

MARSHALLS MONO LTD

PASTURE HOUSE QUARRY, SOUTHOWRAM

BESPOKE RECOVERY PERMIT APPLICATION

ENVIRONMENTAL MANAGEMENT SYSTEM

September 2021

Silkstone

Environmental Ltd

Geotechnical, Mineral Waste Management
& Environmental Consultancy for Industry

Project No.	20293
Client	Marshalls Mono Ltd
Project	Pasture House Quarry Waste Recovery Facility
Document Title	Environmental Management System

Pasture House Quarry – Environmental Management System

PART 1 – SITE DETAILS

1. Introduction

- 1.1 Silkstone Environmental Ltd acting on behalf of Marshalls Mono Ltd has prepared this Environmental Management System (EMS) as part of a bespoke recovery permit application at Pasture House Quarry, Southowram, West Yorkshire.
- 1.2 A waste recovery plan was submitted and approved in March 2021 so this document forms part of a waste recovery permit application at the site.
- 1.3 The waste recovery facility is to enable the site to be restored back to original ground levels following mineral extraction. The waste to be used consists of inert quarry rock overburden mixed with fines in the form of concrete sludge from the block manufacturing plant.
- 1.4 All inert waste to be used for this purpose will be sourced at the operators Brookfoot Works stone processing facility, 700m to the South East of the site.
- 1.5 The information within this document forms the written management system required to operate the waste recovery facility at Pasture House Quarry.
- 1.6 The purpose of the EMS is to ensure the operator carries out activities in a manner which does not result in any adverse impact on the immediate and local environment. The operator shall therefore ensure that the waste recovery facility is operated in accordance with the procedures stated in the WMS document.
- 1.7 The activity shall also be carried out in accordance with referenced health and safety practices and all relevant regulatory requirements.
- 1.8 Plan ESSD1 shows the location of the site.
- 1.9 Plan 20293/100 shows the proposed environmental permit application area.
- 1.10 The application boundary is highlighted green.
- 1.11 Marshalls own company written management system is included in Appendix B of this report.

2. Site Description

- 2.1 Pasture House Quarry is located approximately 450 metres North East of Southowram Village, Grid Ref SE119239 (E 411900, N 423900). It is located to the north of Church Lane and accessed via a dedicated access, 250 metres in length.
- 2.2 A small number of isolated residential properties are located to the east and south of the access road with the main residential areas of Southowram to the west. The properties in closest proximity are Cromwell Road and Fairfax Crescent, approximately 150 metres to the west.
- 2.3 Pasture House Quarry is an operational sandstone quarry which has planning permission for sandstone extraction and the importation of inert waste for restoration back to original ground levels and agricultural use, Ref 14/00138/MCO and 14/00409/MIN from Calderdale Council. The sandstone mineral is now almost fully

exhausted and therefore there is now a need to import inert materials to enable the site to be restored back to original ground levels.

3. Proposed Operations

- 3.1 The operators have an existing permit, Ref EPR/AP3194EM at Cromwell Wood Quarry which is now full to capacity and are therefore looking for a new site for continuation of tipping operations. Pasture House Quarry is approximately 700m North West from the Cromwell tip.
- 3.2 The permit is for disposal of the inert residues from the stone cutting and sand manufacturing operations at the adjacent Brookfoot Works and is inert in nature. The material when tipped is a sludge with typically 25% moisture content and sets hard when fully dried out.
- 3.3 This material was mixed with shales to create a supporting buttress against an unstable quarry face and was considered a waste recovery application for this reason. The material required at Pasture House Quarry would be for restoration purposes only to enable the site to be restored back to original ground levels to make up the shortfall from mineral exported from the site.
- 3.4 The annual tonnage of material to be deposited is up to 20,000 tonnes per annum with a void space of approximately 200,000 tonnes. The area shown on plan 20293/100 in Appendix A is the area proposed for the new permit and is the previously worked area for mineral extraction where the reserves are now fully exhausted. This area is approximately 2.0 Hectares.
- 3.5 Only mobile plant is to be used on site which is already planning permitted as part of the quarrying operations.
- 3.6 The waste will be imported by road lorries from Brookfoot Works and will be tipped directly into the waste recovery area being restored at each particular time. No additional plant is required for this facility which is already permitted for mineral extraction.
- 3.7 There are no offices or weighbridge at the site.

4. Waste Acceptance

- 4.1 It is estimated approximately 200,000 tonnes of imported inert material is required to achieve the planning permitted restoration levels.
- 4.2 At a proposed importation rate of 20,000 tonnes per annum, it would take approximately 10 years to complete.
- 4.3 The imported material consists of stone and sand sludge from the stone cutting operations and the sand processing plant as well as inert waste from the concrete plant. This material is currently mixed with as dug shales from the quarry and provides an inert restoration material replacing the sandstone mineral which has been previously extracted. The material is inert in nature and whilst is a sludge when tipped (with typically 25% moisture content) it sets hard and solid when allowed to dry out.
- 4.4 The waste recovery area and cross sections plan 20293/100 and 101 demonstrate the levels of fill required to achieve the planning permitted restoration contours.

- 4.5 The material to be used would continue to comprise of uncontaminated inert material which provides the required engineering criteria. The table below outlines the ECW waste codes we intend to import.

Waste Code	Description	Source
01 01 02	Wastes from mineral non-metalliferous excavation	Factory
10 13 14	Waste concrete and concrete sludge	Factory
17 05 04	Soil and stones	Excavation sites
20 02 02	Soil and stones	Excavation sites

- 4.6 Soil and stones is included in case further soil is required for restoration to provide adequate cover to provide a suitable growing medium.
- 4.7 The operator will ensure that material imported to the site is inert and non-hazardous in nature.
- 4.8 The operators shall ensure that material imported to the site is accompanied with information including chemical testing, and details of the source of material (specifically, the excavation site location).
- 4.9 Inert material will be delivered to the site by rigid body HGV, and will be deposited at the area of restoration active at the time.
- 4.10 Each delivery of inert material shall be inspected by the operator to ensure that it is compliant with the waste types detailed in Section 4.5 above. Upon satisfactory inspection, the material will be deposited. The operator shall ensure that non-compliant waste is not accepted at the site.
- 4.11 Deposited material will be periodically checked by an independent engineer for compliance with the relevant standards.
- 4.12 Unsuitable waste materials shall not be accepted at the site.

5. Operating Hours

- 5.1 The operating hours will be as specified in the planning permission, and it is proposed to operate the site for the reception, processing and despatch of wastes and products during the hours shown.

07:00 to 19:00 hours Monday to Friday
07:00 to 13:00 hours Saturdays

No such operations shall be carried out on Sundays, Bank and Public Holidays.

6. Staffing and Supervision

- 6.1 When operating at optimum capacity, the unit as a whole will be staffed as follows:

Crushing & Screening

Site Manager	1
Plant Operators	2

Total Number of Employees: 3

- 6.2 No reception of waste or export of product will take place unless the minimum numbers of staff are present on site and at least one member of staff will be suitably trained and fully conversant with the requirements of the licence. All staff on site will be adequately trained for their position and duties. Records of the received training will be maintained as a part of the personnel files for the site.
- 6.3 The licence holder will submit to the Environment Agency, and update when necessary, a list of those persons given responsibility for the technically competent management and supervision of operations undertaken.
- 6.4 The list above also shows the name and phone number of a representative of the licence holder who may be contacted out of normal working hours.

7. Site Infrastructure

7.1 Provision of Site Identification Board

- 7.1.1 The board shall be easily readable from outside the site entrance in daylight hours, and shall display the following information:
- a) Site name and address;
 - b) Licence Holder name (company name, not individual name unless justified as necessary);
 - c) Operator name (company name, not individual name unless justified as necessary);
 - d) Licence number;
 - e) Emergency contact name and telephone number (for security reasons, personal names and home phone numbers should not be used except where no alternative is practicable);
 - f) Statement that the site is licensed by the Environment Agency;
 - g) Agency national numbers: 03708 506 506 (or any other number subsequently notified in writing by the Agency);
 - h) Days and hours site is open to receive waste.

- 7.1.2 The site identification board will be updated as necessary.

7.2 Site Security

- 7.2.1 The site already has security gate and fencing for the quarrying operations.
- 7.2.2 The gates will be kept locked outside working hours or when there are no personnel present on site.
- 7.2.3 The gates and fences will be inspected daily for damage. Details of any damage found will be entered in the site diary/log book. Every effort shall be made to repair any damage so detected within 24 (twenty-four) hours. If this is not possible, any effective

temporary repair shall be carried out to maintain the site security by the end of the working day and the fence/gate will be fully repaired within 7 (seven) working days.

7.2.4 Any breaches in the security of the site will be recorded in the site diary/log book.

PART 2 – ENVIRONMENTAL RISK ASSESSMENTS

Risk Assessment is the process by which the likelihood, frequency and level of any harm from a proposed operation may be qualified and quantified to allow the reduction, as far as possible, of that threat to the environment.

The risk assessments carried out in support of this application will:

1. Identify the potential hazards of the operations proposed
2. Determine the likelihood, frequency and level of any hazard to the environment
3. Determine the consequence of any hazard
4. Allocate a level for the risk, using the above criteria
5. Provide controls for the risks identified

This development has been designed from the outset to minimise any risks to any personnel associated with the operation, any 3rd parties affected by the operation, its surroundings and the environment.

This Environmental Permit Application will apply to placement of inert waste within the quarry void to enable the site to be restored back to original ground levels. The overall environmental risks associated with the proposed operations are therefore low due to the low risk nature of the waste to be imported.

Potential Hazards

The potential hazards are set out below, with their targets & pathways. For this application, the risks of liquid spillages, odours, pests, fires and explosions within the waste are minimal because the waste handled within the waste area will be inert and therefore low risk.

Source & Hazard	Pathway	Targets
Dust from depositing	Airborne	Site operatives /Visitors / Users/ Neighbours
Dust from Stockpiling	Airborne	Site operatives /Visitors / Users/ Neighbours
Fires (Plant/Waste)	Overland and Airborne	Site operatives /Visitors / Users/ Neighbours
Fuel Oil Spillages	Direct to	Site operatives /Visitors / Users/ Neighbours /Environment and Surroundings
Litter from Waste	Airborne	Site operatives /Visitors / Users/ Neighbours
Mud & Debris	Direct to	Site operatives /Visitors / Users/ Neighbours /Environment and Surroundings
Noise from operations	Direct to	Site operatives /Visitors / Users/ Neighbours /Environment and Surroundings
Non-conforming Wastes	Direct to	Site operatives /Visitors / Users/ Environment
Odour	Direct to	Site operatives /Visitors / Users/ Neighbours /Environment and Surroundings

Site Security	Direct to	Site operatives /Visitors / Users/ Neighbours /Environment and Surroundings
Surface & Groundwater	Direct to	Site operatives /Visitors / Users/ Neighbours /Environment and Surroundings
Vermin within waste	Direct to	Site operatives /Visitors / Users/ Neighbours /Environment and Surroundings
Visual Impact of operations	Direct to	Site operatives /Visitors / Users/ Neighbours /Environment and Surroundings

Assessment of Risks

For each of the above hazards, the actual risk to the environment and persons or property in and around the site is assessed on the table below. The table covers both waste deposition and storage operations. With the control measures listed in the preceding sections in place, it will be seen that the overall risk posed by the proposed operations is low.

Further detailed Operational Risk Assessments, combining both Environmental and Health and Safety Risks, may be found at the end of this section.

Hazard & Source	Probability Of Occurrence	Magnitude Of Consequence	Level of Risk With Controls In Place
Smoke (Fires)	L	M	L
Fire (Waste/Plant)	M	M	L
Dust (Stockpiling)	L	M	L
Litter	L	L	L
Non-conforming Wastes	L	M	L
Visual Impact (Operations)	L	L	L
Noise (Processing)	L	M	L
Fuel Oil Spillages	L	M	L
Surface Water & Groundwater	L	M	L
Vermin	L	M	L
Odour	L	L	L
Mud & Debris	L	L	L

As can be seen from the accompanying documents, all of the risks have been satisfactorily dealt with throughout the design stage of the site operations.

The nature of the above potential hazards and the proposals for managing the risks identified are described below. The issue of dust generated by the proposed operation will be dealt with as one unit.

Dust

The waste recovery facility at Pasture House quarry will involve the movement and placement of quarry backfill/shale and concrete sludge. Such activities can potentially generate dust which can cause nuisance to nearby sensitive receptors.

The site manager will ensure that all operatives are familiar with the dust management plan for the site, and of all relevant health and safety policy documents.

The site operator will ensure that dust generation on site is minimised at all times by implementing the dust management plan.

The aim of the dust management plan is to:

- a) Minimise dust generation and migration from the site
- b) Ensure nuisance caused to nearby receptors from dust is kept to a minimum.
- c) To develop a dust minimisation strategy that shall be implemented by the site management.
- d) Ensure that operations at the site have consideration for potential dust generation.

The dust management plan shall be reviewed on an annual basis, and changes made to ensure that dust continues to be effectively managed at the site throughout its operations.

Dust Control Measures

Potential dust emissions from the site may be generated from activities associated with:

- Vehicle movements to and from the site.
- Operational processes including the mixing and placement of waste.
- Exhaust's from operational plant/equipment.

In order to minimise potential generation of dust from the site, the following preventative control measures shall be implemented;

- a) All inert waste will be placed in the waste reception area and deposited for restoration as soon as is practicable
- b) The site management will utilise a mobile water bowser throughout the site area to condition surfaces and any waste handled, to ensure mitigation of dust generation.
- c) If necessary, a mobile fine mist water spray will be provided for the haul road in the unlikely event that the bowser proves insufficient to suppress dust generation.
- d) Mud and debris, which has the potential to dry out and generate dust, will be kept clean from the site roads by the use of a road sweeper or manual labour where it is deemed necessary.
- e) As a matter of course, drivers will be instructed and monitored to ensure discharge heights are kept to a minimum.

- f) All waste handling and compaction operations on site shall be monitored by site management, and if necessary dust suppression systems (i.e. water bowser or spray system) shall be activated to mitigate dust migration.
- g) Vehicles discharging on site will do so within the quarry void, and below the elevation of the land immediately adjacent to the quarry, wherever possible.
- h) All vehicles will be fitted with exhausts venting skywards to avoid unnecessary dust generation.
- i) Site operating personnel, including plant operators, will be supplied with dust masks, whenever necessary, and all plant cabs shall be maintained such that as far as reasonably practical the ingress of dust is minimised.
- j) Vehicular speeds at the site shall be strictly controlled and the number of movements on site kept to a minimum in order to limit associated dust generation.
- k) Should the measures stated above be insufficient to mitigate nuisance caused by dust migration from the site then the specific activity causing dust nuisance at that time shall cease immediately. The specific activity shall only re-commence once adequate mitigation measures are taken to address dust generation from that particular activity.
- l) All dust suppression systems and equipment used on site shall fall under the maintenance schedule for all site plant.
- m) Any maintenance or repairs required to maintain the efficiency of dust suppression equipment shall be carried out as soon as reasonably practicable and recorded within the relevant maintenance log.
- n) Any site operations compromised by the breakdown of dust suppression equipment will cease until such systems are repaired or adequate alternative mitigation measures put in place.

Management and Review Procedure

The site manager will be responsible for the control and management of dust at the site. Site management will ensure that all personnel operating on site are adequately trained to implement the dust control measures and that they are strictly implemented at all times.

When the control measures stated are implemented, dust generation and nuisance to nearby receptors should be kept to a minimum.

In the event that dust nuisance is caused to a nearby sensitive receptor, and a complaint is received regarding dust migrating from the site, the following dust action plan will be implemented.

Dust Action Plan

- a) If any operation at the site results in unacceptable dust generation and migration then that operation will be reviewed by the site management and improvements put in place wherever possible that satisfactorily mitigate dust generation. The operation may be suspended temporarily should site management consider it necessary to facilitate any operational improvements.
- b) If a complaint is received regarding dust nuisance arising from the site, the site management will immediately investigate that complaint and determine the source of the

dust. If the source is identified as being the site then appropriate actions shall be taken to mitigate the dust generation that led to the original complaint.

- c) Any mitigation action taken will be communicated to the complainant. The nature of the complaint, the findings of the investigation and any mitigation measures adopted shall be recorded in writing and kept on record.

Dust Monitoring

Should complaints continue to be received regarding dust nuisance, dust monitoring will be undertaken. The monitoring locations and frequency will be agreed with the Environment Agency.

Dust monitoring shall be carried out by an independent technician.

Dust monitoring gauges will be set up and will comprise a Frisbee type depositional dust monitoring gauge and sticky pad adapter as shown in Figure 1 below.



Fig 1 – Directional and Depositional Dust Sampler

The sticky pad shall be replaced after each monitoring period and each sticky pad shall be analysed independently to determine the rate and direction of dust deposition.

After each dust monitoring period, the contents of the depositional dust gauge will be collected and sent for independent analysis to determine the rate of dust deposition. If necessary, the dust collected in the dust gauge may be analysed to determine its nature and origin.

The sticky pad and depositional dust samples recovered from the dust monitoring location will be independently analysed and the results submitted to the site operator.

Should dust monitoring results identify the site as being the source of significant dust migration, then the site management will undertake a full review of all site operations to establish the source of the dust generation. The operational review shall result in improvements being adopted at the site that mitigate any further dust nuisance.

Analysis Technique

Baseline directional and deposited dust levels will be monitored at locations and a frequency to be agreed with the Environment Agency.

Directional Dust

The directional dust monitoring component of the device samples fugitive dust coming from 360° around the gauge and the deposited dust monitoring component collects dust depositing from the air onto a horizontal surface.

At the end of each sampling period, the sampler units are removed and placed in a protective carrying flask or case and replacement samplers fitted. For the directional samplers, the pattern of dusting on the cylinder indicates the direction and magnitude of visible dust propagation. For the depositional samplers, the dust coverage on the sticky pads indicates the magnitude of visible dust deposition at that point.

Assessment of dust coverage on the sticky pads uses a computer-based scanning system. Directional dust measurements are reported at 23° intervals around the sampling head by comparing the exposed 'sampling area' of the sticky pad with an unexposed 'reference area'. The deposited dust data are reported as the average of the sampling area in relation to the reference area. The results are reported as Effective Area Coverage (EAC) which measures the darkness or potential soiling of dust.

Depositional Dust

This method measures dust deposition rate and involves the passive deposition and capture of dust within a funnel and bottle arrangement. Data is usually collected over monthly periods and results are expressed in g/m²/month (ie. the mass of dust deposited per m² per month). This method enables determination of the relative 'dustiness' of sampling locations. It does not provide data on dust concentrations or enable determination of dust levels from a particular event or source. It does not give an indication of the potential health effects of the dust because it does not measure the amount of fine and very fine particles in the atmosphere.

Thresholds should be agreed between the site operator and the regulator and will be dependent on the site and proximity of sensitive receptors.

Litter

No off site waste is to be imported to site, only concrete sludge waste from the stone processing factory, therefore litter will not be an issue on this site.

Non-conforming Wastes

As before, all waste to be deposited is from the stone processing factory, therefore there will be no non-conforming wastes imported into the site.

Visual Impact (Operations)

The visual impact of the site already exists as an operational sandstone quarry. The importation of inert waste will enable the site to be restored to original ground levels and agricultural use. No additional plant is proposed to what is already permitted for mineral extraction operations.

Noise

As the site benefits from an existing planning permission for mineral extraction the noise impact from these operations has been part of the existing noise climate for many years.

The plant and operations to be used already have noise measures in place.

All plant will carry effective silencers and will be noise suppressed to manufacturer's specifications. The plant will be well maintained. Operations will be stopped and repairs made if this is found to be otherwise.

It is not considered that the proposed development would cause any significant negative noise impacts.

Whilst the above deals with noise outside the site, it will be managed within the site by ensuring that, wherever possible, operators will work in enclosures away from noise sources. Enclosures, such as cabs on plant, will be supplied where they are deemed necessary. Should an operator have to work within a noisy environment, ear defenders will be provided and worn.

Fuel Oil Spillages

Any fuel or lubricating oil spills within the site will be cleared immediately and any contaminated material removed, via the Non-conforming Waste segregation procedure, for disposal at a suitable Licensed Facility. Any such spills would be controlled using the spill kits available on site.

Any spills on would be absorbed using a suitable material and removed for disposal.

Surface Water and Groundwater

The storage of waste yet to be processed in the waste reception area shall be restricted to one day's maximum operational capacity of 2000 tonnes. The duration of storage in the waste reception area for any individual waste load shall not exceed 6 working days.

The limit on waste storage capacity and duration will minimise the risk of surface run off.

The waste reception area shall not be located in any area of the site where surface water gathers or flows. If site conditions are such that the waste reception area is at risk, then the waste shall be moved to an area of the site that is not at risk, such as an area of higher elevation, and receipt of waste at the site shall cease until conditions improve. In the event that a suitable location is

not available anywhere on site, the material shall be loaded onto skips/containers for temporary storage and sheeted/covered to minimise water ingress.

Monitoring of Meteorological Conditions

A record of the meteorological conditions at the site will be entered into the site diary/log book daily in summary form.

Smoke (Plant Fires)

Smoke from fires on board plant used anywhere on site constitutes a hazard to the surrounding environment and persons connected with the operations on site. The possibility of this occurrence is low and, should any such fire be reported on site, the procedures laid down within the Emergency Plan (included with this document as Appendix C) will be followed.

Fires

The possibility of a fire within the waste stored or processed on site is low, due to the type of waste (inert) that will be deposited within the site. Any fire risk from the processing plant will be controlled by ensuring that effective procedures are employed to avoid such situations (proper repair and maintenance of plant, etc) and correct management of them should they occur. The necessary equipment, resources and training will be provided for staff to react correctly to such an occurrence.

Vermin

As the site will use good housekeeping practices and short turn around times for wastes waiting processing and recycling, no vermin problem is envisaged.

Should a vermin problem arise, the appropriate steps will be taken, including the use of control programs by specialist contractors, if necessary.

Site Security

The quarry as a whole is secured by a fence and the licensed area will be within the quarry void. The quarry access is gated and will be locked when the site is unattended

Odour

No odours will be generated by the operations within the site as good housekeeping practices will be used along with short turn around times of wastes awaiting processing and dispatch. Any non-conforming waste will be removed for disposal at a suitable Licensed Facility at the earliest opportunity, using the non-conforming waste segregation and disposal procedures laid down in the Working Plan. Such an action will be recorded in the Site Diary.

Mud & Debris

Mud and debris, whether it is on the ground, on site or on the road at the front of the site, constitutes a risk to both the environment and human health & safety. The main controls for mud and debris are undertaken as part of the good housekeeping practices carried out as part of the daily site operations.

All site surfaces will be maintained in a clean and serviceable condition, with any mud and debris removed, either using the site loading shovel or a hired road sweeper as soon as is practicable. The site staff will continually monitor these areas. All traffic leaving the site will pass through the site wheel wash as conditions dictate. The housekeeping measures listed above will ensure

that the site surfaces are kept in a clean condition, so stopping the tracking of mud and debris from the site onto public roads.

As can be seen from the proposals outlined within this document, the risks posed by this operation to the persons, property and the environment are very low.

Risk Assessment and Monitoring

In order to ensure that risks are assessed and controlled where necessary, an ongoing system of whole site assessment will be carried out. This assessment will include the following:

Environmental Monitoring

Regular checks are to be made by Site Manager on environmental efficiency of operations. These checks will include the performance of the dust and noise suppression equipment and procedures; condition of site boundary; site housekeeping; condition of the road in front of the site; condition of the site surfaces; an overall assessment of the environmental performance of the site and operations as a whole. This list is not exhaustive.

Health, Safety and Environmental Monitoring

The Risk Assessments and Emergency Plan covering the whole site are to be re-assessed at regular intervals of not more than 1 year. Should an operation on site change or a new operation or piece of plant be introduced, the Risk Assessments must be updated or expanded accordingly. The Risk Assessments are only to be carried out by suitably qualified and experienced personnel. Whole site procedures are to be checked for environmental performance against existing Risk Assessments at the same time.

The Site Manager will investigate any incidents reported on site and the results of such an investigation recorded in the Site Diary. Should such an investigation reveal the need to amend a procedure or Risk Assessment, that amendment will be completed by the Site Management as soon as is reasonably practicable.

Environment Agency Returns

These are to be completed and returned to the Environment Agency. All the tonnages of waste processed and or transported off site will be recorded, and returns calculated accordingly using weighbridge summaries to ascertain tonnages of incoming inert waste to the crushing and screening operation and disposal tonnages to determine tonnages of waste processed, deposited at the quarry face, and transported off-site. These surveys will be carried out as required by the EA.

Competent Persons

Technically competent management of the crushing and screening operations shall be provided by the person named in the permit application, or as otherwise named by the operator should a change of Technical Competent personnel occur at the site.

The operator shall ensure that appropriate Technical Competent supervision of the waste recycling facility is provided for the necessary operational time periods, and that the waste recycling activity is managed using best practice techniques wherever possible.

Conclusions

In summary the waste for recovery facility has been designed to accept approximately 200,000 tonnes of waste of the limited list of EWC codes as detailed in the working plan to enable the site to be restored back to original ground levels.

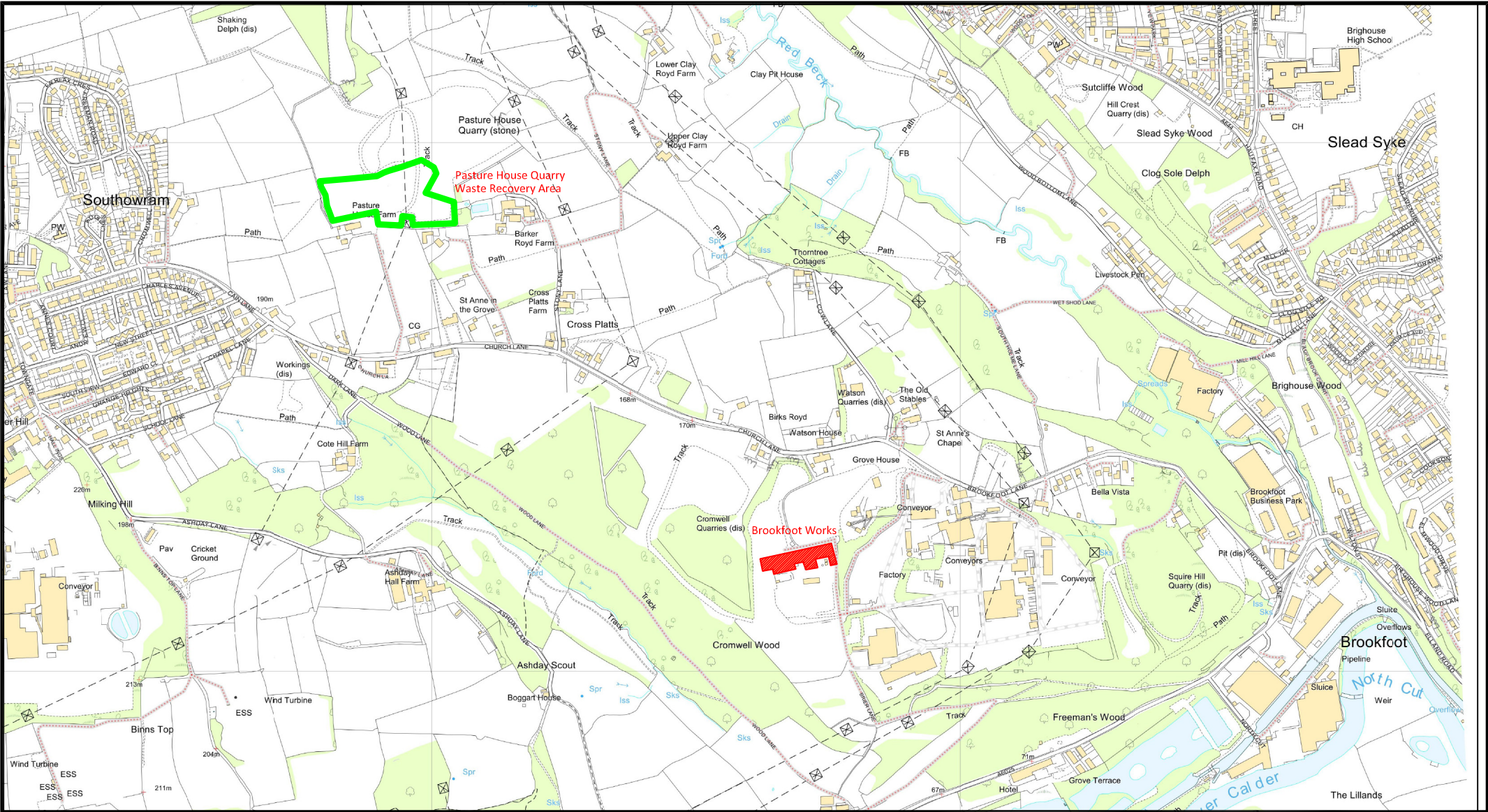
It has been designed to operate with minimal environmental impact on its surroundings by using best practice management techniques.

The road links to and from the site are adequate for the expected traffic flows which will not increase as a consequence of this proposal.

Silkstone Environmental
September 2021

APPENDIX A

Drawings



Silkstone
Environmental Ltd

www.silkstoneenvironmental.co.uk

7, Hall Annex, Thorncliffe Park, Chapeltown, Sheffield, S35 2PH
Tel (0114) 2573487 Fax (0114) 2573459



Waste Recovery Permit Boundary

Client:



Project:

PASTURE HOUSE QUARRY
BESPOKE RECOVERY PERMIT
APPLICATION

Plan Title:

LOCATION PLAN

Drawing No.
ESSD1

Rev

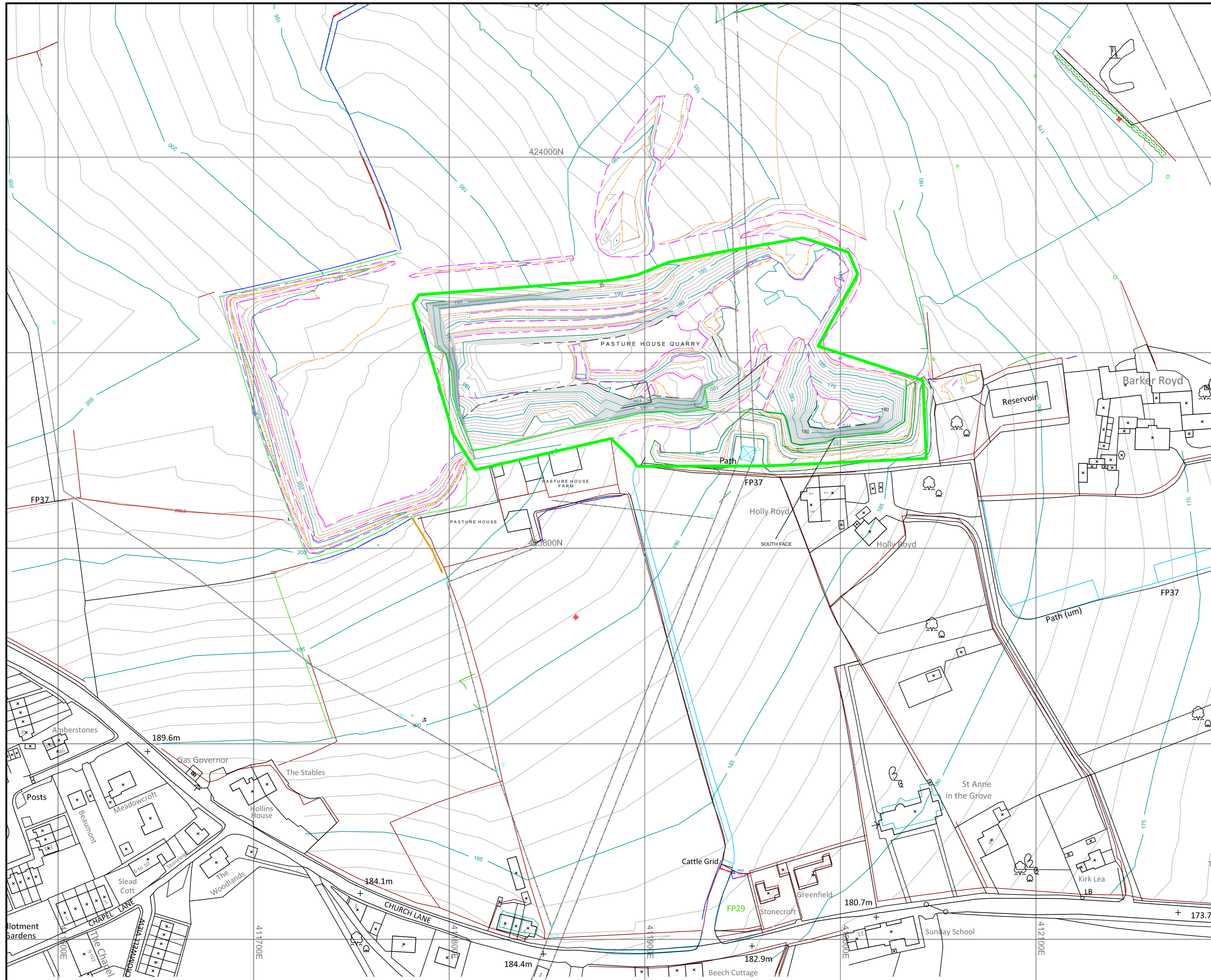
Project No. 20293

Date: Sept 2021

Scale: 1:10000 @ A4

Drawn: PS

Chkd:



LEGEND

— Proposed Waste Recovery Area

Rev	Description	Date	Drawn	Chkd

Client:



Project:
PASTURE HOUSE QUARRY

Plan Title:
WASTE RECOVERY PLAN

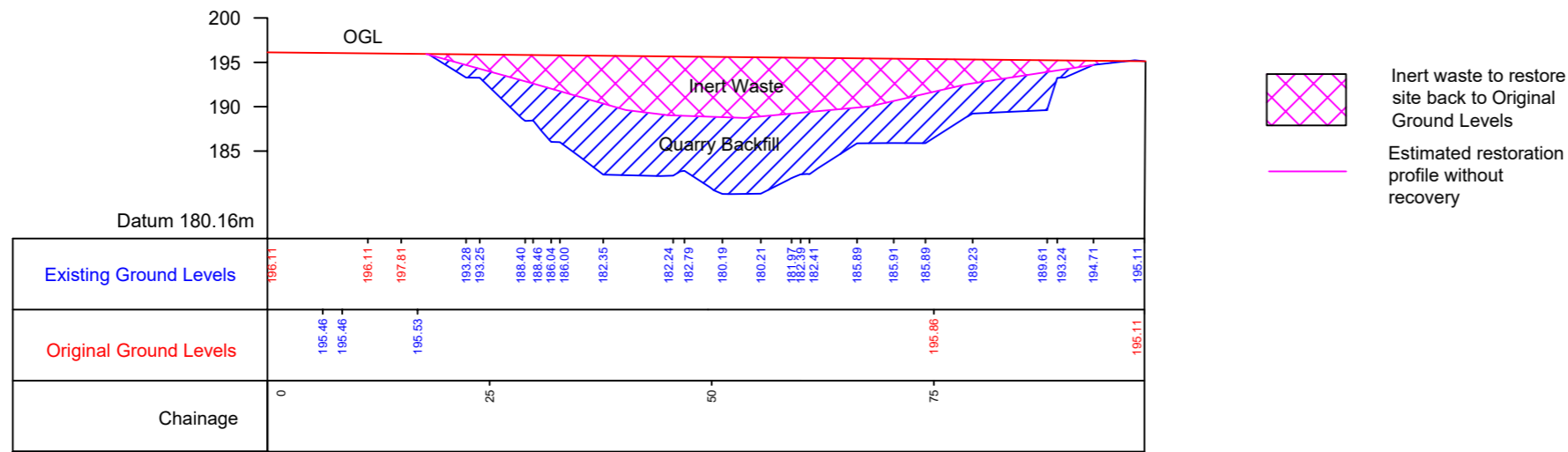


www.silkstoneenvironmental.co.uk
7, Hall Annex, Thorncliffe Park, Chapeltown, Sheffield, S35 2PH
Tel (0114) 2573487 Fax (0114) 2573459

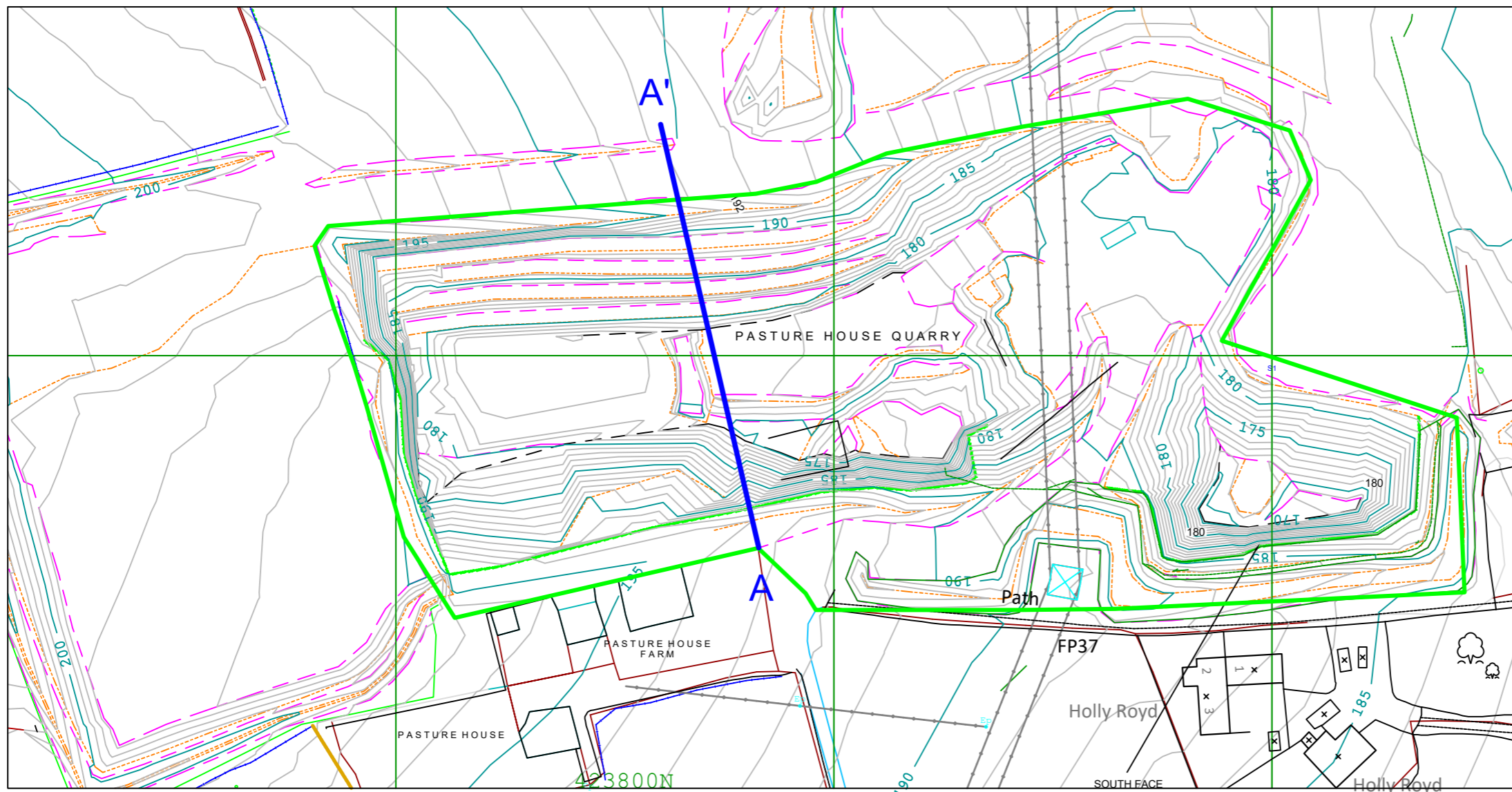
Project No. 20293	Dwg No. 20293/100	Rev
Date: Jan 20	Scale: 1:1250 @ A2	

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A — A' Cross Section Location



Section A-A'



Rev	Description	Date	Drawn	Chkd
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Client:
Marshalls

Project:
PASTURE HOUSE QUARRY

Plan Title:
WASTE RECOVERY PLAN
CROSS SECTION

Silkstone Environmental Ltd
www.silkstoneenvironmental.co.uk
7, Hall Annex, Thornccliffe Park, Chapeltown, Sheffield, S35 2PH
Tel (0114) 2573487 Fax (0114) 2573459

Project No. 20293	Dwg No. 20293/101	Rev
Date: Feb 21	Drawn: PS	Chkd: MB
Scale: 1:750 @ A3		

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APPENDIX B

Marshalls WMS



Marshalls

Creating Better Spaces

Marshalls

Landscape House

Premier Way

Lowfields Business Park

Elland, Halifax HX5 9HT

Environmental Management System

BS EN ISO 14001: 2015

Issue 1.0

August 2020

Steve Swanwick Group IMS Manager

Authorised by:

John Davies Group HSE Director

Contents of the EMS Manual

Page no.	Issue no.	Contents	Date of Issue
1	1.0	Title Page	31 st August 2020
2	1.0	Contents, Context of the Organisation introduction	31 st August 2020
3	1.0	Interested Parties Analysis	31 st August 2020
4	1.0	Scope of EMS	31 st August 2020
5	1.0	Structure of documentation of EMS, Leadership and Commitment, EMS Policy	31 st August 2020
6	1.0	Roles and Responsibilities	31 st August 2020
7	1.0	Roles and Responsibilities, Planning, Risks and Opportunities	31 st August 2020
8	1.0	Risks and Opportunities, reference to Determining Aspects	31 st August 2020
9	1.0	Compliance obligations, Planning actions and objectives, Support, Resources	31 st August 2020
10	1.0	Competence, Awareness and Communication	31 st August 2020
11	1.0	Communication Matrix (environment)	31 st August 2020
12	1.0	Communication Matrix (environment)	31 st August 2020
13	1.0	Documented Information, Operational Controls	31 st August 2020
14	1.0	Emergency preparedness, Performance Evaluation, Monitoring summary	31 st August 2020
15	1.0	Internal Audit and Management Review reference, Improvement	31 st August 2020
16	1.0	Appendix 1 - Summary of revisions	31 st August 2020

4. CONTEXT OF THE ORGANISATION

4.1 Understanding the organisation and its context

A "Scope of Operations" Document helps identify locations, certification and purpose of each of the Marshall's Group activities. This is located on SharePoint/Departmental Sites/Management Systems/Context of the Organisation folder. External and internal issues that are relevant to our purpose and that may influence our EMS management system have been identified within the IMS Manual. Monitoring is conducted through the combined Management Review process. An annual SWOT analysis sent to internal interested parties helps determine current understanding and needs (**EnvPD01**).

4.2 Understanding the needs and expectations of interested parties

Interested parties are identified that can have an effect or potential effect on our ability to consistently provide products and services that meet customer, environmental and applicable statutory and regulatory requirements. We have also identified their requirements

Potential interested parties were also discussed with Senior Management and staff coupled with a review of existing strategic documents. There were three stages to the review:

- a) Identification of interested parties that are relevant to the company and;
- b) the relevant needs and expectations (i.e. requirements) of these interested parties;

- c) which of these needs and expectations become compliance obligations, any resulting compliance obligations from these interested parties have been included in the Register of Compliance Requirements

The results are tabulated below:

INTERESTED PARTIES ANALYSIS

Interested Parties	Interest (descriptive)	Mitigating factors	Compliance Obligations
Customers	Industry-compliant products Customer Service/availability Price Sustainable products Water control solutions (Suds)	Meet industry standard requirements – Kite mark, Meet performance criteria Satisfactory service level	Meeting standards and customer requirements
Suppliers and product partners	Repeat orders Payment terms Quality, Delivery and Price Environmental performance including dealing with waste streams in line with the correct hierarchy; communication of on-site requirements	Critical suppliers reviewed regularly with regards to management systems operated (e.g. ISO 9001/14001, BES 6001)	Meeting specifications or service agreements Compliance with waste hierarchies
Senior management team	Legal compliance, risk, reputation, continual improvement, wider and environmental assurance. Opportunity to show other interested parties the sustainability initiatives	Compliance with permit / Compliance obligations Link to Group Risk Register Link to Group ESG approach	Yes- all compliance obligations and positive initiatives
Shareholders	Legal compliance, risk, reputation, continual improvement, profitability, business continuity	Compliance with permit / Compliance obligations. Continual improvement, efficiency ESG commitments, Sustainability	Yes- all compliance obligations and sustainability initiatives
Employees	Safe and responsible place to work. Job security Training and CPD	Staff training and development programme Adherence and comprehension to policies and procedures	The Group EMS structure
Communities	Dust, noise, traffic, controlling waste	Maintaining good relationships with local community, management of aspects, voluntary initiatives to support communities	Yes- statutory nuisance, environmental permit, bylaws
Insurers	Legal compliance, design, product conformity, assurance of third party ISO certification	Zero claims	Yes- all compliance obligations

Regulators/ compliance bodies/ registration bodies	Legal compliance, regulatory compliance, adherence to requirements set by standard	Zero breaches, full compliance, effective EMS	Yes- all compliance obligations
NGOs	Legal compliance, adherence to codes of practice	Wildlife and biodiversity plans, full compliance with related legislation	Yes – all compliance obligations
Industry Bodies	Conformance to industry standards, collaboration, best practice in environment, safety and social issues	Participation, membership, involvement in setting and agreeing initiatives.	Yes- other requirements industry standards

4.3 Determining the scope of the business management system

Marshall's has defined its scope as;

“Design, manufacture and supply of pre-cast concrete products for the building, civil and railway engineering sectors, winning, processing and supply of mineral products, design, manufacture and supply of landscape protection and vehicle protection products, manufacture and supply of ready to use mortars and screed products for building and civil engineering projects. The marketing of products, commercial and technical activities and support functions to the business including logistics management.”

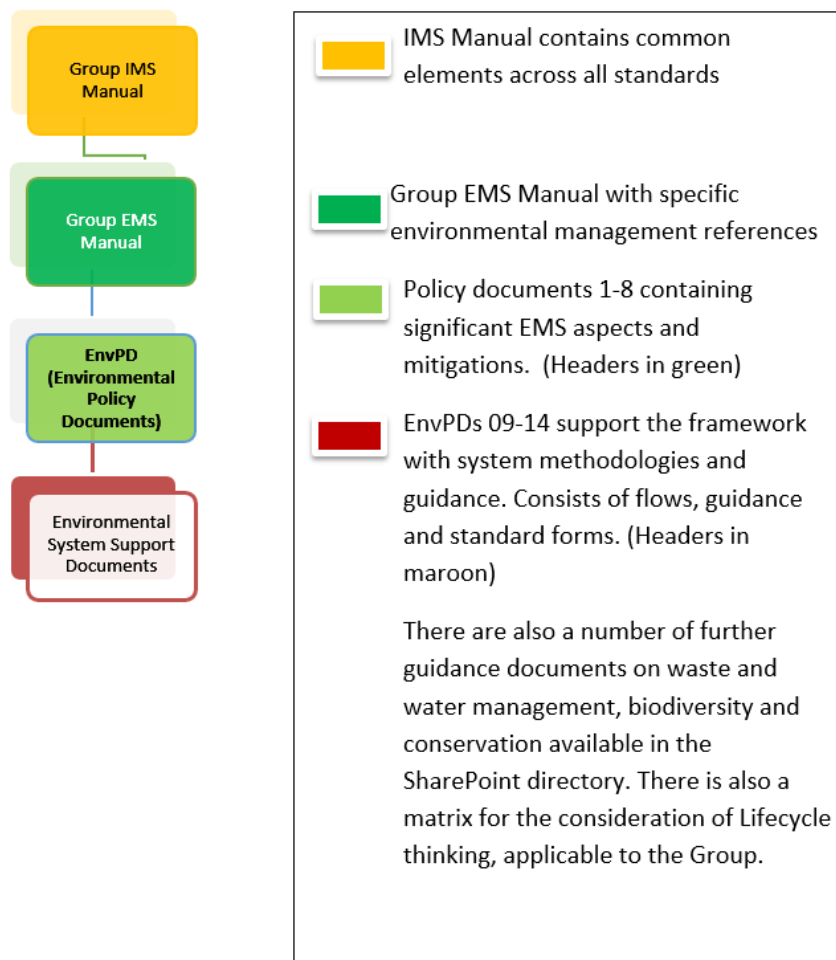
This covers all of our activities and services.

4.4 Environmental Management System

Marshall's run and continually improve the EMS in accordance with the requirements of ISO 14001 and have determined the processes needed for the environmental management system.

Processes may be reviewed in part or complete during internal/external audits and a formal recorded review may be undertaken due to changes being required to a process, or as a periodic review to confirm continued suitability. This includes the Management Review process.

Structure of EMS documentation and relationship with IMS structure



5 LEADERSHIP

5.1 Leadership & Commitment

Marshall's EMS is directly supported by senior management and forms part of our core business delivery approach. This is demonstrable through:

- Developing and supporting the environmental policy and objectives and making sure they are fully compatible with the context and strategic direction which includes the Environmental Social Governance (ESG) approach committed to;
- Promoting process approaches, improvement and risk-based thinking and ensuring the integration of the EMS into the business processes;
- Providing the resources needed for the environmental management system and supporting people to contribute to the effectiveness of the EMS;
- Ensuring that the EMS achieves its intended results through supporting continual improvement processes, the management review, and actions from the management review;

- Communicating the importance of effective environmental management and of conforming to EMS requirements;

5.2 Environmental Policy

The policy is communicated via the EMS SharePoint folder and is available to staff via notice boards. Further communication at site level is undertaken with the delivery of toolbox talks. The policy is reviewed annually within the management review process. For external interested parties, the policy statement is available on the website. www.marshalls.co.uk

5.3 Organisational roles, responsibilities and authorities

There is identification of the following key roles and responsibilities to deliver, maintain and improve our EMS. The interrelationship of departments, functions and personnel is within the organisation chart.

Specific individual EMS responsibilities are described below; wider responsibilities are described within job descriptions and / or in operating procedures, our continuous improvement programme(s) and other management system related documentation.

Roles and responsibilities for the environmental management systems are group led with site-based implementation.

SHE Director, MD Marshalls Manufacturing Operations and Operations Directors – Group and Business stream Level Site Managers

- Strategic direction
- Policy
- Objectives
- Review and chairing management reviews/management meetings
- Continual Improvement
- Reviewing liaison with regulators
- Budgeting, Capital Expenditure and resources

Group Systems Manager, Group SHE Manager – Group Level

- Provision of internal auditing
- Provision and support to IMS documentation
- Advice and guidance to sites
- Environmental system training, planning and implementation
- Management and support of SHE advisors, SHEQ Compliance leaders
- SHEQ concerns systems
- Contributing towards management review
- Establishing, help with implementation and maintaining the Group EMS
- Report to top management on the EMS, including performance and opportunities for improvement
- Liaise with external parties on matters relating to the EMS including Certification Bodies
- Identify, (with external resource) ensure conformance with compliance obligations, (including legal and regulatory), relevant to the company's activities, products and services; compliance audits and system audits

SHE Advisors (SHE Team) – Marshalls

- Delivery and maintenance of EMS audits and monitoring effectiveness of systems at sites
- Offering guidance to sites on environmental obligations and controls

SHEQ Compliance Leads

- Establish, implement and maintain operational control on site
- Liaison with staff and those working on behalf of the organisation to ensure awareness of requirements of the EMS
- Ongoing monitoring of environmental performance
- Liaison with external organisations on environmental matters
- Site level compliance monitoring
- Environmental tool box talks and awareness raising
- Provision of environmental advice and point of contact for queries
- Manage SHEQ concerns at site level

All Employees

All employees including those employees on sub-contract basis are responsible for the following:

- Adherence to the Environment Manual, Procedures and Processes
- Reporting of nonconformity and any opportunities for improvement
- Adhere to the SHEQ controls process.

6 Planning for the Environmental Management System

6.1 Actions to address risk and opportunities

6.1.1 General

As a team, Marshalls has identified key risks and opportunities through a SWOT analysis (see section 4.1), interested parties 4.2, Impacts and Aspects Register 6.1.2 and Compliance Obligations 6.1.3.

Significant areas of risk and opportunity	Control Mechanisms
Change management	Board level meetings and strategy, referral to Risk Register, adoption of Science Based targets and green initiatives (car fleet moving to hybrid/electric, HGVs to alternative sources, energy savings through design of buildings and processes, etc.) SHEQ Meetings at sites, Morning meetings at sites – agenda point to discuss any upcoming changes Environmental training Procurement process
Communities - permitting requirements	Site based assessments (management and SHE dept) Dust permit management Dust Control Noise Communication log for interested parties

Water use – groundwater - Town’s water - Recycled water	Abstracted water (boreholes at some sites) Monitoring of water use Monitoring of water reclamation
Site drainage	Site drainage Compressor condensate
Spills and leaks	General Spill Control, Design of containment
Acid cleaning	Where applicable: Acid bath cleaning, Acid wash cleaning
Air conditioning	Air conditioning maintenance and certification
Waste	Waste Management hierarchy (see flow chart)
End of life equipment	Identification of Redundant machinery Engineering Asset Register Correct disposal of equipment
Tanks and drums	Fuel and lubricant management in containment Methods of use to avoid spillages Spillage procedures
Raw materials	Group procurement aligned with ESG requirements, responsible sourcing
Energy	Refer to Energy Management Systems– monitoring energy use/reduction opportunities in line with ESOS
Management System risks and opportunities	
Weaknesses/Risks	Opportunities
Need to review and consolidate management systems, especially Environmental systems into a Group wide system. Ensure that the EMS fits in with Marshalls approach to sustainability and ESG	Management awareness sessions on requirements and advantages of management systems, consolidated with IMS and other systems. Consistent approach in delivering against strategic targets set by “Better Futures”.
Weaknesses/Risks	Opportunities
Software and IT systems need updating and improving	Continual support from Marshalls IS Department Obtaining a suitable digital platform to contain monitoring needs and record retention
Lack of training strategy and competence on environmental matters	Awareness planning for all levels of management and workforce and training on the policies, Toolbox Talks
Internal communication between management levels	An initiative to bring issues to the Executive on a three monthly basis
Communication and planning for change	Relates to the Change Management steps illustrated above. All systems require communication to be considered at all levels; Executive, Management Review, the SHEQ Management meetings, Works meetings, daily briefings, SHEQ concerns are all a means to provide 2 way communication.

A group wide “holistic” Risks and Opportunities document is within the IMS Manual format. This draws from the Group Risk Register (a secure document) and places the risk type into the appropriate management system.

6.1.2 Environmental Aspects

The methods for determining Aspects and Impacts are described within **EnvPD 12**.

6.1.3 Compliance Obligations

A Register of compliance obligations is held and maintained in order to comply with the requirements of the Standard. The Register shall summarise the applicable legislation and outline how the legislation applies to the Company activities.

This Register will be maintained by the HSE team and updated annually in liaison with the appointed Environmental Consultant. Central updates are also available from Group level and communicated to all sites. Changes to the register will be reviewed annually as part of the management review process. If any business activities or operations changes significantly, the Register must be amended accordingly to ensure its continued compliance.

6.1.4 Planning Action

Significant environmental aspects, compliance obligations and risks and opportunities are all managed through the development of suitable improvement programmes, operational control and or through training and competence of individuals.

Relevant actions and controls are highlighted in the aspects register, register of compliance obligations, risk and opportunities register and the improvement programmes. The effectiveness of any actions is evaluated through ongoing monitoring, auditing and observations and reviewed as part of the management review process.

6.2. Environmental Objectives and planning to achieve them

An Environmental Improvement Programme is formed from Group opportunities tied in with "Better Futures" and considering significant aspects where improvements have been identified as necessary to meet compliance obligations, policy requirements and or ensure that risks are minimised and opportunities realised. Further site objectives are identified within the business plans.

All EIPS have a clear documented objective, which is then broken down into time bound targets. The targets are further broken down into individuals' tasks that are assigned to personnel with deadline dates agreed where possible, this is known as the management programme. EIPs are regularly reviewed by the Directors and SHE team.

7 Support

7.1 Resources

The organisation determines and provides the resources needed for the establishment, implementation, maintenance and continual improvement of the environmental management system.

Marshall's ensure that the below elements are taken into account when completing this evaluation:

- The capabilities of, and constraints on, existing internal resources;
- What needs to be obtained from external providers

- Infrastructure and technology
- Information systems
- Competence

The overall responsibility for the Environmental Management System and for providing sufficient resources and personnel rests with the Board member given the responsibility of environmental performance and the SHE Director.

7.2 Competence

Competence is explained in an IMS protocol (Competence) that applies to all management systems.

7.3 Awareness

Marshall's ensure that all staff and persons doing work under their control are aware of environmental policy, relevant objectives, their contribution to the EMS, and the implications of not conforming to the EMS requirements.

7.4 Communication

Marshall's communicate internally on environmental matters through quarterly SHEQ meetings with attendance by the unit manager and or deputy, production supervisors, Union Representatives, where appropriate, and the SHE team.

Meetings are feedback to teams by the production supervisors who use the minutes to develop a toolbox talk. This is also to encourage communication and participation from the shop floor. Records are maintained of the minutes and toolbox talks.

Any new documentation within the EMS will be communicated with staff through a cascade of information from the SHE team to production supervisors to general operatives.

Environmental information is also displayed on noticeboards throughout the organisation and is available on the company intranet.

Marshall's Communication Matrix

The implementation, maintenance and improvement of management systems are dependent on adequate communication across the organisation. This will range from senior strategic management to aspects of operational delivery. See also Participation and Consultation matrices within H&S Manual.

Marshalls Communication matrix

Communication	Method	Communicated internally/externally? Y/N	How	Frequency	Decision date	Responsible Person	Review
Environmental Management Systems Policy Statement	Board /Executive meeting Site Meetings Notice boards SharePoint	Y (both)	Intranet and SharePoint Notice boards Website TBT (work force)	Annual	December	CEO, Executive Directors	January (CEO sign-off)
Environmental Incidents (non-permitted activity)	Incident form	Y (EXT to regulator) Y (INT to HSE team)	Letter/email/telephone call	In accordance with Emergency Plan	As required	Group HSE Director, Operations Director	December
Environmental Performance including objectives from the Improvement Plan and Management Review	Management Review	N externally Y internally	Minutes on SharePoint	Annual	November	Group HSE Director, Operations Directors	December

Scope of operations to be covered by Management Systems	Within Management Systems	N (summary is contained in certification)	Intranet	Annual review	January	Board representative, CFO and HSE Director	November - December
Business Performance	Presentation	Y	Website (webcast) Annual Report Management Conference (Q2) Communication Roadshow	Annual (six monthly statement from Board)	January	CEO Group Manufacturing Operations Director Group Emerging Businesses Director	November - December
Management Systems changes	Announcements on Intranet, email to significant interested parties	N (with exception to registration body)	Intranet	As and when required	At point changes are announced	HSE Director	Annual

7.5 Documented Information

7.5.1 General

The organisation demonstrates documented compliance to the standards through this Environmental Management System Manual (which includes processes & procedures), this information is made available to staff via the company intranet / SharePoint. All information is read only and only accessible via the document owner for amendment.

Records identified throughout the EMS, are to be kept in order to demonstrate both achievement of the required environmental objectives and targets and the effective operation of the EMS.

Environmental records shall be legible, identifiable and traceable to the activity, product or service involved.

7.5.2 / 7.5.3 Creating and updating / Control of documented information

The SHE Team will approve control and maintain the Environmental Procedures and relevant documentation in both paper and electronic format. Controlled copies of relevant documentation shall be available in read only format via the intranet / SharePoint.

The SHE Manager will control the status, issue, review and disposal of documentation to avoid outdated references, out-of-date procedures etc. and non-compliance with compliance obligations. Where issue status or revision changes are made the document shall be communicated via E-Mail to relevant Managers who shall be responsible for formal communication via Toolbox Talk methodology.

The HSE Manager and Group IMS Manager shall control the release of any reports compiled from external sources.

The Group IMS Manager will control the review, improvement and modification of the Environmental Management System in line with the IMS Manual.

Group IMS documentation is controlled by the Document control systems describes within the relevant procedures within the IMS. (**Document and Data Control Protocol**).

8 Operation

8.1 Operational planning and control

Marshall's has determined the requirements and controls for all its significant aspects, compliance obligations and risks and opportunities,

Controls are in place to ensure that we mitigate any adverse effects within the products or services we provide or that are outsourced where we can control or influence those suppliers.

Marshall's have considered the life cycle of their goods, products and services when determining their aspects, compliance obligations and risk and opportunities,

Marshall's have identified those operations and activities that are associated with identified specific heightened Environmental risks where additional control measures need to be applied, these additional controls are detailed within **Environmental System Control Procedures**.

8.2 Emergency preparedness and response (Environment)

Emergency Response Plans have been written to ensure emergency preparedness and response for each individual location and all potential situations.

Periodic testing (at least annually) of these systems shall be incorporated into the system audit schedule to ensure that personnel react correctly to such things as substance spillages.

Non-conformances will be dealt with via the non-conformance and corrective and preventative action procedure.

All emergency equipment e.g. spillage kits, etc. will be inspected and maintained at appropriate, or statutory, intervals and not less than annually.

Spill kits will be inspected as part of the monthly Environmental Tours, HSE Inspections and as part of the site audit process.

9 Performance Evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

Monitoring and measurement will be undertaken and completed by tracking performance against Environmental objectives and procedures and to facilitate reporting to group level. In order to continually monitor the facilities, a formal inspection via audit will be carried out at regular intervals as detailed in the Internal Audit Programme. Daily Site Inspections will be carried out to ensure continued compliance between audits.

Type of monitoring	Person/Team Reporting	Frequency	Reported to
Waste Data	SHEQ Compliance Lead / Unit Managers	Monthly	SHE Manager/Compliance team
Energy Data	Energy Champion	Monthly	SHE Manager/Compliance team
Internal Site Inspections	SHE Advisor	Monthly	SHE Manager
Water Volumes used Per tonne produced	SHEQ Compliance lead	Monthly	SHE Manager/Compliance team
Water volumes used Finished goods	SHEQ Compliance lead	Monthly	SHE Manager/Compliance team
Abstracted Water (where permitted)	SHEQ Compliance Leads	Monthly	SHE Manager/Compliance team

9.1.2 Evaluation of compliance (Environmental)

It is the responsibility of the SHE team to establish, implement and maintain a system for the periodic evaluation of compliance against applicable legal requirements and other requirements to which the organisation subscribes.

The frequency of the periodic evaluation will be as a minimum at annual intervals to coincide with the review of the compliance obligations. The evaluation shall be completed by an independent competent person in accordance with the guidelines to the standard.

Where the potential for occasional or more frequent non-compliance is identified as part of the evaluation, then a specific plan shall be produced to enable compliance and this shall be included in the Objectives.

9.2 Internal Audit

See **IMS Protocol Internal Audits**

9.3 Management Review

See **IMS Protocol Management Review**

10 Improvement

10.1 General

The company determine opportunities for improvement through regular monitoring measurement and auditing of their activities and through communications throughout their workforce on environmental issues.

Recommendations for improvement are encouraged from all staff and would be considered and reviewed by the organisation.

10.2 Nonconformity and corrective action

All non-conformances identified during internal audits are managed as per section 9.2 of the Internal Audit Protocol.

Any non-conformities identified through internal site- based activities, e.g., site inspections, incident investigation etc. are managed through the SHEQ concerns process.

SHEQ Concerns – defined as being potential for some areas to go wrong or single incidences. See HSPD02 for analysis and actions relating to SHEQ concerns within SHEQ meetings.

10.3 Continual Improvement

In particular, continual improvement is documented within the environmental improvement programmes, analysed through monitoring and measurement, reviewed, and built upon within the management review process.

Appendix 1 Revisions Issue 1.0

Page no.	Issue No.	Description of Change	Date of Issue
All pages	1.0	Thorough overhaul of a previous Manual applied to Marshall's CPM. Adapted for Group with reference to Group Policies and methods	31 st August 2020