Direc <sup>□</sup>	Freq** (%)					
Fugitive dust emissions generated by: Vehicle movements and handling of waste on site	1	40	N, E & W	1.7-23.4	High – close proximity to Site, frequently downwind	Medium – potential deposition on sensitive vegetation	Medium	Site staff will enforce strict waste acceptance protocols to manage the deposit of potentially dusty wastes.	Low
	2	65 - .365	E – W	6.7 – 5.2	High – close proximity to Site, occasionally downwind	Medium – dust nuisance to visitors	Medium		
	3	70	W	5.2	High – close proximity to Site, occasionally downwind	Medium – transient dust annoyance	Medium	On site vehicle speed limit and maintenance of site roads ensure that vehicle movements do not generate excessive dust. Haul roads and other areas shall, when necessary, be sprayed with water during dry weather to prevent dust.	
	4	290	W	5.2	Medium – proximity to Site, occasionally downwind	Low – transient dust annoyance	Medium		
	5	325	S	1.0	Medium – proximity to Site, rarely downwind	High – dust nuisance to residents	Medium		
	6	420	SW	3.5	Low – distant to Site, occasionally downwind	Low – transient dust annoyance	Low	Daily visual inspection by appropriate site staff at suitable locations taking account of the prevailing wind direction. Daily consideration given to tipping locations based on prevailing wind.	
	7	430	SW	3.5	Low – distant to Site, occasionally downwind	High – dust nuisance to residents	Medium		
	8	420 - 470	SW - S	3.5 – 1.0	Low – distant to Site, occasionally downwind	Medium – potential deposition on sensitive vegetation	Medium	All vehicles will use wheel and underside chassis cleaning facilities to prevent materials being deposited on the public highway. The facility will be appropriately maintained to ensure its effectiveness. Site staff at the weighbridge will check departing vehicles.	
	9	475	SW	3.5	Low – distant to Site, occasionally downwind	Medium – potential for sediment to accumulate	Medium		
	10	490	NNW	6.0	Low – distant to Site, occasionally downwind	High – dust nuisance to residents	Medium		
	11	360	NW	2.9	Low – distant to Site, rarely downwind	Medium – potential for sediment to accumulate	Medium	All vehicles transporting materials to and from Site will be sheeted. All vehicles are to be regularly maintained and enclosed where possible.	
	12	380	SE	1.3	Low – distant to Site, rarely downwind	Low – transient dust annoyance	Medium		
	13	450	E	6.7	Low – distant to Site, occasionally downwind	Medium – potential for sediment to accumulate	Medium	Imported materials to be placed directly within the access ramp.	
	14	464	S	1.0	Low – distant to Site, rarely downwind	Low- transient dust annoyance	Medium		
	15	510	W	5.2	Low – distant to Site, occasionally downwind	Low – potential for sediment to accumulate	Low	Where stockpiling is deemed necessary, this will occur within the lower depth profile of the quarry void and deposition heights will be minimised.	
	16	545	S	1.0	Low – distant to Site, rarely downwind	Low – transient dust annoyance	Low		
	17	598	SW	3.5	Low – distant to Site, occasionally downwind	Low – transient dust annoyance	Low		
	18	610	SW	3.5	Low – distant to Site, occasionally downwind	Low – transient dust annoyance	Low		
	19	634	SW	3.5	Low – distant to Site, occasionally downwind	Low – transient dust annoyance	Low		
	20	634	S	1.0	Low – distant to Site, rarely downwind	Low – transient dust annoyance	Low		
	21	560	NW	2.9	Low – distant to Site, occasionally downwind	Low- transient dust annoyance	Low		

Hazard / Pathway	Receptor				Probability of Exposure	Unmitigated Consequence	Unmitigated Risk	Risk Management	Mitigated Risk
	No.	Dist* (m)	Direc <sup>□</sup>	Freq** (%)					
	22	620	NW	2.9	Low – distant to Site, occasionally downwind	Low- transient dust annoyance	Low		
	23	727	SE	1.3	Low – distant to Site, rarely downwind	Low – unlikely sediment will accumulate	Low		

## [6] Community Engagement, Reporting and Contingencies

### [6.1] Overview

Prevention will be viewed as the most effective means of controlling dust before an adverse impact occurs from uncontrolled emissions. The Source → Pathway → Receptor model determined above allows for the identification of the critical control points where dust can arise, how it can travel to a receptor and the likely impact.

The performance of a dust management system will ultimately be judged by the impact of the recovery activity on the receptors. Should complaints be received, a procedure will be in place to effectively deal with the issue in a sensitive, efficient and auditable manner.

The controls for each potential dust source are detailed in previous sections of this report. The management of those controls will be based on the on-going monitoring regime on site. The monitoring regime can work as an early warning system against potential problems (e.g. meteorological monitoring) or a diagnostic tool to establish the cause of a dust event (e.g. perimeter monitoring). Checks will be undertaken as required and at least daily.

### [6.2] Monitoring

#### [6.2.1] Off-Site Dust

The Site Manager will be responsible for ensuring that regular visual inspections are made of the site and its perimeter in order to identify any sources of dust and to establish whether any dust has left the site. This will include dust arising from vehicles arriving at site and from the facility itself.

A dust assessment will be completed for each inspection (Appendix A) during the site walkover checks and all site personnel will be responsible for reporting dust problems as soon as practicable to the Site Manager or the assigned deputy/supervisor. An environmental occurrence/non-conformance reporting system has been implemented by the Operator to enable the efficient documentation, investigation and mitigation to occur and initiate corrective and further preventative actions.

The following locations will be targeted for dust monitoring by the site staff:

- Weighbridge or waste reception area (continuous monitoring of vehicles);
- Point of waste deposition (continuous during deposition); and
- Subject to prevailing wind direction (i.e. up and down wind), appropriate areas of the site perimeter including Buckton Moor.

During adverse conditions, as deemed appropriate by the competent site operatives / site management, an additional watching brief will be considered at nominated locations as required for visual observation monitoring purposes. This may involve deployment of staff at more than one location at the discretion of the site manager.

In the event that dust is reported to be excessive and / or dust is observed leaving the site boundary the site manager will be contacted (if not directly involved in the observations) and operations will be temporarily halted. Alternative options will be considered and if emissions are excessive, operations will be temporarily halted.

The following information will be recorded during each round of monitoring:

- Name of assessor and position at facility e.g. weighbridge clerk etc.;
- Nature of any problem identified including location, source, date, time, duration, prevailing weather conditions and likely cause;
- On-site activities and operational condition at the time of the monitoring visit (this should include any of the abnormal events detailed in Section [6.8] below);
- Records of the likely source of any dust, even if it is not from the facility;
- Details on the corrective action taken, realistic timeframes for remedial works and any subsequent changes to monitoring and operational procedures.
- In the event of adverse conditions, information is to be recorded on the Particulate Monitoring Check and Action Report (Appendix A).

The Site Manager will be informed immediately of any findings of dust attributed to the Site and will authorise remedial measures to be taken.

The operator will ensure appropriate controls are in place during extreme weather conditions to prevent dust or particulates spreading beyond the site boundary, including restricting or suspending activities most likely to generate dust and particulates. Additionally, the operator will ensure stockpiles are minimised in size appropriately contained/sealed and dampened down to reduce windblown dust as necessary where stockpiling cannot be avoided.

### [6.2.2] PM<sub>10</sub> Monitoring

Consideration has been given to the possible requirement for PM<sub>10</sub> monitoring at the site. The activities on site depositing inert waste to create an access ramp will be unlikely to produce significant volumes of dust and there will be limited activities associated with this activity that will involve further agitation of the waste. The site is not located within a PM<sub>10</sub> Air Quality Management Area (AQMA) and therefore monitoring for PM<sub>10</sub> is not required.

### [6.3] Complaints Process

Any complaints received at the facility or via the Regulatory Bodies including the Environment Agency and Local Authority, will be recorded using the form provided in Appendix B. This will instigate further visual dust monitoring at the location of the complaint and on-site to determine the extent and location of the dust generating materials and/or processes. Where possible, as much information and detail about the complaint will be recorded, whether this is from the relevant authority or a complaint direct to the site. This information will assist in the investigation and determining the source of the dust e.g. differentiating between potential dust from the site or other off-site activities.

All complaints and queries will be logged in accordance within the Site management system as soon as is practicably possible. All complaints logged will be subject to investigation, and complainants responded to within 48 hours of receipt, where possible and updated on the progress of the complaint investigation. All responses will be through trained and experienced staff.

An initial investigation of the complaint will be conducted to clarify the source of the dust. In the event that a substantiated dust complaint is received arising from the facility, additional monitoring will be undertaken at the nearest sensitive receptors. The person conducting the

survey shall make note of any dust at each monitoring point including those not of obvious Site origin.

Complaints regarding dust from the facility will be investigated in accordance with the protocol, and appropriate records maintained which may include:

- Complaints received including name and contact details of complainant (if known), and complainants description of the dust;
- Nature of problem including date, time, duration, prevailing weather conditions and cause of the problem;
- On-site activities and operational conditions at the time of the complaint;
- Records of the likely source of the dust, even if it is clearly not from the facility;
- Details on the corrective action taken and any subsequent changes to monitoring and operational procedures; and,
- The Environment Agency will be proactively informed by the Operator of the complaint and the Operator will confirm to the best of its knowledge the information described above.

The Operator will ensure that the complainant has all the relevant contact details of the site (i.e. the Site Manager) and the officer responsible at the Environment Agency. The Operator will be in regular contact with the complainant and the Environment Agency whilst the cause of the dust is being investigated and remediated.

If repeated substantiated complaints are received, operations will temporarily cease while the issue is investigated so it can be corrected.

An evaluation of the effectiveness of the techniques used will be carried out on completion of any remedial measures, or if the complaints persist. Records of the above will be retained by site for future reference.

#### **[6.4] Means of Contact**

The facility will be readily contactable to outside organisations and to members of the public. The site signage board (placed in a readily visible location) will contain the necessary contact details for both the site operations and Environment Agency. The company website will also contain the necessary contact details for the Site.

Any complaints received directly to site will be notified to the Environment Agency. Should an off-site issue arise, therefore, the complainant has a readily available means of getting in touch with the Operator.

Operations do not occur “out of hours”, as such no out-of-hours arrangements are necessary. However, the site notice board does include an emergency number for out of hours if needed.

Contact details are made clearly visible on the site notice board, located at the site entrance.

A community liaison group has been established for the purpose of providing a means of communication between local residents and Churchill Enviro Ltd.

## [6.5] Complaints Investigation

In the event that dust is found to be causing a nuisance and originating from the Buckton Vale Quarry recovery activity, as determined and confirmed by investigation into off-site complaints, or during routine monitoring, measures will be taken to determine the source of this dust and the following course of action shall be undertaken:

- Additional dust monitoring to identify the extent of the dust emission and potential cause of the dust i.e. waste material and/or activity;
- Examination of the operational activities at the time of the dust complaint;
- Examination of the meteorological conditions at the time of the complaint;
- Carry out a review of the operational procedure and controls and instigate any control measures immediately following identification of the problem; and,
- Further monitoring will be carried out to ensure the issue has been addressed and to monitor the effectiveness of any control measures undertaken.

All complaints whether they be made directly to Site or through a regulatory body, will be investigated.

## [6.6] Contingency and Emergency Plans

Control and mitigation measures for each stage of the access road construction are summarised in Table 4.

## [6.7] Abnormal Events

This Dust Management Plan assumes that the facility will be running under expected operational conditions. There are however circumstances that could result in a dust emission from the site if not appropriately considered in advance, discussed below.

### [6.7.1] Strong Winds

Visual inspection of the site infrastructure will be undertaken and recorded as required and at least daily. Additional inspection of damage resulting from high wind events will also be undertaken and contingency actions identified in this Management Plan will be considered should high wind conditions result in escape of significant dust emissions.

### [6.7.2] Hot/Dry Conditions

During periods of warm weather, the potential for wastes to become dry and dusty increases, particularly when stored outside and when agitated. Inspections will be undertaken as required and at least daily of the waste to ensure waste delivered to the site is not dusty. If waste is determined to be dusty, additional wetting down of the material will occur if required, to reduce dust emissions. Water resources are considered appropriate, including site dewatering fluids, mains water and lagoon supply.

During prolonged periods of hot weather inspection frequency will be increased and the surface area of stored waste will be kept to a minimum.

### [6.7.3] Implementation of the Contingency Plan and/or Emergency Plan

No waste processing is envisioned.

Unavailability of machinery or vehicles will only take place due to unscheduled maintenance, emergency situations or for Health and Safety reasons for example, during a fire at the Site. In such cases the site staff will initially inform the Site Manager who will in turn inform Area Operations Manager, the Local Authority and the Environment Agency. Site staff will implement measures to store or divert wastes as required.

All site contingency and emergency plans are regularly reviewed and will be reviewed immediately following an incident. Training of the updated procedures and lessons learnt will be provided for site staff.

### [6.8] Records and Reviews

Records relating to the management and monitoring of dust will be maintained as necessary and will include the following details:

- The results of inspections and visual monitoring carried out by installation personnel;
- Weather conditions including atmospheric pressure, wind speed and wind direction;
- Date, time, duration, prevailing weather conditions and cause of dust emissions;
- Complaints received including name and address of the complainant; and
- Details of the corrective action taken, and any subsequent changes to operational procedures.

This DMP will be reviewed on a periodic basis with the scheduled review of the site's EMS or with every major decrease, or alteration to the dust generated at Site (i.e. a change to dust source term, pathway or receptor).

### [6.9] Communication Tools

Stakeholders will typically include the Local Authority, the Environment Agency, Parish Councils and members of the local community. Other stakeholders may include local businesses and/or residents potentially impacted by the Site activities.

Additionally, as covered within the complaints section, contact details will be made available so that any complaints can be directed to site and an investigation undertaken immediately

## Appendix A Particulate Monitoring Check and Action Report Template



<b>PARTICULATE MONITORING CHECK &amp; ACTION REPORT</b>  NAME/POSITION   <b>DATE AND TIME TO BE RECORDED UNDER DAY</b>	MON	TUE	WED	THURS	FRI	SAT
<b>SITE</b>						
ROADSWEEPER						
TRACTOR BOWSER						
ENSURE SPEED RESTRICTION IS ADHERED TO						
CLEANLINESS OF ROADS						
<b>DUST MONITORING</b>						
WIND DIRECTION W-Ramsbotom, E-WM Quarry, N- Top end of site, S-weighbridge/Marshalls works						
WEATHER CONDITIONS						
OBSERVATIONS/ACTIONS						

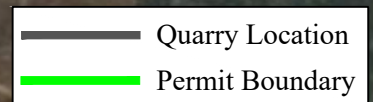
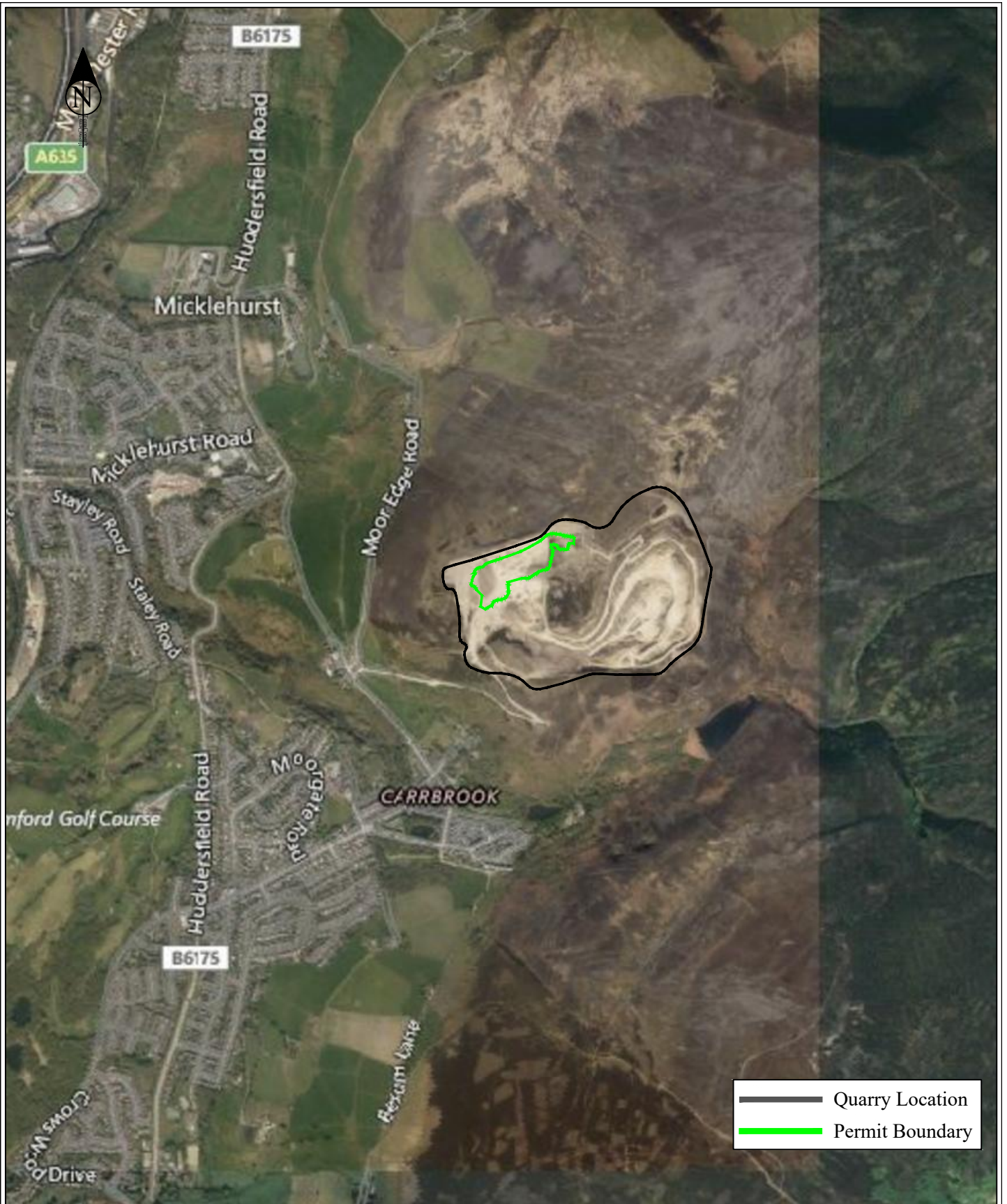
ADDITIONALSHEET IF REQUIRED

## Appendix B Complaint Form

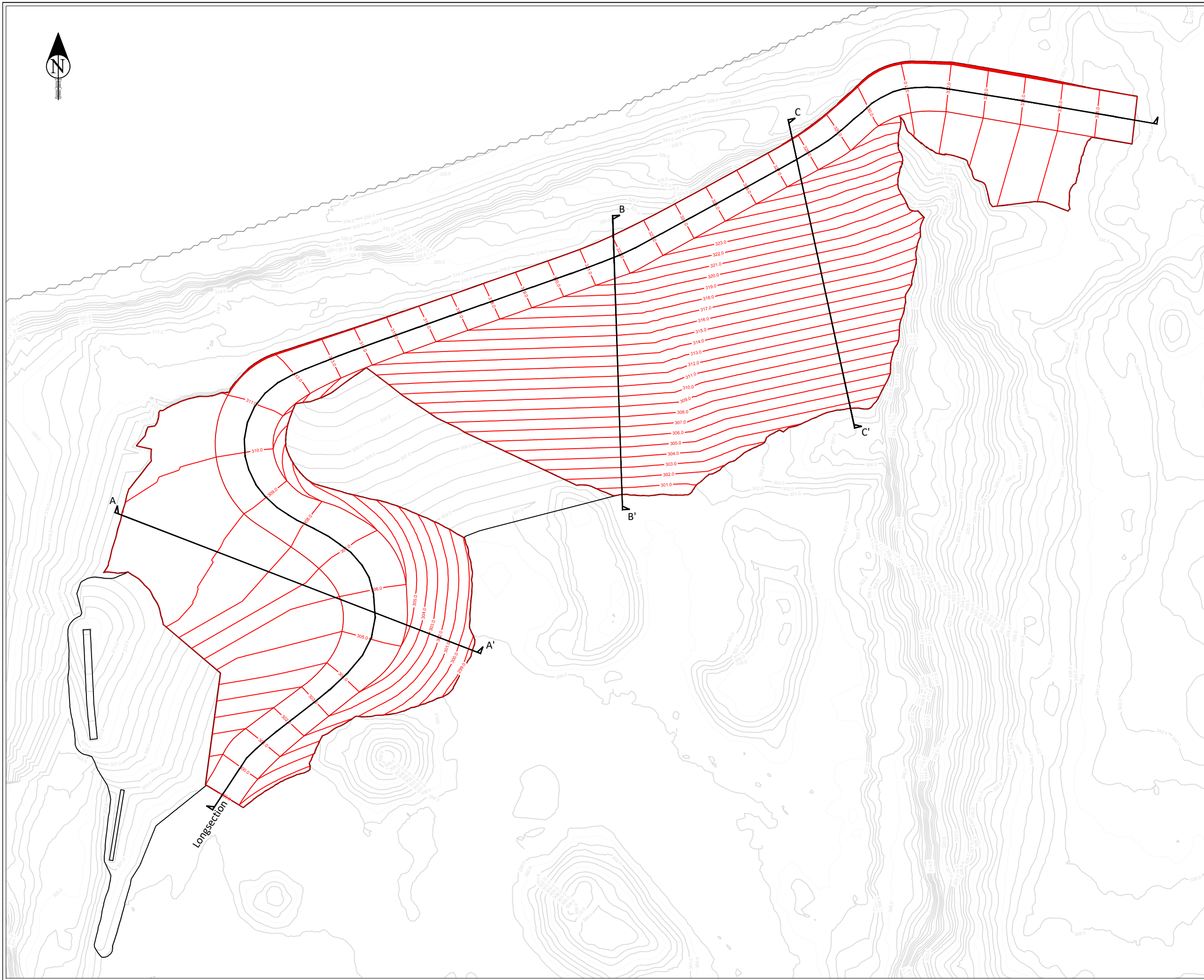
**COMPLAINT FORM**

DATE RECEIVED	COMPLAINT/COMPLAINANT	ACTIONED BY	OUTCOME

## Drawings



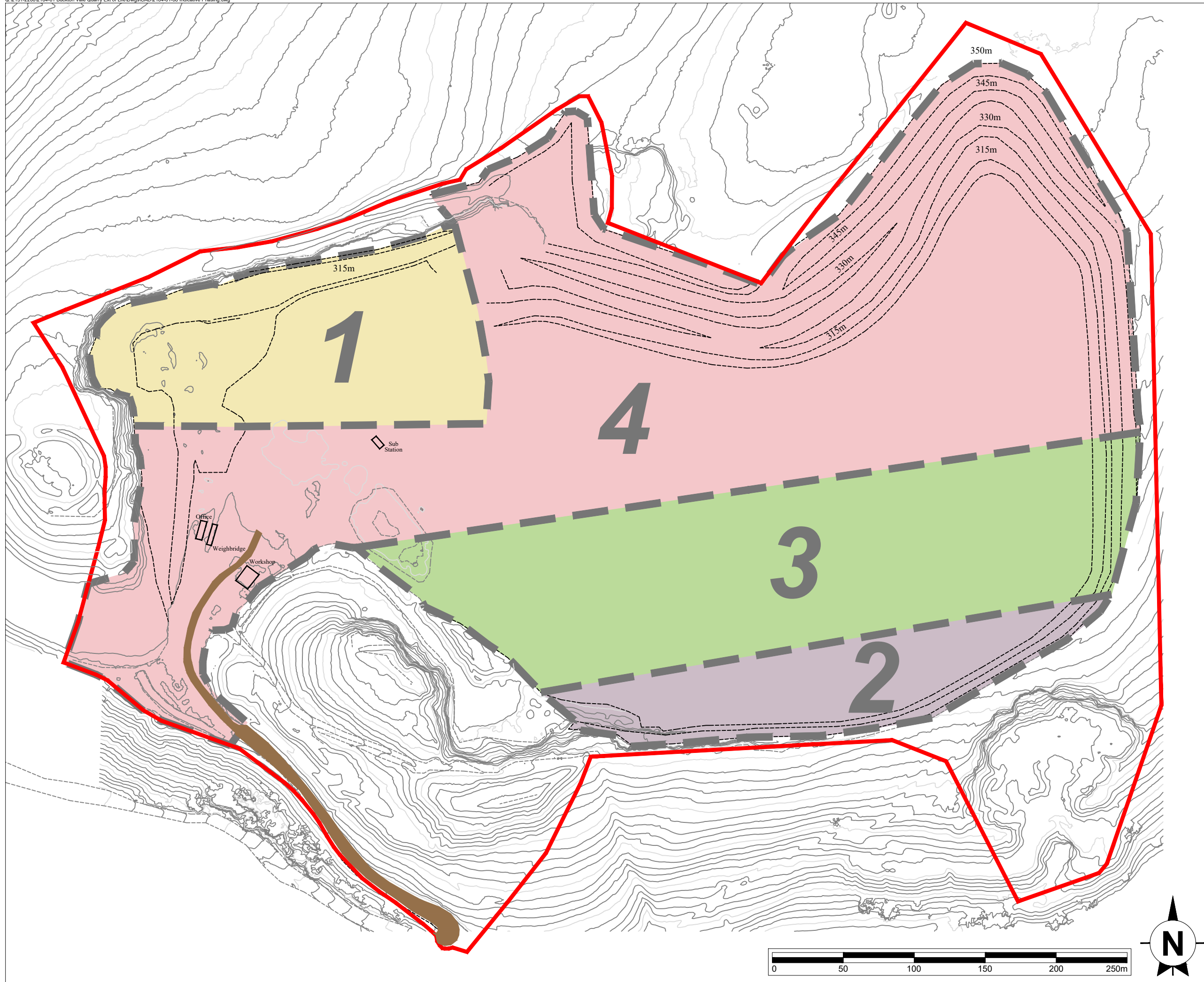
<b>TerraConsult</b>	Site	Scale		1:15,000	@ A4
	<b>BUCKTON VALE QUARRY</b>	Drawing No.		4859/1/004	
Title		Rev	Date	Description	
	<b>SITE LOCATION PLAN</b>				
File			4859.1.004 Site Location		
Bold Business Centre, Bold Lane, Sutton, St Helens WA9 4TX	Client	Date	06/20	Engineer	PP
<b>CHURCHILL ENVIRO LIMITED</b>		Drawn	PP	Checked	JB



**Key**

	Existing Contours
	Proposed Upper Bench Access
	Road Contours

Bold Business Centre, Bold Lane, Sutton, St Helens WA9 4TX		
Client <b>Churchill Enviro Limited</b>		
Site <b>Buckton Vale Quarry</b>		
Title <b>Proposed Upper Bench Access Road Cross Section Locations</b>		
Scale	1:1,000	@ A3
Drawing No.	4859/1/002	
Rev	Date	Description
File	4859.1.002 Cross Section Locations	
Date	06/20	Engineer PP
Drawn	PP GH	Checked <b>DRAFT</b>










This drawing is the copyright of AXIS P.E.D Limited and may not be loaned, copied or reproduced in any way - or used for any other, quote, tender or construction purposes without written consent of the company to do so


Follow any figured dimensions - do not scale for construction purposes. IF IN DOUBT ASK.

• Revision History • Date

Revision History	Date

-  Site Boundary
-  Indicative Phase Boundary
-  Site Access Road retained
-  Phase 1 (restoration from 2025)
-  Phase 2 (restoration from 2028)
-  Phase 3 (restoration from 2035)
-  Phase 4 (restoration from 2042)

- NOTES:
- Unshaded areas would be unaffected by the proposed operations.
  - The phasing details shown are indicative only. Full details would be agreed with Tameside Metropolitan District Council via planning condition.

Chester Office: West House House Breton Chester CH4 8DH	South Manchester Office: Canalside House 74 Water Lane Worsley SK9 6SL	
client: W Maher & Sons		
project: BUCKTON VALE QUARRY		
drawing title: INDICATIVE PHASING		
date: December 2019	drawn by: AM	checked: A1
drawing number: 2164-01-08	status: --	rev: --
scale(s): 1:2500@A3		
planning environment design		