DRM Aggregate Solutions Ltd

Waste Recycling Facility
DRM Aggregate Solutions Ltd
Whitchurch Drive
Ketley
Shropshire
TF1 5BY

Environmental Management System

2020

Prepared by: 4W Environmental Limited, Office 26 Redhill House, Hope Street, Saltney, Chester, CH4 8BU

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1.0 GENERAL CONSIDERATIONS

1.1 Site operator/ licence holder

1.1.1 DRM Aggregate Solutions Ltd operates a waste transfer/ recycling facility located on Whitchurch Drive, Ketley, TF1 5BY. The site is intended to allow DRM Aggregate Solutions Ltd to run a waste recycling business and increase the amount of waste recycled/ recovered. DRM Aggregate Solutions Ltd, amongst other business activities, carries out small civil engineering projects and surfacing. It is intended that the site will accept waste from commercial, industrial and domestic customers.

1.1.2 This Environmental Management System has been produced for DRM Aggregate Solutions Ltd as a means of providing a management structure to meet the requirements of an Environmental Permit.

1.1.3 This document will be reviewed every 4 years as a minimum. Additionally, a review will be carried out in the event of a change in site activities or an incident on site.

1.1.4 Developments in legislation have increased the effectiveness and scope of operations for waste transfer, recycling and recovery operations. This facility is intended for the recycling or reclamation of waste into soil, soil substitutes and aggregate through treating, sorting and storage of waste prior to recycling or reclamation. The proposed recycling operations will reduce the need to use virgin materials.

1.1.5 The registered office address for DRM Aggregate Solutions Ltd is:

DRM Aggregate Solutions Ltd
28 Hortonwood 50
Telford
Shropshire
TF1 7GY

1.2 Site history and planning status

1.2.1 The site is located on land on Whitchurch Drive, Ketley, TF1 5BY, National Grid Reference SJ 66780 11347 as shown on Drawing No. *DRM/01/A*.

1.2.2 The site has the benefit of a valid planning permission which covers the operations of the site. Planning permission TWC/2018/0060 was granted on 11th January 2019 for Change of Use from Scrap Yard (Sui Generis) to waste recycling site for concrete, road planings and soil, including erection of an office and storage building and bunded waste recycling bays (Sui Generis)

1.3 Waste management operations

1.3.1 The area which is the subject of this Environmental Management System is outlined in green on Drawing No. *DRM/02/A*. All references to 'the site' in this Environmental Management System shall mean this area and the infrastructure, plant and equipment associated within the site.

1.3.2 The EP permits the; Treating, Sorting and Storage of waste prior to recycling or reclamation.

1.3.3 Specified waste management operations will include the waste recovery operations listed in Annex I and Annex II of the revised Waste Framework Directive. They are in summary:

R13: Storage of waste pending recovery (Operations listed R3 and R5)
R5: Recycling/reclamation of other inorganic materials
R3: Recycling/reclamation of organic substances which are not used as solvents

1.4 Hours of operation

1.4.1 The operation of the facility will be during the hours listed below and in line with planning permission TWC/2018/0060.

Site Operations	
Monday to Friday	07.30 to 17.30
Saturday	08.00 to 13.00
Sunday	No operations
Public and Bank Holidays	No operations

Crusher Operations	
Monday to Friday	08.15 to 17.30
Saturday	No operations
Sunday	No operations
Public and Bank Holidays	No operations

1.4.2 Any proposal to conduct site operations outside the hours listed in 1.4.1 will be subject to prior notice to the Environment Agency and Local Planning Authority.

1.5 Waste types and quantities

1.5.1 The waste types to be accepted at the site will be non- hazardous waste as listed in *Appendix 1*.

1.5.2 Excluded wastes – the following wastes will not be accepted

Hazardous waste as defined under the Hazardous Waste (England and Wales) Regulations 2005. Liquid wastes, clinical wastes, sludge's and wastes consisting mainly or solely of loose fibres/ powders.

1.5.3 Waste delivered to the site will principally be from vehicles operated by DRM Aggregate Solutions Ltd/ R D Marsh Surfacing Contractors Ltd.

1.5.4 Waste delivered to the site will be contained predominately within skip vehicles and 8-wheel tippers. The maximum quantities to be tipped at the site in any one working day will be 1000 tonnes.

A running total will be kept to ensure compliance.

1.5.5 The maximum amount of waste to be stored on site at any time is shown in Drawing No*. DRM/02/A*. The maximum duration of unprocessed waste is 6 months.

1.5.6 If the maximum storage capacity of the site is reached, then no further waste will be accepted until waste has been processed and distributed to a working contract.

1.5.7 The maximum annual throughput is 75000 tonnes per annum.

1.6 Staffing and management

1.6.1 The site will be open for the receipt and processing of waste and for other essential operations during the hours listed in Section 1.4.

1.6.2 Positions in bold italic print below are the minimum staff requirements when the site is open for the reception and treatment of waste:

Position	***No.***	***Responsibilities***
Site Operative	***1***	***Overall site management (conversant with the waste acceptance and emergency procedure requirements of the Environmental Management System)***

1.6.3 A training needs assessment as shown in *Appendix 2* will be carried out for all staff and will be reviewed annually.

1.6.4 Additional staff employed by DRM Aggregate Solutions Ltd will also be utilised on site during busy periods to carry out waste operations, site maintenance works and plant maintenance.

1.6.5 Technical competence – the owners will meet the requirements of demonstrating technical competence through the CIWM Epoc scheme. Additional technical competence may be achieved through the use of a third party holding the correct level of award upon approval by the Environment Agency.

1.6.6 Continuing competence will be demonstrated every 2 years through the WAMITAB continuing competence scheme.

1.6.7 All staff will undergo training as determined by their role. A record of the training will be kept in their personnel files. As a minimum all staff will have induction training.

1.7 Health and Safety

1.7.1 All operations on site will be carried out in accordance with the relevant requirements of the Health and Safety at Work Act 1974.

2.0 SITE INFRASTRUCTURE

2.1 Access and parking

2.1.1 Access to the site is gained from Whitchurch Drive (A5223). The site entrances are shown on Drawing No's *DRM/03/A.*

2.1.2 The site speed limit is 10mph to avoid the generation of airborne dust.

2.1.3 Parking - adequate space is available on the site for the parking of all vehicles associated with the operational activities, see Drawing No. *DRM/02/A* and *DRM/03/A.*

2.2 Notice board and signs

2.2.1 A notice board will be positioned at the site entrance and will display the following information:

- The site operator's name, address and telephone number including emergency contact details
- Statement that the site is permitted by the Environment Agency
- The hours of operation of the site
- The Environmental Permit reference number
- Environment Agency national telephone number including emergency response (0800 807060)

Additional signs will be displayed where relevant to highlight any information required for compliance.

2.3 Site security

2.3.1 Gates - Gates are erected on site as shown on Drawing No. *DRM/02/A* The gates are to a minimum height of 3 metres and made from metal and topped with barbed wire. The gates will always be padlocked when the site is unmanned.

2.3.2 Fencing – The site is bounded to the specification shown in Drawing No. *DRM/02/A*, comprising of buildings, walls and fencing to the height of 3 metres.

2.3.3 CCTV – The site has the benefit of a CCTV system with cameras located on telegraph poles around the site. These cameras are motion sensitive and alert via text to the owners mobile when activated. This system allows Richard Marsh to view the cameras remotely and talk through a speaker on site to the intruders.

2.3.4 During operational hours there is a motion sensor located by the site entrance which raises an audible noise through the speaker on the main office to alert staff that there is somebody on site.

2.4 Site office

2.4.1 The site office is located as shown in Drawing No. *DRM/02/A*.

2.4.2 The site records detailed throughout this Environmental Management System will be maintained in the site office and will be made available for inspection by the Environment Agency on request. Records will be kept for a minimum of 6 years unless stated otherwise. The list below details the relevant site documents.

Environmental Permit (life of the site)
Environmental Management System (life of the site)
Waste Assessments (soil analysis from potentially contaminated sites)
Site Diary
Environment Agency inspection reports
Duty of Care Transfer Notes (retain for 2 years)
Hazardous Waste Consignment Notes (retain for 3 years, non-conforming waste only)
Waste delivery tickets (where applicable)
Weighbridge tickets (where applicable)
Visitor Book
Accident book

- Site Condition Report (life of the site)
- Records of outputs from WRAP processed material

2.5 Weighbridge

2.5.1 The site does not currently have the benefit of a weighbridge at present, although there are plans to install one in the future. All loads will be weighed using the onsite weighbridge (when installed).

2.5.2 In the absence of a weighbridge or weighbridge failure volumes of waste will be recorded (m^3) on incoming and outgoing loads. This can then be converted into tonnage using the following conversion factors

Conversion factors for main waste types accepted

List of Waste Code	Description	Conversion Factor
17 01 01	Concrete	0.93
17 01 02	Bricks	0.66
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	0.66
17 03 02	bituminous mixtures other than those mentioned in 17 03 01	0.9
17 05 04	soil and stones other than those mentioned in 17 05 03	1.06

2.6 Fuel storage/ chemical storage/ effluent storage

2.6.1 Diesel is stored within the Fuel Store as shown on Drawing No. *DRM/02/A*. The diesel is stored within a double skinned tank within a 20-foot ISO container.

2.6.2 Any liquids/ chemicals stored on site will be in double skinned containers, stored within bunded areas or on drip trays. The location may vary with operational need.

2.7 Drainage

2.7.1 The site drainage details are shown in Drawing *DRM/02/A* and *DRM/06/A*.

2.7.2 Surface water runoff drains towards the site entrance and is collected by a series of drainage grids. These grids then flow into a silt trap to remove suspended solids before entering a pumped well where the water can be pumped back onto site for use with dust suppression. Any excess water will enter the existing oil interceptor prior to discharging to an existing outfall. This area will be fenced and gated and will be locked when not in use.

2.7.3 A penstock valve in the pump well will allow the flow to be shut off in the event of a major spillage on site or a spill likely to enter the surface water drainage system.

2.7.4 A visual inspection will be undertaken daily of the water quality to ensure no oil films and level of suspended solids/ sediment within the silt trap. A record will be kept in the site diary.

2.7.5 The silt trap (see Drawing No. *DRM/06/A*) has been designed with benching to move silts to one side and allow the easy cleaning using an excavator. The silt trap will be cleaned periodically when deemed necessary by the TCM for the site.

2.7.6 Foul drainage from the office is provided by a separate above ground storage tank as shown in Drawing No. *DRM/02/A*. Foul drainage from the welfare/ toilet facilities is held within integrated storage tanks for the individual units. Foul water is collected when required by a licenced waste carrier.

2.7.7 There are no known public sewer connections (foul sewer and surface water sewer) adjacent to the site (see *Appendix 3*).

2.7.8 The is a concrete bund which surrounds the main operational perimeter of the site as shown in Drawing *DRM/02/A.*

2.8 Waste Transfer & Storage

2.8.1 All waste operations will take place within the areas shown on Drawing No. *DRM/002/A.*

2.8.2 Area for the deposit of unauthorised wastes - an enclosed container/ area is to be allocated for the quarantining of unauthorised waste, which cannot be removed from the site immediately. The location of this container/ area may be varied as operating conditions permit.

2.9 Vehicles, plant and equipment

2.9.1 The site will utilise the following plant and equipment which is integral to the operations of DRM Aggregate Solutions Ltd;

- 360-degree excavator
- Screener
- Crusher (will be hired in when required)
- Loadall/ Loading shovel/ Skid Steer Loader with brush attachment

2.9.2 Plant and vehicles will be serviced and maintained to ensure that they are fit for purpose and do not generate excessive particulates.

2.9.3 The brush attachment on the skid steer will be monitored and checked for effectiveness. Once the brushes are worn and the brush becomes ineffective then the brush will be replaced.

2.9.4 Additional plant will be hired to cover any busy periods.

2.9.5 Records of plant maintenance and plant inspections are kept in the site office.

2.9.6 Vehicles and mobile plant will not be allowed to idle excessively to avoid the generation of dusts. This will be enforced by management.

3.0 SITE OPERATIONS

3.1 Preliminary procedures

3.1.1 Guidance will be given by the site management to all employees, sub-contractors, other waste carriers and customers regarding waste types that are acceptable at the site. The waste arriving on site will predominantly be brought in by vehicles operated by DRM Aggregate Solutions Ltd/ R D Marsh Surfacing Contractors Ltd or delivered by other hauliers who hold current waste carrier's registration certificates. Details will be taken for all new haulage operators bringing waste to the site and the details will be periodically checked with the Environment Agency to ensure registration.

3.1.2 As the waste accepted will principally be from DRM Aggregate Solutions Ltd/ R D Marsh Surfacing Contractors Ltd own vehicles then staff will check the load prior to uplift to ensure that the contents are in line with the Duty of Care Waste Transfer Note and in line with those permitted by the Environmental Permit and *Appendix 1* of this Environmental Management System.

3.1.3 Any non-conformances will be recorded and follow the procedure for waste rejection in 3.2.3 and a waste rejection form completed (*Appendix 4*) and sent to the Environment Agency.

3.1.4 Any soils with the List of Waste Code 17 05 04 and from potentially contaminated sites will need to be approved prior to acceptance. Approval will consist of chemical analysis and assessment which demonstrates that the material is suitable for the intended use without significant risk of pollution. Records demonstrating compliance will be maintained.

3.2 Checking in and inspection of loads

3.2.1 All incoming vehicles are required to stop at the waste inspection area so that a visual inspection can be undertaken of the contents. This may include visual inspection by CCTV. The load will then report to the site office. The details of the load will be recorded, and the duty of care note/ company documentation will be checked by the operator, to ensure that the load is acceptable. Any deviation from the procedures or problems with any load will be reported to the manager.

3.2.2 If the waste does not meet the description stated on the controlled waste transfer note the customer will be advised to check the note and give a more detailed description of the waste. If the more detailed description of the waste reveals that the waste is not permitted at the site, then the customer will be advised to contact the Environment Agency to find an alternative site.

3.2.3 If unauthorised waste is discovered two courses of action are available:

(i) Return the waste to the producer and advise the Environment Agency of the deposit; **or,**

(ii) Where the producer of the load cannot be contacted or where the removal off site of the waste may cause further problems then the waste will be stored in the quarantine area provided for unauthorised wastes. The Environment Agency will then be contacted to agree a course of action.

3.3 Waste Processing

3.3.1 The purpose of this recycling facility is to allow waste streams to be stored treated and blended to produce soil, soil substitutes and aggregate. This will reduce the need for landfill and for the use of virgin materials. This will occur through the following processes;

3.3.2 Once a load has been accepted for deposit (in accordance with 3.2.1) and is found to comply with the conditions of the environmental permit the following outline procedure will apply;

(i) The driver will be directed where to deposit the load to help increase the recycling efficiency as shown in Drawing No. *DRM/02/A* and *DRM/03/A.*

(ii) Waste will be crushed and/ or sorted by mechanical plant into different sizes and different specifications. These segregated wastes will either be stored; in bays or in designated piles.

(iii) Any waste that cannot be recycled will be stored on the site prior to been removed to a suitably licenced waste management site.

3.3.3 If the maximum storage capacity of the site is reached, then no further waste will be tipped until waste can be removed from the site and taken to a suitably licenced or exempt waste management operation.

3.3.4 Unsorted waste will be stored for a maximum of 12 months for inert and 6 months for non-inert waste.

3.3.5 DRM Aggregate Solutions Ltd operates under a WRAP approved scheme for processing inert material into products such as 6F2, 6F3 and 6F5. A copy of the Quality Management System and Factory Production Control can be found in *Appendix 5*.

3.4 Waste collection

3.4.1 The potential waste types produced by the recycling process includes;

Waste Types	*Classification*	*LoW*
General waste (plastic, wood, rubber)	non-hazardous	20 03 01
Scrap metal (ferrous)	non-hazardous	19 12 02

3.4.2 All waste carriers and disposal outlets will be checked for suitability against Duty of Care requirements (*Appendix 6*).

3.5 Site Closure

3.5.1 In the event that the site ceases to operate, a permit surrender application will need to be submitted to remove the requirements of the environmental permit. To achieve this the following procedure will be implemented;

- TCM to contact the current EA Enforcement Officer and inform that the site is planning to cease operations.
- TCM to confirm with the EA that waste acceptance has ceased.
- TCM to assess the amount of unprocessed and processed waste and provide a timetable for clearance.
- After full implementation of the timetable and following removal of all infrastructure and mobile plant from the site a site investigation will be undertaken to assess the ground current conditions.
- This will be compared with the Site Condition Report (see 5.2)
- A surrender application will then be made to the EA permitting team for determination.

4.0 ENVIRONMENTAL CONTROL, MONITORING AND REPORTING

4.1 Breakdowns and spillages

4.1.1 In the event of breakdown of the loading plant an alternative 360-degree excavator or loading shovel will be brought on site until it is repaired unless the repair can be carried out quickly without causing the operations of the site to breach any conditions.

4.1.2 Any breakdown of plant that could lead to a breach of conditions and any spillage will be reported to the Environment Agency as soon as is practically possible.

4.1.3 Any spillage will be cleared immediately by depositing using the spill kit as shown in Drawing No. DRM/02/A or sand on the affected area. The area will be cordoned off to contain the spillage. The sand or absorbents will then be placed in a container prior to being taken to a suitably licenced site for recovery/ disposal.

4.1.4 In the event of a major spill or one that has the potential to enter the surface water collection system the penstock valve on the pump well will be closed to prevent flow to the existing outfall whilst the spill and decontamination is dealt with. A record will be kept in the site diary and Site Condition Report.

4.2 Site inspections and maintenance

4.2.1 The inspection schedule for maintenance/ housekeeping is listed in *Appendix 7***.** The inspection will be completed by the site manager or a person who is familiar with the requirements of the Environmental Management System and Environmental Permit. All details of defects, problems and repairs carried out will be recorded in the site diary on the day that each event occurs.

4.2.2 All repairs to site security fencing will be made within 5 working days of the discovery of the damage and the site will be made secure until the repair has been carried out.

4.2.3 Any major defects found during the daily site inspection which are likely to lead to a breach of conditions will be repaired by the end of the working day in which they are found, where possible. If a repair is not possible by the end of the working day the Environment Agency will be contacted to agree a suitable time-scale for repair.

4.3 Control of mud and debris

4.3.1 Mud on roads – The surfacing of the entire operational area of the site is concrete and hardstanding and is not expected to create mud in volumes that would cause an amenity issue. If mud was to become an issue, then the mud would be cleaned by the end of the working day using the brush attachment for the skid steer.

4.3.2 Road vehicles will not track through waste. However, the deposit of material on the public highway will be treated as an emergency and will be cleaned with a mechanical vacuum sweeper, or similar, immediately.

4.3.3 Vehicles leaving the site can be hosed down if required to prevent mud from falling from vehicles and the generation of dust at a later date.

4.4 Control and monitoring of dust

4.4.1 All site operations will be carried out to minimise the creation of dust. A Dust and Emissions Management Plan has been produced as part of the bespoke permit application and can be found in *Appendix 8*. This document gives a more in-depth analysis of the potential and management of dust.

4.4.2 In summary the dust control techniques are;

- Relatively small volumes of waste
- Crushing will be carried out on a campaign basis and will not be a continual daily occurrence.
- The crusher supplied will be fitted with spray bars.
- The drop height from chutes will be kept to a minimum and chutes/ conveyors covered where possible.
- Water spray to be used to damp down site.
- Brush attachment for skid steer to be used to clean road surfaces.
- Covering of stockpiles with heavy gauge tarpaulin.

4.4.3 All vehicles entering and leaving the site will be sheeted where possible or have loads damped down with the hose to prevent the generation of dust.

4.4.4 A visual check for dust will be conducted twice daily (morning and afternoon) by walking around the perimeter of the site. A record will be made in the site diary of;

- person undertaking the assessment
- date
- time of assessment
- description of findings
- description of any dust mitigation employed as a result of the assessment
- assessment on the effectiveness of any dust mitigation measures

4.4.5 A water hose and attachment (spray) may be used to dampen the site and stockpiles to reduce the potential for airborne dust/ particles.

4.5 Odour control

4.5.1 All incoming waste will be subject to the acceptance procedures as detailed in section 3.2.1. If any waste exhibiting offensive odours is deposited on site, it will be deposited in the quarantine area for rejected waste or removed from the site immediately to a suitable disposal site. Waste will be visually inspected before uplift by DRM Aggregate Solutions Ltd/ R D Marsh Surfacing Contractors Ltd to ensure that there are no putrescible wastes brought on to site which may give rise to potential odour issues.

4.5.2 It is not perceived for odours to be a problem due to the nature of the waste types accepted on site. Odours can be mitigated using good operational techniques. Should odour become an issue then the following action will be taken:

- Investigate the source of the odour
- Investigate operations management
- Investigate other potential sources exterior to the site
- Investigate complaint

4.5.3 If odours are detected within the site, then action will be taken to improve site operations. If this is not sufficient then alternative control methods will be employed such as odour masking sprays.

4.6 Litter control

4.6.1 The site surface will be inspected daily when the site is in operation however due to the nature of the waste types accepted litter is not perceived to be an issue.

4.6.2 Any litter which does escape and is arrested by the site boundary will be removed within 48 hours after it is discovered.

4.7 Control of pests, birds and other scavengers

4.7.1 Vermin/ insect/ bird control - It is unlikely that vermin will present a problem because of the waste types handled at the site but a recognised pest control contractor will be brought in if any problems are encountered.

4.7.2 The site will be inspected as part of the weekly site inspection and the presence of vermin would be noted in the site dairy with a description of the action taken and its effectiveness.

4.8 Control of Fire

4.8.1 It is not thought fire from waste activities to be significant due to the waste types processed.

4.8.2 Naked flames and smoking are not allowed on site, other than in a designated area outside the site office.

4.8.3 No waste material shall be burned within the boundaries of the site.

4.8.4 Any fire at the site will be regarded as an emergency and immediate action shall be taken to extinguish it with the appropriate fire extinguisher, provided that the person feels competent to tackle the fire.

4.8.5 In the event that the fire cannot be tackled with the equipment provided the Fire Brigade should be called.

4.8.6 All outbreaks of fire shall be notified forthwith to the Environment Agency.

4.9 Control and monitoring of noise and vibration

4.9.1 It is not anticipated that site operations will cause a noise and vibration nuisance because of the scale and location of the operation. Activities likely to give rise to noise will be those operations associated with adhoc screening, adhoc crushing, plant/ machinery, reversing alarms from vehicles and unloading/ loading operations.

4.9.2 The nearest receptors for noise will be the residential areas of Ketley Brook and Hybridge. A noise assessment was carried out as part of the planning application by Sound Analysis Ltd. The report concluded that the measured levels were generally in line with World Health Organisation (WHO) Guidelines for Community Noise (1999).

A Noise Impact Assessment and Noise and Vibration Management Plan have been produced as part of the bespoke permit application process. A copy can be found in *Appendix 9*.

4.9.3 The design of the site itself will mitigate noise to these receptors as stockpiles of waste and bays will act as a buffer. The site has planning permission for a screening bund to the north and west which will act as an additional noise mitigation feature.

4.10 Local Receptors

4.10.1 The drawing in *Appendix 10* shows the location of the facility relevant to its surroundings and highlights commercial, industrial and residential properties.

4.10.2 Environmental Risk Assessments and Accident Management Plan can be found in *Appendix 11*

4.10.3 The main local receptors identified for the site are highlighted in the table below;

Receptors

Map No.	*Receptor*	*Distance (m)*	*Direction*	*Type*	*At Risk?*
1	T & W	0	SE	Industrial	Workers, Public, Contractors
2	Deciduous Woodland - Protected	23	E	Open Space	Workers, Public, Contractors
3	A5223	38	W	Road	Workers, Public, Contractors
4	Ketley Brook	51	E	Open Water	Workers, Public, Contractors
5	Railway Line	71	N	Industrial	Workers, Public, Contractors
6	Telford College of Arts & Technology	78	W	Public Sector	Workers, Public, Contractors
7	Residential Properties - Haybridge	110	N	Residential	Workers, Public, Contractors
8	Residential Properties - Ketley Brook	147	E	Residential	Workers, Public, Contractors
9	Car Wash, Filling Station	220	NW	Commercial	Workers, Public, Contractors
10	Residential Properties - Ketley Sands	233	SW	Residential	Workers, Public, Contractors
11	Residential Properties - Arleston	274	SSW	Residential	Workers, Public, Contractors
12	Fire Station	314	W	Public Sector	Workers, Public, Contractors
13	Haybridge Industrial Estate	336	NW	Commercial	Workers, Public, Contractors
14	B5061	385	SE	Road	Workers, Public, Contractors
15	The Bridge School (primary & secondary)	385	NE	Public Sector	Workers, Public, Contractors
16	New Buck's Head Football Ground	500	W	Commercial	Workers, Public, Contractors
17	Pond (Works)	509	SE	Open Water	Workers, Public, Contractors
18	Works	530	SE	Industrial	Workers, Public, Contractors
19	Bridge Builder Public House	545	S	Commercial	Workers, Public, Contractors
20	Residential Properties - Wellington	601	W	Residential	Workers, Public, Contractors
21	Filling Station	607	S	Commercial	Workers, Public, Contractors
22	Wrekin Retail Park	665	S	Commercial	Workers, Public, Contractors
23	Field Drain	715	N	Open Water	Workers, Public, Contractors
24	Field Drain	730	NW	Open Water	Workers, Public, Contractors
25	Residential Properties - Ketley	777	E	Residential	Workers, Public, Contractors
26	Millbrook Primary School	785	NNW	Public Sector	Workers, Public, Contractors
27	Post Office	883	NE	Commercial	Workers, Public, Contractors
28	The Old Hall School	904	WNW	Public Sector	Workers, Public, Contractors
29	Residential Properties - Hadley	945	ENE	Residential	Workers, Public, Contractors
30	Sports Leisure Centre	982	NE	Commercial	Workers, Public, Contractors

4.10.4 The site is located above a groundwater source protection zone 3. The superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer. A Telford & Wrekin Council Desk Study and Contamination Report highlights a significant thickness of cohesive glacial clay between the made ground under the site and the aquifers.

4.10.5 Superficial deposits are ‘Glaciofluvial Deposits, Devensian - Sand And Gravel’ – source BGS.

4.10.6 Bedrock is ‘Bridgnorth Sandstone Formation – Sandstone’ – source BGS.

4.10.7 The site has historically been used for agriculture, sand pit, landfill and scrap yard. A full contamination assessment report has been produced by Telford and Wrekin Council in September 2018 as part of the planning process. This report forms the basis of the Site Condition Report.

4.11 Environment Agency reporting mechanism

4.11.1 Any incidents involving the following will be reported to the Environment Agency as soon as is practicably possible either through a direct line or using the national 24-hour line where out of normal office hours;

- Accidents.
- Incidents (including near misses).
- Plant breakdowns and malfunction that could have an adverse effect on the environment or human health and could lead to a breach of conditions.
- Waste rejection.
- Any significant environmental effects including damage to any sensitive receptors and significant impacts on properties.

4.12 Actual or potential non-compliance reporting mechanism

4.12.1 Any actual incidents or potential non-conformances will be raised to management who will undertake an investigation to establish; if justified, date/ time location of incident, person reporting, root cause, review of procedures and risk assessments (environmental and H&S) covering the activity, recommendations for improvement and review of improvements at a later date to assess benefits.

4.12.2 This procedure will cover health &safety actual incidents or potential non-conformances, environmental actual incidents or potential non-conformances and complaints from neighbours/ regulators.

4.13 Complaints procedure

4.13.1 Complaints will be treated as actual or potential non-conformances (see 4.12).

4.13.2 Complaints from the public will be investigated by either Richard Marsh or Dawn Marsh.

5.0 SITE RECORDS

5.1 Records

5.1.1 Documented procedures and records for the identification, collection, storage and disposal of waste have been established.

5.1.2 The following details will be recorded for every load accepted at the site:

(i) The following details will be recorded for every load deposited at the site:
(ii) The date of delivery
(iii) Origin of the waste
(iv) The type, nature and quantity of waste (in tonnes or cubic metres)
(v) The List of Waste Code
(vi) sic code for the process giving rise to the waste
(vii) Vehicle registration number

5.1.3 The details may be entered into a computer system to assist with the production of auditable records of waste inputs.

5.1.4 The following details will be recorded for all deposits of unauthorised waste at the site and will be forwarded to the Environment Agency:

(i) Date and time of deposit.
(ii) A description of the waste.
(iii) The quantity of waste (type and number of containers).
(iv) Name, address and telephone number of waste producer.
(v) The carrier's name, registration number and vehicle registration.
(vi) Reason for the rejection of waste and action taken.

The details will be recorded on a Rejected Waste Form *Appendix 4*

5.1.5 The following details will be recorded for every load of waste leaving the site:

(i) The date and time of removal.
(ii) The type, nature and quantity of waste (in tonnes or cubic metres).
(iii) The destination site.
(iv) The name and registration number of the carrier removing the waste.

5.1.6 The details will be recorded on dockets and/ or a waste transfer note and may be entered into a computer system to assist with the production of auditable records of waste outputs.

5.1.7 Every quarter a quarterly return will be submitted to the Environment Agency detailing the amount of waste received on the site and its location and the amount of waste removed from the site. The quarterly returns will be submitted by the end of the month following the quarterly return period as shown in the Table below;

Quarter	Period covered	Last date for submission
Q1	January to March	30th April
Q2	April to June	31st July
Q3	July to September	31st October
Q4	October to December	31st January

Electronic Waste Returns should be submitted to;

National-Operator-Returns@environment-agency.gov.uk

5.1.8 Site diary - The outcome of all inspections of site infrastructure will be recorded in the site diary including any action taken or proposed along with a review of the effectiveness of the action. Site Diary records shall include;

- Construction work
- Maintenance
- Breakdowns
- Emergencies
- Problems with waste received and action taken
- Site inspections and consequent actions carried out by the operator (including visual dust assessments)
- Technically competent manager attendance on site, date, time on, time off site
- Despatch of records to EA (i.e. waste rejection)
- Severe weather conditions
- Complaints and actions taken
- Environmental problems and remedial actions

5.1.9 Visitors to the site will sign the visitor's book upon arrival and exit stating the purpose of their visit and whom they represent.

5.1.10 The management system will be reviewed as a minimum every 4 years. However, reviews will also take place in the event of;

- Change in site operations
- Change in plant/ equipment that affects the activities covered by the permit
- A permit variation is applied for
- After any accident, complaint or breach of permit
- If a new environmental problem emerges and additional control measure have been implemented

5.1.11 In the event of a review/ change in the management system then the log in *Appendix 12* shall be completed.

5.1.12 A copy of Environmental Permit and EMS shall be kept available on site.

5.1.13 Document retention will be as follows;

Document	*Retention Time*	*Reason/ comment*
Environmental Permit	Life of the Site	Includes all modifications to aid surrender
Environmental Management System	Life of the Site	Required with permit
Site Diary	Life of the Site	Will be required for permit surrender to demonstrate no contamination of land/ groundwater
Environment Agency inspection reports	Life of the Site	Will be required for permit surrender to demonstrate no contamination of land/ groundwater
Duty of Care Transfer Notes	2 years	As long as electronic record available containing the details – keep for life of the site to aid permit surrender
Hazardous Waste Consignment Notes	3 years	Non-conforming waste only
Weighbridge tickets	2 years	As long as electronic record available containing the details – keep for life of the site to aid permit surrender
Site Condition Report	Life of the site	Required to be kept up to date for permit surrender
Records generated by EA reporting mechanism	Life of the site	Will be required for permit surrender to demonstrate no contamination of land/ groundwater
Records generated by actual or potential non-compliance	Life of the site	Will be required for permit surrender to demonstrate no contamination of land/ groundwater
Complaints	Life of the site	Will be required for permit surrender to demonstrate no contamination of land/ groundwater
Other records required by this EMS will be kept for a minimum of 6 years to allow review of the EMS by EA		

5.2 Site Condition Report

5.2.1 A Site Condition Report (SCR) is a requirement of the Environmental Permitting Regulations for waste permits. This report is designed to record the condition of the land (including groundwater) on the site.

5.2.2 The SCR should be kept up to date throughout the life of the permit to aid any future surrender application. The types of information that should be included in the report are;

- Details of any historic spills or contamination and any response (prior to permit issue).
- Evidence of the effectiveness of any measures taken to protect land and/ or groundwater since permit issue.

A copy of the SCR can be found in *Appendix 13*

6.0 CONTINGENCY PLANNING

6.1 Breakdowns

6.1.1 In the event of breakdowns then Richard Marsh will be contacted as soon as is practically possible and informed of the problem. He will then arrange for a repair to be carried out.

6.1.2 In the event that a repair cannot be affected in a timely manner then the following options are available;

- Store the material on site (max. storage time and quantities apply)
- Cancel third party contractors
- In the extreme event send material to another waste facility, although this would have to be exceptional circumstances.

6.2. Enforced shutdowns

6.2.1 In the event of an enforced shutdown the procedure in 6.1 will be followed.

6.3 Flooding/ extreme weather

6.3.1 With the impacts of climate change, it is likely that extreme weather events will become more frequent and more severe.

6.3.2 The site is not located within a flood zone and so the risk of flooding is minimal from rivers. There remains the potential for flooding caused by infiltration in excess however this unlikely as the surrounding superficial geology is Glaciofluvial Deposits, Devensian - Sand and Gravel.

APPENDIX 1

WASTE TYPES

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

Exclusions

Wastes having any of the following characteristics shall not be accepted:

- **Consisting solely or mainly of dusts, powders or loose fibres**
- **Hazardous wastes**
- **Wastes in liquid form**

Waste Code	Description
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02 02	**waste from preparation and processing of meat, fish and other foods of animal origin**
02 02 02	shellfish shells from which the soft tissue or flesh has been removed only
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood
10	**WASTES FROM THERMAL PROCESSES**
10 01	**waste from power stations and other combustion plants**
10 01 01	bottom ash and slag only
10 01 02	pulverised fuel ash only
10 01 05	gypsum (solid) only
10 01 15	bottom ash and slag only from co-incineration other than those mentioned in 10 01 14
10 11	**wastes from manufacture of glass and glass products**
10 11 03	waste glass based fibrous materials – allowed only if wastes without organic binders
10 11 12	clean glass other than those mentioned in 10 11 11
10 12	**wastes from manufacture of ceramic goods, brick, stiles and construction products**
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	**wastes from manufacture of cement, lime and plaster products and articles and products made from them**
10 13 14	waste concrete only
15	**WASTE PACKAGING**
15 01	**packaging**
15 01 07	clean glass only
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	**wood, glass and plastic**
17 02 02	clean glass only
17 03	**bituminous mixtures, coal tar and tarred products**
17 03 02	road base and road planings (other than those containing coal tar) only
17 05	**soil (including excavated soil from contaminated sites) stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03

17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 05	**soil (including excavated soil from contaminated sites) stones and dredging spoil**
17 05 08	track ballast other than those mentioned in 17 05 07
17 08	**gypsum based construction material**
17 08 02	gypsum only other than that mentioned in 17 08 01
17 09	**other construction and demolition wastes**
17 09 04	Construction and demolition wastes other than those mentioned 17 09 01, 17 09 02 and 17 09 03 Allowed only if; The waste is generated from utilities trenching's The waste consists of sub base aggregates i.e. granular material The waste contains only materials that would be described by entries 17 01 01, 17 03 02 and 17 05 04 if the waste is not mixed.
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION / INDUSTRIAL WASTE**
19 05	**wastes from aerobic treatment of solid waste**
19 05 03	compost from source segregated biodegradable waste only
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 02	washed sewage grit (waste from desanding) free from sewage contamination only
19 08 99	stone filter media if free from sewage contamination only
19 12	**wastes from the mechanical treatment of wastes**
19 12 05	clean glass only
19 12 09	minerals (for example sand, stones)
19 12 12	treated bottom ash including IBA and slag other than that containing dangerous substances only
19 13	**wastes from soil and groundwater remediation**
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**separately collected fractions**
20 01 02	clean glass only
20 02	**garden and park wastes**
20 02 02	soil and stones

APPENDIX 2

TRAINING NEEDS ASSESSMENT

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

DRM Aggregate Solutions Ltd

Training Needs Assessment

JOB	TRAINING REQUIRED (tick boxes to show who needs which training)																COMMENTS
	Environmental awareness					Maintenance/operations						Accidents and emergency					
	Certificate of Technical Competence/ deemed competence	Supervision of waste management sites	Environmental and permit awareness	Waste receipt including Duty of Care	Waste separation and storage	360 Degree Excavator	Crusher	Screener				Fire procedure	Spill response procedure	Waste Rejection	Dust and Emissions Management Plan		
Site Manager		■	■	■	■	■	■	■				■	■	■	■		
Technically Competent Manager	■	■	■	■	■							■	■	■	■		
Site Operatives			■	■	■	■	■	■				■	■	■	■		

■ Required skills

DRM Aggregate Solutions Ltd

Training Summary – points to be covered by either formal training or toolbox talks

Environmental & Permit Awareness training to cover

- What is an environmental permit?
- What is the EMS and how does this relate to the environmental permit?
- What are the main pitfalls on a daily basis?
- What is the best way to avoid prosecution?
- Waste acceptance procedures (Section 3.1 and 3.2 of the EMS)

Waste receipt including Hazardous Waste Consignment Note and Duty of Care Waste Transfer Note Training

- Waste acceptance procedures (Section 3.1 and 3.2 of the EMS)
- How to complete a hazardous waste consignment note
- Legal impacts of hazardous waste consignment note
- How to complete a Duty of Care Waste Transfer Note
- Legal impacts of Duty of Care Waste Transfer Note

Waste separation and storage

- How to store in accordance with permit (Section 3.2 and 3.3 of EMS)

Fire Procedure

- How to raise the alarm
- Where is the muster point?
- Correct fire extinguisher for the correct fire

Waste Rejection procedure

- Where is the quarantine area?
- Who do I notify?
- Section 3.2 of EMS

DRM Aggregate Solutions Ltd

Training Summary – points to be covered by either formal training or toolbox talks

Spill Response Procedure

- Types of spill
- Spillage procedure
- Location of spill kit
- Section 4.1 of EMS

Dust and Emissions Management Plan

- What is it?
- Why is it required?
- Dust control measures
- What to do if you see dust leaving the site
- Dust complaints procedure (internal and external)

DRM Aggregate Solutions Ltd

Training Record

Employee Name	Job Title Site Manager

Training Required	Date due	Date done	Passed as competent? yes/no	Reviewers Signature	Date for Refresher	Comments
Supervision of waste management sites						Through day to day operations
Environmental & Permit Awareness						
Waste receipt including Duty of Care Waste Transfer Note Training						
Waste Separation and storage						
360 Degree Excavator						
Crusher						
Screener						
Fire Procedure						
Spill Response Procedure						
Waste Rejection Procedure						
Dust and Emissions Management Plan						

DRM Aggregate Solutions Ltd

Training Record

Employee Name	Job Title Technically Competent Manager

Training Required	Date due	Date done	Passed as competent? yes/no	Reviewers Signature	Date for Refresher	Comments
Certificate of Technical Competence						
Supervision of waste management sites						Through day to day operations
Environmental & Permit Awareness						
Waste receipt including Hazardous Waste Consignment Note and Duty of Care Waste Transfer Note Training						
Waste Separation and storage						
Fire Procedure						
Spill Response Procedure						
Waste Rejection Procedure						
Dust and Emissions Management Plan						

DRM Aggregate Solutions Ltd

Training Record

Employee Name	Job Title Site Operative

Training Required	Date due	Date done	Passed as competent? yes/no	Reviewers Signature	Date for Refresher	Comments
Environmental & Permit Awareness						
Waste Separation and storage						
Fire Procedure						
Spill Response Procedure						
Waste Rejection Procedure						
Dust and Emissions Management Plan						

APPENDIX 3

SEVERN TRENT

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

SEVERN TRENT WATER Ltd
Asset Data Management
GISmapping Team
PO Box 5344
Coventry
CV3 9FT
Tel 0345 601 6616
Fax 02477 715862
Contact
Our Ref 52903
22 July 2019

Apparatus Location Enquiry

Further to your enquiry re: **Whitchurch Drive, Ketley, TF1 5BY**
Enclosed is a copy of the plans showing the approximate positions of the **water mains** situated within the vicinity of the land/property which is the subject of your enquiry.

May I advise you that Severn Trent Water has no record of any **public sewers** within the vicinity of the designated area shown on your plan. However, development may have taken place for which we have not received any information and this should be anticipated during any excavation.

Asset Data Management can only provide plans of the location of the Company's underground assets. Therefore service pipes and drains are the responsibility of the property owner and should be anticipated during any excavation.

However, we wish to inform you that although most private lateral drains and sewers were transferred to Severn Trent Water's ownership on 1st October 2011, the Company does not possess complete records of these assets and therefore they may not be shown on these maps.

Please also find enclosed a copy of Severn Trent Water's General Conditions and Precautions for your information.

Kind Regards

GISmapping Team

Enquiry received
GISmapping:
22 July 2019

- Distribution Main
- Trunk Main (local/primary)
- Strategic Main
- Fire Supply Main
- Fire Main
- Non-Domestic Customer Service Pipe
- Domestic Customer Service Pipe
- Abandoned Main
- Elevated Main
- Aqueduct
- Duct
- Cable, Earthing
- Cable, Optical Fibre/Instrumentation
- Cable, Low Voltage
- Cable, High Voltage
- Cable, Other

- Pumping Facility
- Booster Facility
- Potable Water Storage
- Water Tower
- Well / Borehole
- Intake
- Water Treatment Works / Chamber
- Draw-off Tower
- Bowser Point
- Water Facility Connection
- Quality Sample Point

- Water Isolation Valve (Closed)
- Water Isolation Valve (Open)
- Water Isolation Valve (Partially Open)
- Water Air Valve
- Pressure Reducing Valve
- Pressure Sustaining Valve
- Non-Return Valve
- Float Valve
- Hydrant (Single/Double)
- Washout (Single/Double)
- Bulk Meter
- Water Hatch Box
- Pressure Tapping
- Insertion Flow Meter Point
- Water Chemical Injection Point
- Motive Water Point

- Change In Characteristic
- Marker Post
- Cable Junction
- Anode
- Boundary Box
- Stop tap
- Cross Piece
- Strainer
- Listening Post
- Revenue Meter
- Housing, Building
- Housing, Kiosk
- Housing, Other
- Pipe Support Structure
- Open Pipe
- Discharge
- End Cap
- SSSI Area
- Access Right
- Pre-1937 Properties

MATERIALS

AC - ASBESTOS CEMENT
AK - ALKATHENE
C - CONCRETE
CI - CAST IRON
CU - COPPER
DI - DUCTILE IRON
GF - GLASS FIBRE
GRC - GLASS REINFORCED CONCRETE
GRP - GLASS REINFORCED PLASTIC
HDPE - HIGH DENSITY POLY
HPPE - HIGH PERFORMANCE POLY
LDPE - LOW DENSITY POLY
LEAD - LEAD
MDPE - MEDIUM DENSITY POLY
O - OTHER
PC - PRE-STRESSED CONCRETE
PF - PITCH FIBRE
PP - POLY PROPYLENE
PSC - PLASTIC STEEL COMPOSITE
PVC - POLY VINYL CHLORIDE
RPM - REINFORCED PLASTIC MATRIX
SI - SPUN IRON
SST - STAINLESS STEEL
ST - STEEL
UPVC - UNPLASTICISED PVC

LINING

BI - BITUMEN
CL - CEMENT
PL - PLASTIC
RL - RESIN
O - OTHER

N
W E
S

SEVERN TRENT WATER

Severn Trent Water Limited
Asset Data Management
PO Box 5344
Coventry
CV3 9FT
Telephone: 0845 601 6616

WATER MAINS RECORD

O/S Map scale: 1:1250

Date of issue: 22.07.19

This map is centred upon:
O / S Grid reference:

x : 366780

y : 311306

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APPENDIX 4

WASTE REJECTION

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

Waste Rejection Form

Date	Time	Vehicle Reg.	Company	Driver

Waste Description	Reason for Rejection	Action Taken	Signature

Environment Agency Notified			
Contact Name	**Date**	**Time**	**Comments**

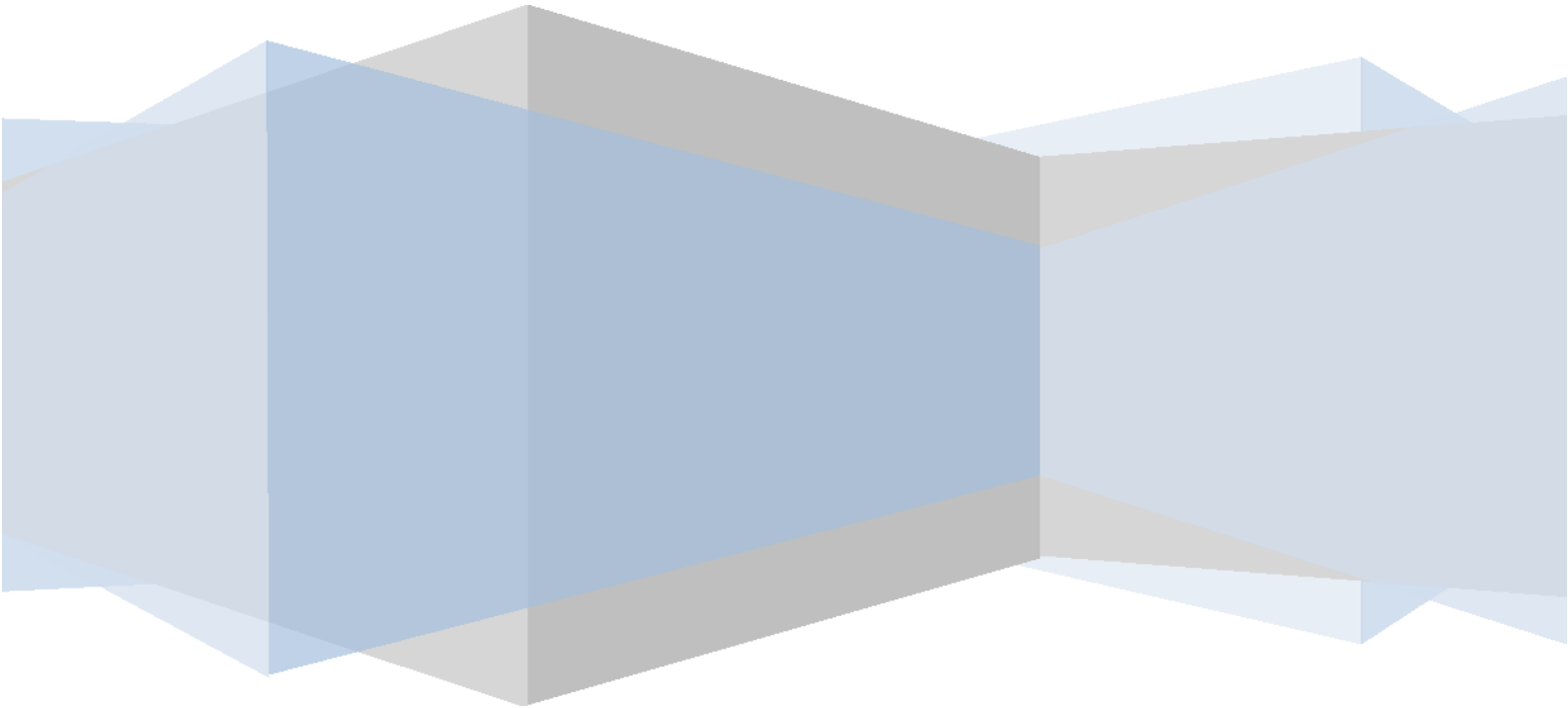
APPENDIX 5

WRAP QMS

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

Quality Management System – Production of Aggregates from Inert waste

DRM Aggregate Solutions Ltd
Recycling Facility
Whitchurch Drive
Ketley
Shropshire
TF1 5BY



Prepared by: 4W Environmental Limited, Office 26 Redhill House, Hope Street, Saltney, Chester, CH4 8BU

TABLE OF CONTENTS

1.0 GENERAL CONSIDERATIONS

1.1 DRM Aggregate Solutions Ltd operates a waste recycling facility using waste from domestic, commercial and Industrial, construction and demolition sectors to create recycled aggregate.

1.2 The facility runs under a bespoke permit due to locational constraints and is heavily based upon standard rules SR2010 No.12 environmental permit for treatment of waste to produce soil, soil substitutes and aggregate.

1.3 It is proposed to operate under this Quality Management System (QMS) to allow inert waste to be turned into a product and therefore no longer be classed as a waste, operating under the guidance of WRAP. This quality management system will be the factory production control document and will include the method statement of production.

1.4 This QMS will provide customers with the confidence that products are manufactured in accordance with the requirements of production and use of aggregates from inert wastes and supersedes "Quality Protocol for the production of aggregates from inert waste", revised edition (ISBN 1-84405-217-6).

1.5 The QMS aims to;

I. Clarify the point at which waste management controls are no longer required.

II. Provide users with confidence that the aggregate they purchase conforms to an approved industry specification defined in accordance with an appropriate European aggregate standard.

III. Provide users with confidence that the aggregate is suitable for a use within a designated market sector(s) including by conforming with the industry standard.

IV. Protecting human health and the environment (including soil)

V. Describe acceptable good practice for the transportation, storage and handling of aggregate.

1.6 Due to potential changes in case law and guidance by DEFRA the point at which waste ceases to be waste may change in the future.

1.7 Products have to be fit for purpose and meet customer requirements. The customer will determine if any additional testing or analysis for end use is required as they hold the technical expertise to make that judgement (customers base includes engineering and construction companies).

1.8 If a recovered aggregate meets a specification which is fit for purpose and does not pose a threat to the environment as stated in 1.6 IV above, then it should be considered a product as long as the procedures highlighted in this QMS are adhered to.

2.0 WASTE ACCEPTANCE

2.1 To achieve the standards required under the WRAP Quality Protocol it is proposed that the following waste types as shown in **Appendix A** are only accepted for the production of aggregates from inert waste.

2.2 Waste is considered to be inert if;

a) It does not undergo any significant physical, chemical or biological transformations.

b) It does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health.

c) Its total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater.

2.3 The process of turning waste material into a product is classified as a waste recovery operation and is subject to the waste management controls set out in the Waste Framework Directive and domestic legislation.

2.4 The waste acceptance criteria will be crucial in aiding the achievement of the quality management system and as such the flow chart in **Appendix B** for the acceptance and processing of inert waste will be followed.

2.5 It is proposed that suitable waste as defined by the List of Wastes Code (Appendix A) and after visual inspection, to check for contamination such as plastic, metal, wood etc. are placed into the aggregates source stockpile for processing.

2.6 Non-conforming material will be quarantined and placed in skips/ containers.

2.7 Waste from mixed inerts/ soils will be screened/ riddled to remove fines/ soil contamination prior to placing the oversize rubble/ stone in the Aggregate source stockpile. Soils will be kept separate. Some vegetable soil that is received directly may or may not require processing and will be sold as a high value product.

2.8 Waste from the aggregate source stockpile will be visually assessed for suitability and the potential of contamination. This visual inspection will act as the waste acceptance criteria for input materials for aggregate production. All staff used for the production of aggregates from inert waste will be trained in the requirements of this Quality Management System.

2.9 A visual inspection for contamination of the waste from the aggregate source stockpile will be undertaken prior to removing the waste for processing. Processing may involve the crushing and/ or screening of the waste to form an aggregate.

2.10 When the waste arrives on site a record will be made of;

I. Waste type (Duty of Care Waste Transfer Note)
II. Waste quantity by weight (weighbridge record) or volume
III. Date (weighbridge records)
IV. Source/ Place of origin (Duty of Care Waste Transfer Note)
V. Supplier/haulier (Duty of Care Waste Transfer Note)
VI. Method of acceptance (visual inspection)

3.0 Waste Processing

3.1 All material from stock areas will be visually inspected for suitability and degradation prior to processing. If any material is found not to comply then it will be rejected with the material being placed in the skip/ container onsite for non-conforming material.

3.2 The soil and mixed inert material will be screened (<40mm) to produce soil and soil substitutes and to separate out the fines. The oversize material will then be crushed and/or re-screened (where applicable) to produce aggregate (unbound mixtures).

3.3 It is proposed that following the quality management system will allow the following outputs to be produced:

- 6F2 – Selected granular material (coarse grading)
- 6F3 – Selected granular material
- 6F5 – Selected granular material (coarse grading)
- Various bespoke products prepared to customer requirements i.e. crusher run, 40mm down

3.4 Currently the market demand is dominated by 6F2 material.

3.5 Tar free road plainings will be kept separate from other wastes and will be used to make 6F3 and other suitable materials/ products. This material may or may not require crushing and/ or screening depending on the method of removal.

3.6 Products produced will be stocked in clearly defined stockpiles. Stockpiles of differing material will not be allowed to be cross contaminated.

3.7 Only personnel trained in this system will be allowed to operate within the areas of the site covered by this QMS.

3.8 Stockpile locations and product locations maybe clearly marked on a diagram kept within the plant used for the production of the aggregate and/ or through use of signage.

3.9 A record of all waste processing activity including hours of operation will be kept in the site diary. This will be used to determine the factory production hours and allow sampling and testing to be carried out in accordance with section 4.

3.10 Plant used in the production of aggregate will be;

- 360-degree excavator(s)
- Loading shovel/ loadall
- Riddle bucket
- Screener
- Crusher/ crushing bucket
- Pecker attachment for reducing size of larger objects.

4.0 Inspection & Testing

4.1 The output material that will be produced will be sold as recycled aggregate and/ or to a specified standard resulting in the need to use less virgin products and dispose of less material.

4.2 The inspection and testing regime takes into account the material end use and factory production time periods. 1 production week equals the period of time taken to complete 5 full production days (60 hours), 1 production month equals 4.5 weeks x 60 hours equals 270 hours, 1 production year equals 12 x production months equals 3240 hours (12 x 270 hours).

4.3 It is therefore proposed that the following minimum test frequencies and parameters are applied as shown in Table 2. The actual testing regimes will vary depending upon the product to be produced and are shown in Appendix B. Additionally specific testing regimes may be produced with customer approval for certain jobs.

4.4 All sampling and testing will be carried out in accordance with the recommendations of the testing house who may have specific requirements for certain test parameters.

4.5 All testing will be carried out by test houses who hold suitable accreditation i.e. UKAS

4.6 Any product stockpile found not to comply with the relevant standards in Appendix B will not be used and will be sent to the feedstock area for reprocessing. A note will be made in the site diary.

5.0 Dispatch

5.1 All products going off site will have the following records kept;

i. Date
ii. Product
iii. Quantity
iv. Location
v. Customer

5.2 On the delivery document form there will be a note saying that the product has been produced under a quality protocol.

6.0 Management

6.1 Dawn Marsh will have overall responsibility for the Quality Management System even though some aspects maybe delegated for operational reasons.

6.2 Dawn Marsh will be responsible for ensuring that the procedures outlined in this quality management system are fully implemented.

6.3 Dawn Marsh will be responsible for ensuring that testing is carried out according to the specification of the products produced.

6.4 Dawn Marsh will be responsible for ensuring administration of documentation, to include;

i. Duty of Care waste transfer notes (kept for a minimum of 2 years)
ii. Waste carriers registration/ certification
iii. Completion of the site diary including production hours/ tonnage
iv. Copies of all test results
v. Copies of all delivery documentation

6.5 A review of this Quality Management System will be undertaken periodically or if there is a major change in operations/ standards. The review will look to check that the Quality Management System is still relevant and will be checked against the requirements of WRAP producers' compliance checklist (**Appendix D**).

6.6 Sub-contractors if any that will be used for any part in the production process including generation of input materials will be instructed in the relevant procedures of this Quality Management System and a record kept in the site diary.

6.7 Equipment involved in the production process will be maintained in good working order and in accordance with the manufacturer's recommendations. Any work carried out on equipment will be recorded in the site diary.

6.8 Crusher size and screen size may be altered to produce different outputs by adjusting the jaws or changing the screen. Any changes will be carried out in accordance with the manufacturer's recommendations and a record made in the site diary.

6.9 Prior to carrying out any work with equipment the equipment will be checked by the operator for defects. If any defects are found, then Dawn Marsh will be contacted immediately, and the equipment will not be used until the problem has been rectified. A note will be made in the site diary.

6.10 Input and output materials will be stocked in a controlled manner and in clearly identifiable locations.

6.11 Records of results from the testing regime including historical will be made available to purchasers upon request.

Appendix A

Acceptable Waste Types

Table 1 – Acceptable inert material for the production of aggregates from inert waste

Wastes from physical and chemical processing of non-metalliferous minerals	
Types and exclusions	**Waste code**
Waste gravel and crushed rocks other than those mentioned in 01 04 07 *May include excavation from mineral workings*	01 04 08
Waste sand and clays *Waste sand only* *Must not include contaminated sand*	01 04 09
Wastes from manufacture of glass and glass products	
Types and exclusions	**Waste code**
Waste glass-based fibrous materials *Allowed only if; wastes without organic binders*	10 11 03
Packaging (including separately collected municipal packaging waste)	
Types and exclusions	**Waste code**
Glass packaging	15 01 07
Construction and demolition waste – concrete, bricks, tiles and ceramics	
Types and exclusions	**Waste code**
Concrete *Must not include concrete slurry*	17 01 01
Bricks	17 01 02
Tiles and ceramics	17 01 03
Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	17 01 07
Construction and demolition waste – wood, glass and plastic	
Types and exclusions	**Waste code**
Glass *Must not include fiberglass or glass fibre*	17 02 02

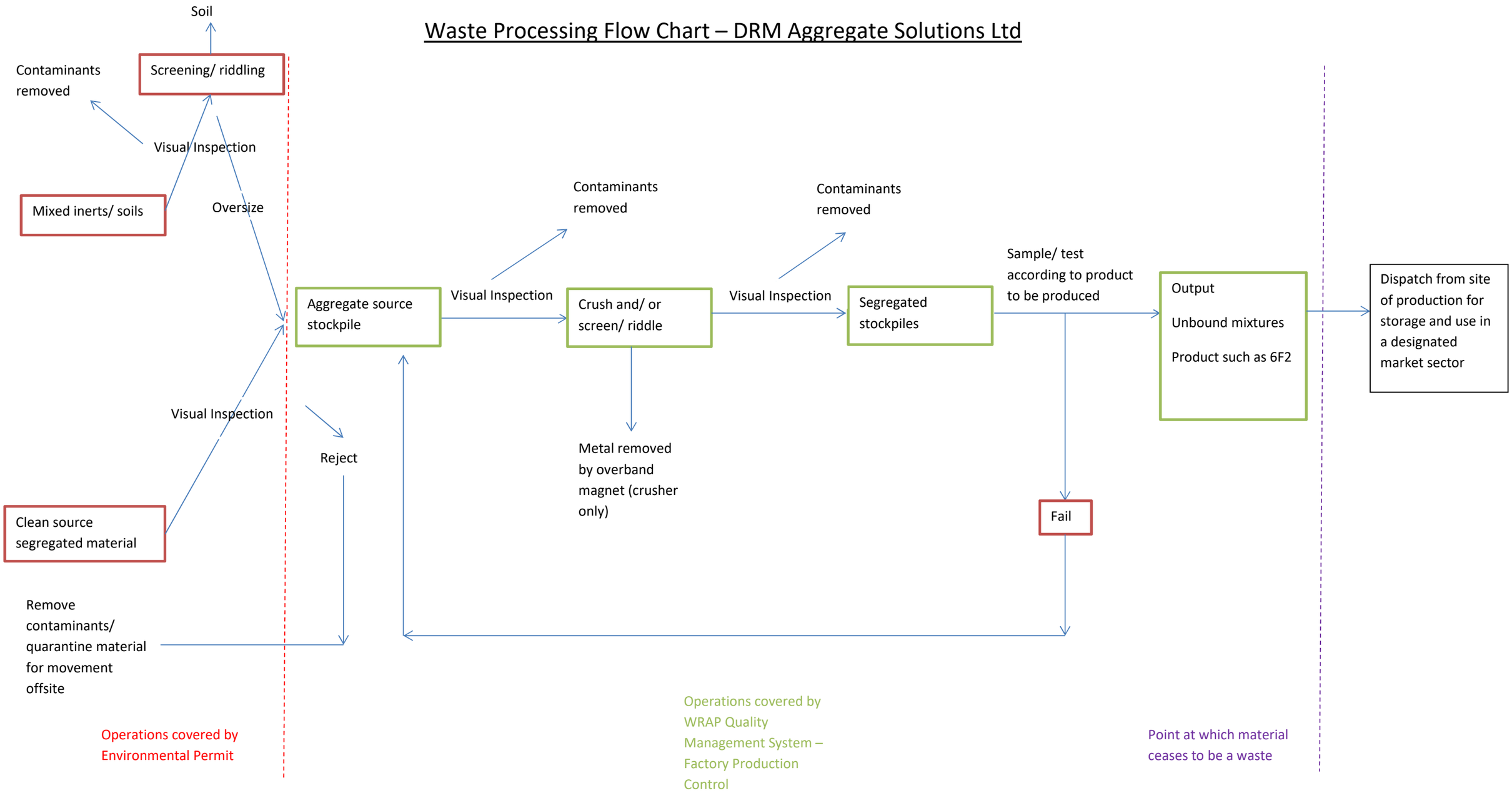
Construction and demolition waste – bituminous mixtures, coal tar and tarred products	
Types and exclusions	**Waste code**
Bituminous mixtures other than those mentioned in 17 03 01 *Allowed only if:* *Bituminous mixtures from the repair and refurbishment of the asphalt layers of the roads and other paved areas (excluding bituminous mixtures containing coal tar and classified as waste code 17 03 01).* *Must not include coal tar or tarred products.* *Must not include freshly mixed bituminous mixtures.*	17 03 02
Construction and demolition waste – soil (including excavated soil from contaminated sites), stones and dredging spoil	
Types and exclusions	**Waste code**
Soil and stones other than those mentioned in 17 05 03 *Must not contain any contaminated soil or stone from contaminated sites*	17 05 04
Dredging spoil other than those mentioned in 17 05 05 *Allowed only if;* *Inert aggregate from dredgings.* *Must not contain contaminated dredgings.* *Must not contain fines*	17 05 06
Track ballast other than those mentioned in 17 05 07 *Allowed only if ;* *Does not contain soil and stones from contaminated sites.*	17 05 08
Construction and demolition waste – other construction and demolition wastes	
Types and exclusions	**Waste code**
Construction and demolition wastes other than those mentioned 17 09 01, 17 09 02 and 17 09 03 *Allowed only if;* *The waste is generated from utilities trenching's* *The waste consists of sub base aggregates i.e. granular material* *The waste contains only materials that would be described by entries 17 01 01, 17 03 02 and 17 05 04 if the waste is not mixed.*	17 09 04

Wastes from mechanical treatment of waste not otherwise specified (for example sorting, crushing, compacting, pelletizing)	
Types and exclusions	**Waste code**
Glass *Does not include glass from cathode ray tubes*	19 12 05
Minerals (for example sand, stones) Must not contain contaminated concrete, bricks, tiles, sand, stone or gypsum from recovered plasterboard.	19 12 09
Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	
Types and exclusions	**Waste code**
Glass *Must not include fibreglass*	20 01 02
Garden and park wastes (including cemetery waste) – soil and stones *Must not contain contaminated stones from garden and parks waste*	20 02 02

Appendix B

Waste Processing Flow Chart

Waste Processing Flow Chart – DRM Aggregate Solutions Ltd



Records available

- Job tickets
- Waste Carrier registrations
- Duty of Care Waste Transfer Note
- Site Diary

Records available

- Site Diary (record of operating hours)
- Plant inspection/ maintenance
- Test analysis results
- Weighbridge calibration certificates

Records available

- Dispatch documentation

Appendix C

Product Testing Regime

Table 2 – Testing Regime

End Use	Standard and Specifications	Test	BS test reference	Minimum test frequency
All end uses	BS EN 13242 BS EN 1260	Particle Size Distribution	EN 933-1	1 per week
		Particle Density	EN 1097-6	1 per month
		Resistance to fragmentation (LA)	EN 1097-2	2 per year
		Classification of constituents	EN 933-11	1 per month
		Water soluble sulfate	EN 1744-1	1 per month
End Use	**Standard and Specifications**	**Specification**		**Quality Controls**
Unbound recycled aggregate: granular fill, general fill, capping	BS EN 13242	Highways Agency Specification for Highways Works: series 600 HAUC: Specification for the reinstatement of openings in highways (SROH) BS EN 13285: Unbound mixtures specifications		BS EN 13242: Level 4 Attestation SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
Unbound recycled aggregate: Pipe bedding Drainage	BS EN 13242	Highways Agency Specification for Highways Works: series 500 HAUC: Specification for the reinstatement of openings in highways mixtures specifications (SROH)		BS EN 13242: Level 4 Attestation SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW
Unbound recycled aggregate: sub-base	BS EN 13242	Highways Agency Specification for Highways Works: series 600 HAUC: Specification for the reinstatement of openings in highways (SROH) BS EN 13285: Unbound mixtures specifications		BS EN 13242: Level 4 Attestation SHW: Quality Control procedures in accordance with the Quality Protocol for the production of aggregates from inert waste SROH: Compliance with SHW

Appendix D

WRAP Producers Compliance Checklist

Material change for a better environment

Quality Protocol for the production of aggregates from inert waste

Producers' compliance checklist

This is a self-assessment checklist for producers of aggregates wishing to test and demonstrate the compliance of their process to the WRAP Quality Protocol for production of aggregates from inert waste.

Please consider your process and activities and tick "Yes" or "No" as applicable for each question. Refer to the accompanying Guidance Notes for further details as required.

Your process is fully compliant with the Quality Protocol for production of aggregates from inert waste only if you respond "Yes" to all questions.

Measures to correct areas of non-compliance (where ticks have been scored in the "No" column) must be identified and implemented to achieve compliance with the Quality Protocol. Recycled aggregates that are produced by a process not fully compliant with the Quality Protocol are likely to be a waste and subject to Environmental Permitting Regulations (England & Wales) or Waste Management Licensing Regulations (Scotland & Northern Ireland).

Checklist and Summary Guidance[i]	YES	NO
Waste management requirements (QP ref* 3.4.1, 3.4.4, 3.6.1 and 3.7.1) Does your recycling operation have the required environmental permit/waste management licensing/exemptions and is the Duty of Care applied? *NOTE: You must demonstrate that you meet the statutory and regulatory requirements, including use of registered waste carriers and Waste Transfer Notes (WTNs). Please consult the Guidance Notes for further details.*	☐	☐
Acceptance of incoming waste (QP ref 3.4.1 to 3.4.4 and App C) Do you have site/location specific Acceptance Criteria procedures for the incoming waste?	☐	☐
Do your Acceptance Criteria include a description of the types of waste accepted and a description of the method of acceptance? *NOTE: List Of Waste Regulations/ European Waste Code for consistency with the WTNs must be used. You must demonstrate that only inert waste is accepted for production of aggregates to the Quality Protocol. Inspection at receipt and at tipping must be carried out.*	☐	☐
Are material input records kept? *NOTE: A record of each load received and accepted must be kept.*	☐	☐
Do you have a procedure for non-compliant waste? *NOTE: You must demonstrate how you are dealing with non-conforming incoming waste. Please consult the Guidance Notes for further details.*	☐	☐
Production and Standards/Specifications requirements (QP ref 3.1 to 3.3 and 3.5) Have you set up a Factory Production Control (FPC) system, which includes a Method Statement of Production (MSP), describing the waste recovery process and the range of products? *NOTE: FPC is mandatory for production of aggregates to BS EN Standards and common industry specifications and it is a requirement of the Quality Protocol. The MSP may be represented by a flow chart. All materials produced must be listed. Implementation of the FPC must be demonstrated using the detailed list of requirements within the guidance notes.*	☐	☐
Do you produce to established specifications and/or standards? *NOTE: Aggregates must be produced to be fully compliant to established specifications and/or standards.*	☐	☐

Checklist and Summary Guidance[i]	YES	NO
Testing (QP ref 3.6, 3.6.1 and 3.6.2)		
Have you defined what testing to undertake, and how often, for each material you produce? *NOTE: Any material produced to a FPC must have a defined testing procedure and sampling and testing frequency. Please refer to the Guidance Notes for examples of minimum testing frequencies.*	☐	☐
Does your testing regime comply with the requirements of the standards and specifications for the aggregates you are producing? *NOTE: Aggregates produced to standards and specifications must be tested to demonstrate compliance to those standards and specifications.*	☐	☐
Do you have a procedure for dealing with non-conforming products? *NOTE: You must demonstrate that non-compliant products are dealt with in accordance to the FPC.*	☐	☐
Documentation (QP ref 3.7.2, 3.7.3, 3.8 and 3.9)		
Do you keep a record of all the appropriate documents, in accordance with the FPC, and specifically of the results of the tests undertaken as required by the standards and specifications? *NOTE: A list of records that must be kept in accordance to the FPC is provided within the Guidance Notes.*	☐	☐
Does the delivery ticket of your product contain the description of the material in accordance with the industry or client specification and does it include a statement that the aggregate was produced to a quality scheme meeting the Quality Protocol? *NOTE: Details on the delivery ticket must be provided in accordance with the FPC. The statement that the aggregate was produced to a quality management scheme conforming to the Quality Protocol can only be inserted if no "No" cells have been ticked in this self-assessment form.*	☐	☐

The competant authority for Environmental Permitting (England and Wales) Regulations is the Environment Agency, for Waste Licensing Regulations in Scotland is the Scottish Environment Protection Agency and in Northern Ireland is the Department of the Environment (Environment and Heritage Service). These agencies are able to confirm or provide information on permits, licences and exemptions to third parties if required. They are also able to require documentary proof of the compliance to the Quality Protocol from recycled aggregate producers who claim to be operating to the Quality Protocol.

* QP refs. are for numbered sections in the three versions of the WRAP Quality Protocol for the production of aggregates from inert waste covering England & Wales, Scotland, and Northern Ireland.

Copies are available from http://www.aggregain.org.uk/quality/quality_protocols/index.html

For additional information on Quality Management Systems go to: http://www.aggregain.org.uk/quality/index.html

[i] Expanded guidance notes are available in a separate document called: Guidance Notes to the Producers' compliance checklist for the Quality Protocol for the production of aggregates from inert waste

Waste & Resources Action Programme

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0808 100 2040

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recycle

APPENDIX 8

DUST AND EMISSIONS MANAGEMENT PLAN

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

DRM AGGREGATE SOLUTIONS LTD

WHITCHURCH DRIVE

KETLEY

SHROPSHIRE

TF1 5BY

DUST & EMISSION MANAGEMENT PLAN

(DEMP)

VERSION NUMBER: 1

DATE: 19 AUG 2019

Issue and Revision Record

Revision	Date	Originator	Checker	Company Approver	Description of Changes

Contents Page

Appendices

1. Introduction

DRM Aggregate Solutions Ltd operates a waste transfer/ recycling facility located on Whitchurch Drive, Ketley, TF1 5BY. The site is intended to allow DRM Aggregate Solutions Ltd to run a waste recycling business and increase the amount of waste recycled/ recovered. Primarily through crushing and screening to produce soil, soil substitutes and aggregate. DRM Aggregate Solutions Ltd, amongst other business activities, carries out small civil engineering projects and surfacing. It is intended that the site will accept waste from commercial, industrial and domestic customers.

This Dust & Emissions Management Plan (DEMP) is designed to support a bespoke environmental permit application.

The waste management activities undertaken at the site include storage of waste prior to treatment though crushing and/ or screening to produce soil/ soil substitutes and aggregates.

This is located within the district of Telford & Wrekin Council.

The site does not fall within a statutory Air Quality Management Area (AQMA)

Due to the physical processing (crushing and/or screening) of suitable waste materials and associated vehicle operations on the site, if there were no environmental control/ abatement systems then there would be the potential for the site to produce atmospheric emissions. The potential emissions and sources of emissions are;

- Dust from physical processing, open air storage and movement of vehicles and plant around on the site. This is the main emission that will be considered in more depth.
- PM_{10} and $PM_{2.5}$ emissions associated with physical processing, open air storage and movement of vehicles and plant around on the site.
- NO_2 from exhaust emissions of mobile plant and vehicles.

The site is currently in its infancy, Planning permission (TWC/2018/0060) was granted on 11th January 2019 for Change of Use from Scrap Yard (Sui Generis) to waste recycling site for concrete, road planings and soil, including erection of an office and storage building and bunded waste recycling bays (Sui Generis). At present the waste bays and building have not been constructed. This DEMP looks at the current situation and will be reviewed once the bays and building have been constructed or if there are any other operational changes on site.

There are no specific conditions relating to dust or other emissions from the site. Conditions are in place to restrict the operating hours of the crusher to operate on weekdays (Monday to Friday) only and in-between the hours of 08:15 and 17:30 only.

This document is designed to provide the operator with a set of procedures and understanding of how dust emissions from the site could impact on the surrounding environment and the control measures required.

This document should be read in context with the general Environmental Management System (EMS) for the site – DRM Aggregate Solutions Ltd EMS, July 2019. This document provides additional information and procedures to ensure environmental compliance.

A copy of the DEMP and EMS will be held within the office on site and shall be readily available to those operatives on site.

1.1 Sensitive Receptors

The main local receptors identified for the site are highlighted in the *Table 1* below and their location shown on *Map 1* below;

Table 1 – List of Receptors

Map No.	*Receptor*	*Distance (m)*	*Direction*	*Type*	*At Risk?*
1	T & W	0	SE	Industrial	Workers, Public, Contractors
2	Deciduous Woodland - Protected	23	E	Open Space	Workers, Public, Contractors
3	A5223	38	W	Road	Workers, Public, Contractors
4	Ketley Brook	51	E	Open Water	Workers, Public, Contractors
5	Railway Line	71	N	Industrial	Workers, Public, Contractors
6	Telford College of Arts & Technology	78	W	Public Sector	Workers, Public, Contractors
7	Residential Properties - Haybridge	110	N	Residential	Workers, Public, Contractors
8	Residential Properties - Ketley Brook	147	E	Residential	Workers, Public, Contractors
9	Car Wash, Filling Station	220	NW	Commercial	Workers, Public, Contractors
10	Residential Properties - Ketley Sands	233	SW	Residential	Workers, Public, Contractors
11	Residential Properties - Arleston	274	SSW	Residential	Workers, Public, Contractors
12	Fire Station	314	W	Public Sector	Workers, Public, Contractors
13	Haybridge Industrial Estate	336	NW	Commercial	Workers, Public, Contractors
14	B5061	385	SE	Road	Workers, Public, Contractors
15	The Bridge School (primary & secondary)	385	NE	Public Sector	Workers, Public, Contractors
16	New Buck's Head Football Ground	500	W	Commercial	Workers, Public, Contractors
17	Pond (Works)	509	SE	Open Water	Workers, Public, Contractors
18	Works	530	SE	Industrial	Workers, Public, Contractors
19	Bridge Builder Public House	545	S	Commercial	Workers, Public, Contractors
20	Residential Properties - Wellington	601	W	Residential	Workers, Public, Contractors
21	Filling Station	607	S	Commercial	Workers, Public, Contractors
22	Wrekin Retail Park	665	S	Commercial	Workers, Public, Contractors
23	Field Drain	715	N	Open Water	Workers, Public, Contractors
24	Field Drain	730	NW	Open Water	Workers, Public, Contractors
25	Residential Properties - Ketley	777	E	Residential	Workers, Public, Contractors
26	Millbrook Primary School	785	NNW	Public Sector	Workers, Public, Contractors
27	Post Office	883	NE	Commercial	Workers, Public, Contractors
28	The Old Hall School	904	WNW	Public Sector	Workers, Public, Contractors
29	Residential Properties - Hadley	945	ENE	Residential	Workers, Public, Contractors
30	Sports Leisure Centre	982	NE	Commercial	Workers, Public, Contractors

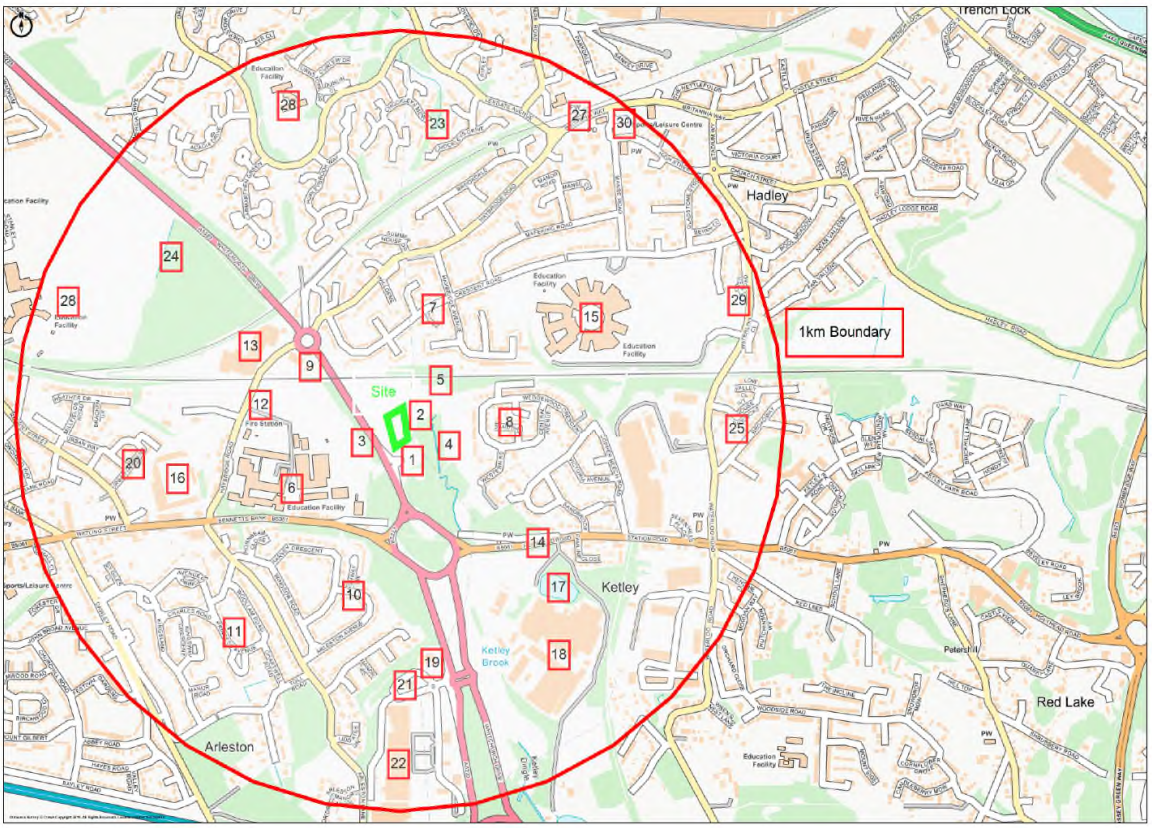
These receptors identified are located within 1km of the site and may be impacted by dust and other emissions such as Nitrogen Dioxide from combustion sources such as mobile plant and road vehicles.

Of the receptors highlighted in *Table 1* the potential receptors that are more susceptible to the adverse effects of exposure to high levels of dust and particulates would be;

- Protected Deciduous Woodland
- Telford College of Arts & Technology
- The Bridge School (Primary & Secondary)

Map 1

Location of Receptors - DRM Aggregate Solutions Ltd



EMS - July 2019

Deposited dust is normally described as an amenity issue whether through environmental permitting or planning control. This is normally through a sense of perception. There is no specific legal definition or exposure limits.

Dust can be a nuisance through prevalence and persistence and through soiling of property, cars, laundry etc.

Additionally, sensitive receptors are those sites where amenity issues could be problem i.e. those industries who require a degree of cleanliness such as electronic manufacturers, powder coaters, paint shops, offices, busy roads, car parks, food manufacturers, food outlets, solar panels, air conditioning systems and agricultural land.

After a review of the local land use within 1 km of the site there appear to be no clean industry manufacturing processes, no powder coaters, no paint shops, no food manufacturing and no actively farmed agricultural land.

There are however offices associated with the works and various other local small businesses, busy roads associated with the A5223 running north to south and the B5061 running east to west of the site. There are food outlets associated with Furrows Haybridge Service station to the northwest and Wrekin Retail Park (Costa Coffee and Subway) to the south. There is likely to be solar panels within the 1km zone highlighted and these could be associated with a combination of industrial units and residential properties. There are 2 units on the Wrekin Retail Park claiming to be zero carbon eco units and so the assumption is that these will have solar panels. Air conditioning systems are likely to be fitted to the industrial units and offices highlighted above and car park areas are also associated with the works, Wrekin Retail Park and Haybridge Industrial Estate.

These will be considered as a sensitive receptor as they have the potential to be affected by dust emissions, however the actual likelihood is extremely low.

Figure 1.1: Nearby Sensitive Receptors

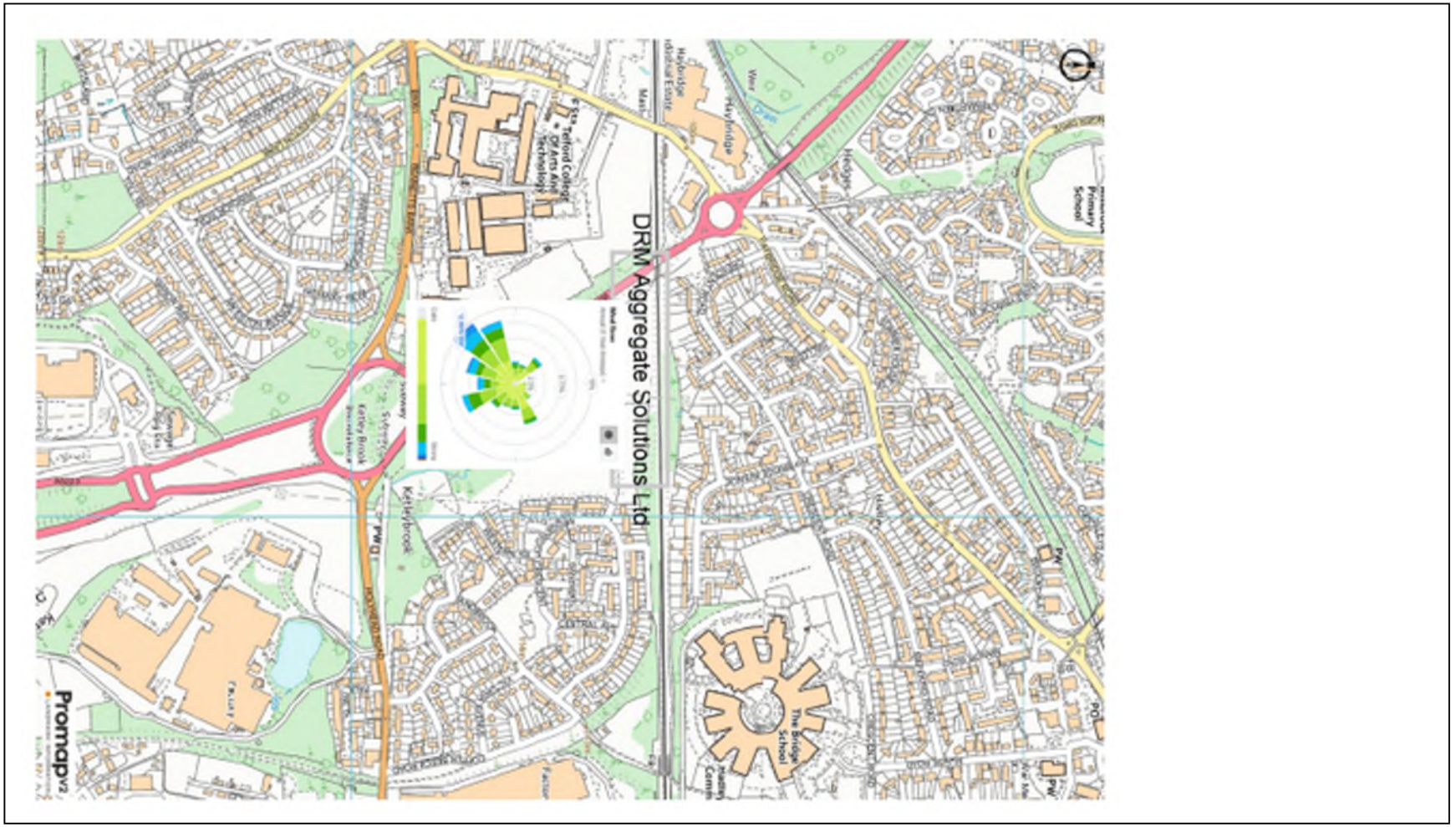


Figure 1.1: Wind rose showing the AVERAGE WIND DIRECTION AND STRENGTH at DRM Aggregate Solutions Ltd

Table 1.1 Sources of Dust and/or other Emissions

Company	Address	Type of Business	Distance from DRM Aggregate Solutions Ltd site boundary (m)
	A5223	Major road	38
Network Rail	North of Wedgewood Crescent	Railway Line	71
Saint-Gobain PAM UK (closed)	PO Box 3/Holyhead Rd, TF1 5AD	Foundary	250
	B5061	Major road	385
	Holyhead Road	Works	530
	Dawley Road	Agricultural land	1000
Pink Skips (Dissolved)	Recycling House Ketley, Telford TF1 5HW	Skip hire and transfer station	1100
	Summerfield Road	Open soil / restoration area	1420
Various house builders (5-year building program)	Lawley Housing Village	Residential	1500

2. Operations at DRM Aggregate Solutions Ltd

2.1 Waste Deliveries to DRM Aggregate Solutions Ltd

Waste is delivered to the site as per Section 3.1 and 3.2 of the EMS
Waste delivered to the site will be contained predominately within skip vehicles, tippers and 8-wheel tippers.
Vehicles fitted with auto sheet mechanisms will be required to have the sheets on prior to arrival on site. Once on site, vehicles will be required to remove sheets by the waste inspection area to allow preliminary waste inspections to take place.
Records associated with the waste operation can be found in Section 5 of the EMS.
Dusty loads will be damped down where relevant and practical prior to coming onto site.

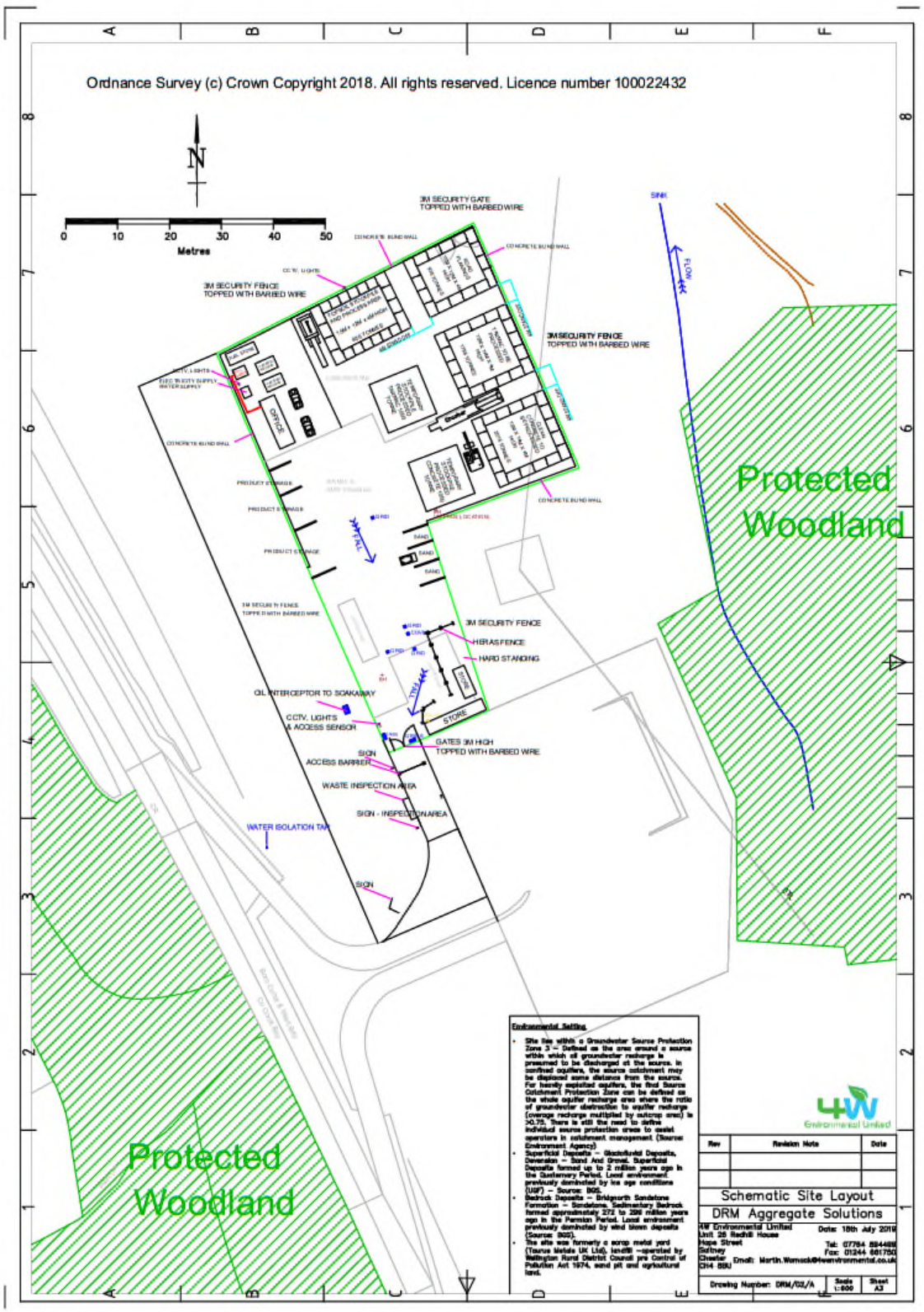
2.2 Overview of Waste Processing, Dust, and Other Emission Controls

An overview of the site layout can be found on Drawing No. DRM/02/A which shows;

- the site infrastructure
- location of buildings
- loading and unloading areas
- storage stockpiles
- location of mobile plant
- location of water supply for use in suppression system
- different types of site surface.

Table 2.1 Typical waste types brought to DRM Aggregate Solutions Ltd

European Waste Code(EWC)	Product Description	Max Tonnes/week	Destination within facility					Process
			Stockpile Area	Treatment Area	Main Building	Storage Area	Storage Bays	
17 01 01	Concrete	6000	Yes	Yes	N/a	Yes	N/a	Crushing
17 01 02	Bricks	6000	Yes	Yes	N/a	Yes	N/a	Crushing
17 01 02	Bricks	6000	Yes	Yes	N/a	Yes	N/a	Crushing
17 01 03	Tiles & Ceramics	6000	Yes	Yes	N/a	Yes	N/a	Crushing
17 01 07	Mixtures of concrete, bricks, tiles and ceramics	6000	Yes	Yes	N/a	Yes	N/a	Crushing
17 03 02	Planings (non-coal tar)	6000	Yes	Yes	N/a	Yes	N/a	Screening
17 05 04	Soil and Stones	6000	Yes	Yes	N/a	Yes	N/a	Screening
20 02 02	Soil and stones	6000	Yes	Yes	N/a	Yes	N/a	Screening
	Screened material from any of the above		Yes	Yes	N/a	Yes	N/a	Crushing
	Crushed material from any of the above		Yes	Yes	N/a	Yes	N/a	Screening
Total		6000						


Ordnance Survey (c) Crown Copyright 2018. All rights reserved. Licence number 100022432
N
0 10 20 30 40 50
Metres
3M SECURITY GATE TOPPED WITH BARBED WIRE
3M SECURITY FENCE TOPPED WITH BARBED WIRE
CONCRETE BUND WALL
CCTV. LIGHTS
OFFICE
PRODUCT STORAGE
SAND
3M SECURITY FENCE
HERAS FENCE
HARD STANDING
OIL INTERCEPTOR TO SOAKAWAY
C.C.T.V. LIGHTS & ACCESS SENSOR
STORE
GATES 3M HIGH TOPPED WITH BARBED WIRE
SIGN
ACCESS BARRIER
WASTE INSPECTION AREA
SIGN - INSPECTION AREA
WATER ISOLATION TAP
SINK
FLOW
Protected Woodland
Protected Woodland
Environmental Setting
Schematic Site Layout
DRM Aggregate Solutions
4W Environmental Limited
Unit 26 Redhill House
Hope Street
Saltney
Chester
CH4 8BU
Date: 10th July 2019
Drawing Number: DRM/02/A
Scale 1:500
Sheet A3

For an explanation of site activities please see DRM Aggregate Solutions EMS.

The design of the site as shown in Drawing No. DRM/02/A is to minimise handling and transporting of material around the site. The stockpiles of unprocessed material are located near to the crusher and the temporary stockpile of processed product/ material is located near the crusher. Product and material will be loaded directly from the stockpiles according to demand.

The design of the site my change overtime (erection of building and bays) and this DEMP will be updated accordingly.

The site is currently designed to prevent dust emissions through physical barriers and operating techniques. There is an earth bund which is located to the West of the site which will offer some protection from the prevailing westerly winds. Planning permission is in place to construct a 4m high bund. Similarly, to the eastern boundary is an established deciduous woodland, the top of the canopy exceeds the maximum storage height of 4 metres.

Operational measures include;

- the use of a water bowser or garden hose spray system to damp down stockpiles.
- Brush attachment on skid steer to clean road surfaces back to concrete/ hard standing.
- Crusher is fitted with dust suppression spray bar on the exit conveyor.
- Drop heights kept to a minimum.
- Crusher chutes to be covered where possible (this item of equipment will be hired in).
- Crusher to operate on average one day per week for reduced opening times. Therefore, weather conditions can be considered when deciding when to crush.

2.3 Mobile Plant and Equipment.

Nitrogen Dioxide gas is a by-product of internal combustion engines and the site uses several items of plant with internal combustion engines. The following table lists the type, mobile and emission ratings for the mobile plant and equipment used on site:

Description	Make	Model	Emission Rating
Excavator	Volvo	EC180B LC	Unknown (fitted with DRG valve[1])
Generator for trommel	Powerscreen		Unknown
Skid Steer	Gehl	4640	Unknown (fitted with DRG valve[1])
DRM HGV's	Various	Various	Tier 6

[1] DRG valve – burns off excess pollutant gases.

The equipment listed in the above table is owned by DRM Aggregate Solutions Ltd/ R D Marsh Surfacing Contractors Ltd. The crusher will be hired in to crush on a campaign basis. It is estimated that crushing will average one day per week.

Routine maintenance (oils and filter) is carried out by site staff and out contractors are brought into carry out major repairs/ service. The machines are serviced every 200 hours.

When items of equipment will need replacing then the emissions will be taken into consideration at the time of purchase.

The yard is supervised, and any unnecessary idling of machines is not tolerated, and staff are made aware about idling machinery.

3. Dust and Particulate (PM_{10}) Management

3.1 Responsibility for Implementation of the DEMP

Richard Marsh is responsible for the DEMP and making sure it works.
Dawn Marsh is this person's deputy.
This document will be reviewed in response to any complaints from residents, businesses, enforcing officials, environmental near misses and change in operation (layout, waste tonnage on site, stockpile locations, crushing and screening).
Staff will be competent to implement the DEMP through induction training and training records (See Section 1.6 of EMS). In the event of a review if staff feel that they are not competent to review then a third-party consultant can be brought in to carry out a review on their behalf.
Training for the site is handled through Section 1.6 of the EMS.
Refresher training can be given at any time if judged by the Technically Competent Manager that training is required.

3.2 Sources and Control of Fugitive Dust/Particulate Emissions

Sources
The operations with the potential to produce dust and particulates on site are shown below;

- Vehicles entering and/or leaving the site with mud on wheels and tracking dust on to or off the site.
- Debris falling off lorries which arrive uncovered.
- Vehicles and plant moving around the site kicking up dust
- Road vehicles tipping waste
- Excavators/360s sorting waste
- Plant sorting waste – trommel screener
- Plant treating waste – crushers
- Waste dropping from conveyors into stockpiles
- Waste stored in stockpiles – potential for wind-whipping on the surface of the waste.
- Site surfaces – loose material on the floor with the potential to be wind whipped or tracked off site.
- Loading waste materials back on to vehicles.
- Particulate emissions from the exhaust of vehicles/plant/machinery on site.
- Generators, plant and other non-road going mobile machinery.

Table 3.1: Source-Pathway-Receptor Routes

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud	tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Choose from table 1 above	Visual soiling, also consequent resuspension as airborne particulates	Site surface is mainly concrete/ hard standing. Vehicles do not track through waste/ product stockpiles. Any mud will be washed off vehicles using the hose before vehicles leave site. Haul road ensures any residual mud drops off before vehicle reaches public highway. Brush attachment for skid steer used to clean road surfaces. If required a road sweeper can be brought onto site.
Debris	falling off lorries	Choose from table 1 above	Visual soiling, also consequent resuspension as airborne particulates	Vehicles fitted with Auto sheeters to ensure loads are covered. Nets to be used on other vehicles removing dusty loads. Water hose to damp down dusty loads if required.
Tipping, storage and sorting of wastes in the open	Atmospheric dispersion	Choose from table 1 above	Visual soiling and airborne particulates	Minimise source strength by means of low drop heights, profiling and shielding of piles from wind whipping (height of stockpiles below the screening bund to the West and tree line to the East, use of water suppression to damp down stockpiles if required.
Vehicle exhaust emissions	Atmospheric dispersion	Choose from table 1 above	Airborne particulates	Vehicles serviced and maintained, avoidance of unnecessary idling of machines. DRM HGV's are Tier 6.
Non road going machinery exhaust emissions	Atmospheric dispersion	Choose from table 1 above	Airborne particulates	Vehicles serviced and maintained, avoidance of unnecessary idling of machines. Excavator and Skip Steer have DRG valves to burn off excess emissions.

Table 3.2: Measures that will be used on site to control dust/particulates (PM_{10}) and other emissions

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Preventative Measures			
Site speed limit, 'no idling' policy and minimisation of vehicle movements on site	Reducing vehicle movements and idling should reduce emissions from vehicles. Enforcement of a speed limit may reduce re-suspension of particulates by vehicle wheels.	Easy to implement as part of good practice. Identified in the site management system (2.1.2 and 2.9.4) and implemented.	Observation of staff activity, complaints, near miss reports.
Minimising drop heights for waste. Use of enclosed chutes for waste drops/end of conveyor transfers and covered skips / storage vessels.	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. This can be achieved by keeping bucket low before opening out on excavator when loading vehicles and managing stockpiles. Adjusting angle of conveyors on screen and crusher to reduce fall height. Potential for enclosing drop chute will further reduce dispersion.	Steps identified in DEMP and EMS (4.4.2)	Will be used and implemented where equipment allows, staff training
Good house-keeping	Having a consistent, regular housekeeping regime that is supported by management, will ensure site is regularly checked and issues remedied to prevent and remove dust and particulate build up. Observation, site diary inspections	Easy to implement and requires minimal equipment. Encourages a sense of pride and satisfaction amongst the staff which promotes vigilance and a positive culture. (EMS Appendix 7)	Will be implemented on site regardless.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
		Staff should target the areas not caught by the road sweeper and other cleaning apparatus. Daily inspections by TCM or nominated deputy	
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	Identified in the site management system (4.4.3) and implemented as appropriate measures.	This will not apply to non-waste activities. The site also acts as a storage yard for R D Marsh Surfacing Contractors Ltd?
Hosing of vehicles on exit	May remove some dirt, dust and particulates from the lower parts of vehicles although likely to be less effective than a more powerful wheel wash.	EMS (4.3.3)	This procedure will be implemented when observations of dust generation on site are reported to management or following on from the twice daily visual inspections around the site boundary. Following complaints that are investigated and results show additional requirements for mitigation.
Ceasing operation during high winds and/or prevailing wind direction	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	Likely to reduce dust and particulate emissions, however, not a long-term solution. Decision on when to cease operations will be those responsible for implementing this DEMP. This decision will be based upon observations of site activities and weather. A record will be kept in the site diary of the decision and reason i.e. crushing suspended as winds blowing from the SW towards the Bridge School. Dust clouds seen to move off site.	Risk based informed decision to be made and recorded. Suspension of activities could also take place following on from complaints.
Easy to clean concrete	Creating an easy to clean impermeable surface, using materials	Implemented through EMS (4.3.1 and Appendix 7).	This be used all the time the site is operational

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
impermeable surfaces	such as concrete as opposed to unmade (rocky or muddy) ground within the site and on site haul roads. This should reduce the amount of dust and particulate generated at ground level by vehicles and site activities.		
Minimisation of waste storage heights and volumes on site	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Reducing storage volumes should reduce the surface area over which particulates can be mobilised.	The amount of waste stored on site and stockpile dimensions are given in Drawing No. DRM/02/A.	This be used all the time the site is operational
Reduction in operations (waste throughput, vehicle size, operational hours)	Reducing the amount of activity on site, including no tipping, crushing or screening of high-risk loads with the potential to generate particulate matter during windy weather, as well as associated traffic movements should result in reduced emissions and re-suspension of dust and particulates from a site.	Effective in terms of dust and particulate reduction	This will be used all the time the site is operational. Also, will be implemented following on from a complaint. Until it is investigated.
Remedial Measures			
On-site sweeping	Sweeping could be effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles. Road sweeping vehicles damp down dust and particulates whilst brushing	Implemented through EMS (2.9.2, 2.9.3, Appendix 2, Appendix 7).	This will be used when the site is operational and will form part of the good housekeeping. The decision on when to use will be made by TCM or site staff.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
	and collecting dust and particulates from the road surface, particularly at the kerbside. This may generate dust and particulate movement that may become a Health and Safety issue if the filters and spray bars on the sweepers are not maintained.		
Water suppression with hose	Damping down of site areas using hoses can reduce dust and particulate re-suspension and may assist in the cleaning of the site if combined with sweeping.	EMS 4.4.2 and 4.4.5	This procedure will be implemented when observations of dust generation on site are reported to management or following on from the twice daily visual inspections around the site boundary. Following complaints that are investigated and results show additional requirements for mitigation.

This is not an exhaustive list of all abatement options, and there may be other technology and abatement options that exist to achieve the same or a greater outcome in reducing the risk of pollution.

The table above is an exercise to make the connection between the pathway and receptor and source. It is to encourage the operator into thinking about how the abatement works, what options could be alternatively more suitable (and possibly cheaper and less intensive to operate regularly) and to go into specific detail about how the abatement works. This will encourage the operator and staff that use this document to not make any assumptions and to ensure that there are no gaps in abating the sources of dust emissions on site.

3.3 Other considerations

Water usage/ availability:
The water supply for the site is currently fed directly from the 600mm water main running along the A5223. This water main has the pressure to allow water to be sprayed over large distances on site and means that all storage areas for waste to be covered. In terms of capacity this water main will be sufficient as long as there is not a hosepipe ban in place for commercial/ industrial processes from Severn Trent Water.

The maximum water requirements for 8 hours of crushing is approx. 1000 litres or an IBC full of water. To dampen down the site for a day will require approx.
In the future it is proposed to collect roof water and surface water and use this for dust suppression.

The water requirement (volume) for all of the systems that rely on water for effect, for the worst possible scenario (dry and windy conditions for an entire operational day) is as follows;

Crusher running for 8 hours	1000 litres
Hosing down site (10 minutes every hour for 8 hours)	1360 litres
Total water requirement	2360 litres

In the event of a drought:
If drought conditions and hose pipe bans are in place for commercial/ industrial processes, then operations will have to cease unless water can be brought to site via other means. In the long-term grey water from surface run off and roof water is intended to be used.

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3.4 Enclosure of Waste Processing & Storage Areas

The activity will take place in the open. The stockpiles and site are located below the height of the surrounding screening bund to the West and below the tree line to the East of the site. These will act as barriers to reduce the effects of wind whipping. It is also proposed to create a bund to the North of the site. This has recently gained planning approval (planting scheme to be agreed). The site is not located in an Air Quality Management Area. The current site layout is shown in Drawing No. DRM/02/A.

As the scale and intensity of the site is relatively low scale (crushing on average one day per week for reduced operational hours) and with the site layout features mentioned above then the justification for enclosure to gain an additional benefit is not warranted.

3.5 Visual Dust Monitoring

Visual dust monitoring will be undertaken in the morning and afternoon, the results of which will be recorded in the site Diary. The inspection will be taken walking around the perimeter from outside the southern, western and northern boundary. A visual inspection will be taken of the eastern boundary although attention is drawn to the proximity of the deciduous woodland which may affect the visual assessment.

In reality when the site is supervised and manned there will be staff who will be continually making observations of the site. They will receive training on the importance of ensuring that particulate matter/ dust does not escape from the site and so they will also act as a potential control system. Out of hours the Director has access to the CCTV system which will allow an assessment to be made of any wind whipping of material from the site.

Small particles like PM10 and PM2.5 affect human health but they are not visible by the naked eye so if you see dust this will include an element of PM2.5 and PM10. It also means that if you don’t see dust, there still might be high levels of PM10.

It is understood that the most likely cause of dust emissions will be from the crushing or screening activity. Observation of dust emissions will take place when these operations are been undertaken to determine if dust is been generated and if the dust generated is likely to cause an offsite nuisance.

Records of monitoring will be held within the site diary or in the office (electronically).

If dust is detected additional visual dust monitoring will take place to ascertain the cause of the dust. If the dust is deemed to be originating from the site then the cause will be investigated and the activity producing the dust will be stopped (if applicable) whilst remedial measures are implemented (wetting of stockpiles, road sweeping, crushing, screening etc). After remedial measures have been implemented then the activity may start again. If the cause was down to weather conditions, then the activity will be stopped until the weather conditions change.

If there are several complaints of dust then an investigation into the cause will be carried out by linking site activity from CCTV records, weather conditions and site Diary records of visual monitoring to see if justified. At this point if there are no direct attributable causes then additional monitoring (quantitative) may be considered.

4. Particulate Matter Monitoring

The monitoring program has been produced taking into account the following factors;

- The type of particulate this DEMP is aimed at is general particulate matter (deposited dust).
- As the potential issue is one of nuisance impacts, then measurement of deposition rates using a horizontally mounted collection gauge such as a Frisbee gauge will be relevant.
- As the waste types (mainly inert) accepted are suitable for making soil, soil substitutes and aggregate and considering the waste acceptance procedures in place it is not deemed necessary to monitor the chemical affects on soils and vegetation or to monitor for organic species, inorganic species, fibres and bioaerosols.
- Research by DETR concluded that 'The issue of dust on ecological receptors is largely confined to the associated chemical affect of dust, and particularly the effect of acidic or alkaline dust influencing vegetation through soil'.

Therefore, it is proposed that twice daily visual inspections are supported by quarterly dust deposition monitoring.

4.1 Monitoring Location

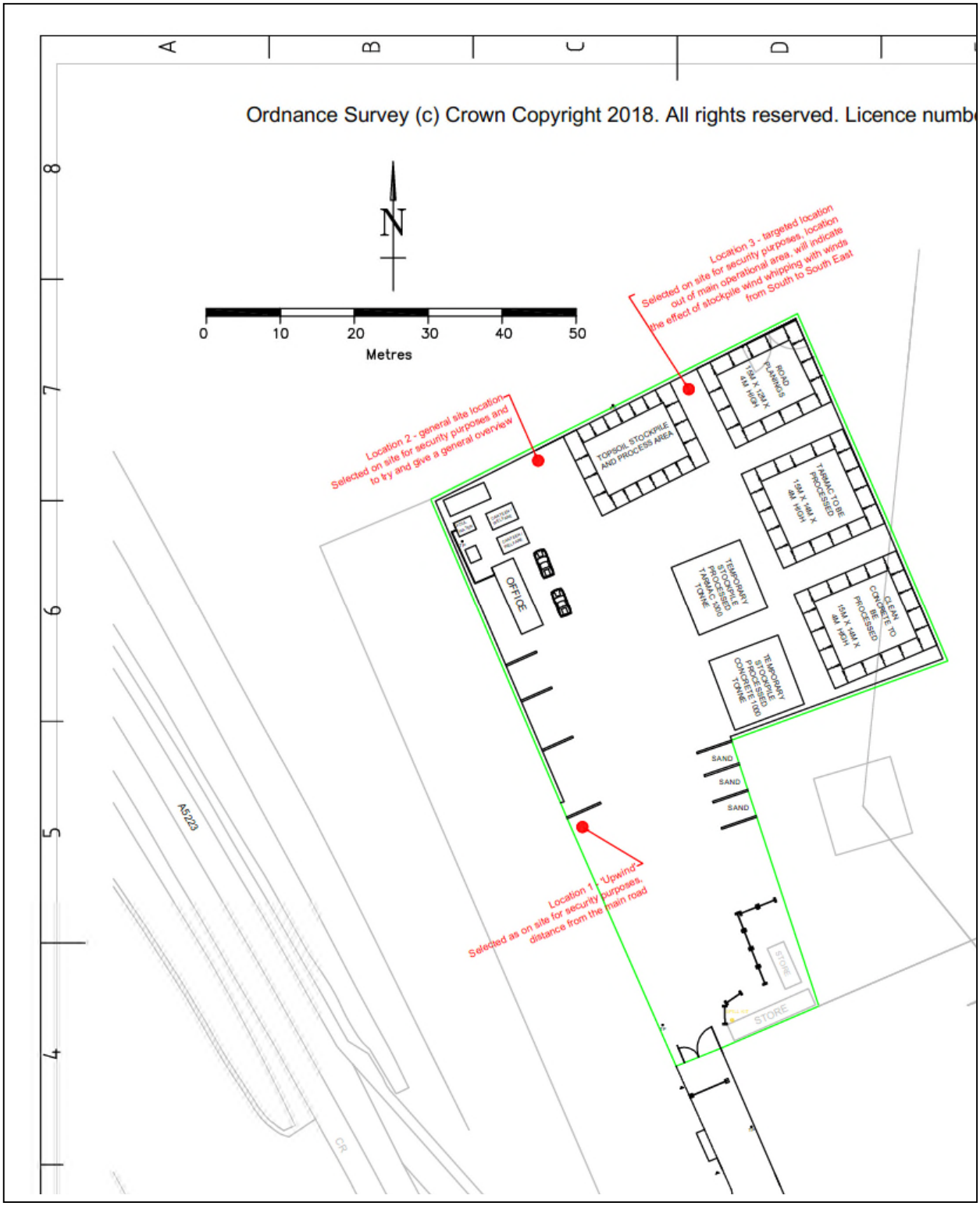
The proposed location for the Frisbee gauges (Gross Dust Deposition) are shown in Drawing No. DRM/05/A. These locations take into account the following factors;

- Security (concerns over vandalism and theft of gauges if left outside the perimeter of the site or at sensitive receptors).
- Meteorological conditions (winds predominantly from the southwest) and the need to have a minimum of one dust gauge "upwind" and one dust gauge downwind. Due to the security issue the "upwind" gauge is located on site near the site entrance. It has to be considered in any interpretation that this site is not a true reflection of background readings as the gauge will be influenced by site activities and winds from the northeast.
- There are currently no major obstructions such as buildings on site, although planning has been gained for a building. The monitoring locations will be reviewed once buildings and/ or bays are constructed to check that the data collected is still relevant.
- Overhang from trees would affect any dust gauge monitoring to the East of the site, where the trees come close to the site boundary and do not provide a 20m distance from the tree dripline to locate a gauge.

- Gauges will not be located within 30m of the A5223 as this will have the ability to influence results, particularly any PM_{10} and $PM_{2.5}$ from the combustion of fuel.

The location of the monitor is shown in Figure 4.1 below.

Figure 4.1 Location of PM monitoring equipment at DRM Aggregate Solutions Ltd



4.2 Operation of the PM Monitoring Equipment

Richard Marsh has overall responsibility for the implementation of this DEMP.

It is proposed to use Frisbee Gauges to monitor the dust deposition rates from the site operations. This work will be undertaken by an external consultant.

Data will be reported from the consultant to DRM Aggregate Solutions Ltd within 1 month of the end of the sampling period. This data will be sent electronically and will be kept on site as a part of the EMS and site diary.

The action level proposed is 200mg m^{-2} day^{-1} as this is the threshold at which complaints are likely.

Any breeches of this action level will be investigated and a report produced which will look at the weather conditions, site operations, external activity, site diary records and mitigation measures employed during the monitoring period to determine if the source is likely to be DRM Aggregate Solutions Ltd and if so the effectiveness of the mitigation measures employed.

Review of the dust deposition monitoring results will take place once received and a judgement can be made about the effectiveness of the mitigation measures employed during this period. This may highlight areas where potential improvements are required.

4.3 Quality Assurance/Quality Control and Record Keeping

The following records will be kept;

i) The make and model of the monitoring equipment
ii) When, how and by whom the data is checked
iii) When and by whom the equipment is routinely inspected;
iv) If the equipment is damaged and/or no longer able to collect reliable data.

4.4 Equipment and Data Management

Richard Marsh has overall responsibility for the implementation of this DEMP.

DRM Aggregate Solutions may use third party environmental consultancies to carry out both routine and any non-routine monitoring.

Any problems or questions encountered by Richard Marsh can be resolved by asking the relevant consultancy that they use.

4.5 Reporting of Data

This DEMP forms part of a bespoke permit application and as such there are no permit conditions for reporting of dust monitoring.

4.6 Additional Detailed Monthly Reporting

The action level proposed is 200mg m^{-2} day^{-1} as this is the threshold at which complaints are likely.

Any breeches of this action level will be investigated and a report produced which will look at the weather conditions, site operations, external activity, site diary records and mitigation measures employed during the monitoring period to determine if the source is likely to be DRM Aggregate Solutions Ltd and if so the effectiveness of the mitigation measures employed.

5. Actions when alarm is triggered.

There are no alarms associated with the dust gauges.

The action level proposed is 200mg m^{-2} day^{-1} as this is the threshold at which complaints are likely.

Any breeches of this action level will be investigated and a report produced which will look at the weather conditions, site operations, external activity, site diary records and mitigation measures employed during the monitoring period to determine if the source is likely to be DRM Aggregate Solutions Ltd and if so the effectiveness of the mitigation measures employed.

6. Reporting and Complaints Response

Any complaints of dust and particulates received by DRM Aggregate Solutions Ltd will be recorded in the site dairy. The following details will be recorded;

i. Name of complainant
ii. Date
iii. Time
iv. Location of complaint
v. Nature/ description of the complaint

An investigation will then be conducted looking at the following points;

vi. Weather conditions (wind speed, direction, rainfall, humidity)
vii. Site activities at and around the time of the complaint
viii. External causes/ sources of dust
ix. Any dust mitigation measures in use at the time of the complaint
x. Results of visual walk around of the site perimeter undertaken in a response to the complaint and additional to the routine monitoring.
xi. Conclusions of the investigation to be recorded in the site diary.

Deadline for completing an investigation into a complaint - 2 working days to respond to complaint.

6.1 Engagement with the Community

DRM Aggregate Solutions Ltd works with Telford and Wrekin Council who own the adjoining yard which is currently used for storage of road planings containing coal tar. There are no other adjoining/ neighbouring businesses.

If DRM Aggregate Solutions needed to get information out to the local community then they could contact the local councillor for the site.

Contact details for the local councillors are given below;

Ward	*Details*
Ketley	Cllr Sam Millward Thomas
	samuelthomas@mail.com
	01952 404434
Hadley & Leegomery	Cllr Leon Murray
	Leon.murray@telford.gov.uk
	01952 380263

6.2 Reporting of Complaints

Complaints will be reported to Richard Marsh as Director and Dawn Marsh as the nominated TCM so that they are aware of the potential issues that may need addressing and additional expenditure that may be required.

If required by the environmental permit dust monitoring complaints will be reported.

The form in Appendix A will be used for complaints.

6.3 Management Responsibilities

Complaints will be investigated by either Richard Marsh as the Director or Dawn Marsh as the nominated TCM for the site. They will sign the form in Appendix A when complete to show the acknowledgement and action taken in the event of a complaint.

6.4 Summary

This DEMP has been produced to support the bespoke permit application for DRM Aggregate Solutions Ltd. This DEMP forms part of the overall EMS for the site and provides information on how to minimise the effects of dust deposition on the surroundings.

APPENDICES

Appendix A - Dust Complaint Form

Customer Details	
Customer Name -	
Address – Postcode -	
Customer Contact Details -	
Tel -	
Email -	
Date -	
Complaint Ref Number -	
Complaint Details -	

Investigation Details	
Investigation carried out by -	
Position -	
Date & time investigation carried out -	
Weather conditions -	
Wind direction and speed -	
Investigation findings -	
Feedback given to Environment Agency and/or local authority -	
Date feedback given -	
Feedback given to public -	
Date feedback given -	

Review and Improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements -	
Actual date for completion -	
If different insert reason for delay -	
Does the dust management plan need to be updated -	
Date that the dust management plan was updated -	

Closure	
Site manager review date	
Site manager signature to confirm no further action required	

APPENDIX 9

NOISE IMPACT ASSESSMENT AND NOISE & VIBRATION MANAGEMENT PLAN

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

DRM Aggregate Solutions Ltd

Waste Recycling Facility
DRM Aggregate Solutions Ltd
Whitchurch Drive
Ketley
Shropshire
TF1 5BY

Noise Impact Assessment & Vibration Management Plan

2020

Prepared by: 4W Environmental Limited, Office 26 Redhill House, Hope Street, Saltney, Chester, CH4 8BU

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1.0 GENERAL CONSIDERATIONS

1.1 Site operator/ licence holder

1.1.1 DRM Aggregate Solutions Ltd operates a waste transfer/ recycling facility located on Whitchurch Drive, Ketley, TF1 5BY. The site is intended to allow DRM Aggregate Solutions Ltd to run a waste recycling business and increase the amount of waste recycled/ recovered. DRM Aggregate Solutions Ltd, amongst other business activities, carries out small civil engineering projects and surfacing. It is intended that the site will accept waste from commercial, industrial and domestic customers.

1.1.2 This Noise Impact Assessment Report has been produced for DRM Aggregate Solutions Ltd following on from a request by the Environment Agency after an initial bespoke environmental permit application.

1.1.3 This document will be reviewed every 4 years as a minimum. Additionally, a review will be carried out in the event of a change in site activities or a complaint is received.

1.1.4 The registered office address for DRM Aggregate Solutions Ltd is:

DRM Aggregate Solutions Ltd
28 Hortonwood 50
Telford
Shropshire
TF1 7GY

1.2 Site location, history and planning status

1.2.1 The site is located on land on Whitchurch Drive, Ketley, TF1 5BY, National Grid Reference SJ 66780 11347 as shown on Drawing No. *DRM/01/A*. The site sits on a previously permitted site (EPR/DB3308XB – Tarr Alloys Limited) as an A20: Metal Recycling Site.

The site is immediately bounded by deciduous woodland and open space. To the north lies a railway line and the residential area of Hadley. To the east lies open space and the residential area of Ketley Brook. To the south lies the former Ketley Brook Civic Amenity Site (no longer in use and designated as white land in the local plan), open space and Ketley Brook roundabout. To the west lies the A5223 and Telford College of Arts & Technology.

1.2.2 The site has the benefit of a valid planning permission which covers the operations of the site. Planning permission TWC/2018/0060 was granted on 11th January 2019 for Change of Use from Scrap Yard (Sui Generis) to waste recycling site for concrete, road planings and soil, including erection of an office and storage building and bunded waste recycling bays (Sui Generis)

1.2.3 The site layout is shown in Drawing No. *DRM/02/A*. The site layout allows for a small office to the northwest of the site and for a reprocessing area and stockpile area for incoming waste streams suitable for making soil, soil substitutes and aggregates (northern half of the site).

1.2.4 A bespoke environmental permit application was made to the Environment Agency following on from basic pre-application advice and was submitted on 1st October 2019. This was subsequently withdrawn after the Duly Made process highlighted the need for Noise Impact Assessment and Noise/ Vibration Management Plan.

1.2.5 A request was subsequently made for enhanced pre-application advice and a meeting was held at Hafren House on 11th March 2020 to discuss issues raised during the Duly Made process, including noise.

1.3 Hours of operation

1.3.1 The operation of the facility will be during the hours listed below and in line with planning permission TWC/2018/0060.

Site Operations	
Monday to Friday	07.30 to 17.30
Saturday	08.00 to 13.00
Sunday	No operations
Public and Bank Holidays	No operations

Crusher Operations	
Monday to Friday	08.15 to 17.30
Saturday	No operations
Sunday	No operations
Public and Bank Holidays	No operations

1.3.2 Any proposal to conduct site operations outside the hours listed in 1.3.1 will be subject to prior notice to the Environment Agency and Local Planning Authority.

2 Proposed Activities and Sources of Noise

2.1 The area which is the subject of this Noise Impact Assessment is outlined in green on Drawing No. *DRM/02/A*. All references to 'the site' in this Noise Impact Assessment shall mean this area and the infrastructure, plant and equipment associated within the site.

2.2 The Environmental Permit will permit the; Treating, Sorting and Storage of waste prior to recycling or reclamation and is heavily based upon a Standard Rules permit (SR2010 No.12 – Treatment of waste to produce soil, soil substitutes and aggregate). Due to its proximity to a protected deciduous woodland a standard rules permit application could not be applied for.

2.3 Specified waste management operations will include the waste recovery operations listed in Annex I and Annex II of the revised Waste Framework Directive. They are in summary:

R13: Storage of waste pending recovery (Operations listed R3 and R5)
R5: Recycling/reclamation of other inorganic materials
R3: Recycling/reclamation of organic substances which are not used as solvents

2.4 The potential sources of noise from the waste management operations on site are as follows:

- Crushing
- Screening
- Loading of vehicles
- Unloading of vehicles
- Vehicle movements

3 Local Receptors

3.1 An Acoustic Consultancy Report was commissioned by DRM Aggregate Solutions Ltd as part of the planning process and was undertaken by Alan Nethersole of Sound Analysis Ltd (dated 2nd November 2018). The report considered an appraisal of the noise radiated to nearest residential properties and other selected locations from the operation of the concrete crusher.

3.2 The selected receptors are summarised below and were chosen by Alan Nethersole as the most likely to be affected or of concern:

Location (refer to report in Appendix 1)	*Description*
MP1	Wedgewood Crescent
MP2	College
MP3	Crescent Road
MP4	Site Entrance
MP5	Roundabout
HS	Habitation Site (Ex Civic Amenity Site)

3.3 It must be noted that the original Acoustic Consultancy Report was written on 2nd November 2018. During the duly making process the Environment Agency believed that the adjacent site which was a former civic amenity site run by Telford and Wrekin Council (TWC) had been granted planning permission as a Traveller Site, for use as a temporary transit site for the travelling community. The Environment Agency therefore requested that this needs to be considered in the existing noise survey and additional environmental risk assessments. DRM Aggregates then approached Sound Analysis Ltd to update the 2nd November 2018 Acoustic Consultancy Report to include reference to the Traveller Site and to include reference to BS4142:2014. The report was subsequently amended with an Addendum (A) showing the update. A copy of this Acoustic Consultancy Report can be found in *Appendix 1*.

However subsequent discussions with Ian Lowe (Principal Planning Officer) reveal that the Traveller Site Permission granted on 24th May 2016 was never implemented and the consent has since expired and that the conditions associated with this permission were never applied to be discharged. The land has subsequently been designated as 'white land' within the Telford and Wrekin Local Plan. A copy of the email confirming this can be found in *Appendix 2*.

DRM Aggregates Limited are actively in discussion with TWC regarding a purchase/ rental of this land. Therefore, this land currently sits vacant with no current prospect of use other than an agreement with DRM Aggregates Limited.

3.3 The national grid references and building heights for the receptors and infrastructure on site are shown below:

Item	*Description*	*National Grid Reference*	*Height*
MP1	Wedgewood Crescent	SJ 66982 11391	2 Storey
MP2	College	SJ 66569 11363	4 Storey
MP3	Crescent Road	SJ 66767 11542	2 Storey
MP4	Site Entrance	SJ 66807 11244	
MP5	Roundabout	SJ 66917 11059	
HS	Habitation Site (Ex Civic Amenity Site)	SJ 66803 11288	
SITE	DRM Aggregate Solutions Limited	SJ 66777 11329	
CRUSHER	Location of crusher	SJ 66805 11341	2.88 metres
OFFICE	Office Corner	SJ 66768 11353	2.5 metres
WELFARE	Canteen/ Welfare	SJ 66768 11353	2.5 metres
WELFARE	Canteen/ Welfare	SJ 66767 11358	2.5 metres

Note: Canteen/ welfare and Office are not permanent structures i.e. temporary or mobile

3.4 The waste activity will be limited by the annual tonnage of 75000 tonnes per annum. The majority of waste is expected to arrive on 8 wheeled tippers with a pay load of 20 tonnes. Using the assumption that there are approximately 255 working days per annum then this equates to a maximum average daily of 14.7 loads per day. The grid reference for the site road is included in the table above as location MP4. The maximum speed limit for the site is 10 mph.

4 Noise Remediation Approach

4.1 The Acoustic Consultancy Report (8th January 2020) was carried out to establish the exposure levels at nearest residential properties, comparing the results to recommendations in BS8233:2014 and World Health Organisation (WHO) guidelines and to BS4142:2014.

4.2 The results of the noise survey against BS8233:2014 and WHO (World Health Organisation) guidelines show that the measured levels at the receptors generally align with the standards. MP1 and MP3 showed only a small level change and that as it is generally accepted that an increase of 3 dB, is the first perceived by the human ear, that complaints would not be anticipated. Therefore, there would no requirement for noise mitigation.

4.3 The results of the noise survey against BS4142:2014 indicates that some form of noise control measure would need to be taken, in particular for positions MP4, MP5 and HS.

4.4 However, MP4 is the shared site entrance to the DRM Aggregates Limited site and to the former civic amenity site. As mentioned in 3.3 above the land is now vacant and classed as 'white land' for development purposes with the only real current prospect been that DRM Aggregates Limited would purchase the site. The Noise Impact Assessment will look at how receptors other than the operator would be affected as the operator will have a duty of care to its employees under the Health and Safety at Work Act as amended.

4.5 Location MP5 is the Ketley Brook roundabout and any noise exposure would be mitigated by the transient nature of the receptor i.e. vehicles moving and pedestrians walking.

4.6 HS is the habitation site or the Traveller Site. As mentioned in 3.3 above this site does not exist and so should not be considered as a receptor.

4.7 There are no proposals at present to put any additional noise mitigation measures in place other than those mentioned within Section 5 and the reduced operating hours for crushing, in line with the planning permission mentioned in 1.3 above. In the longer term there are plans for a screening bund to the north and west with associated agreed planting with the planning authority.

5 Noise and Vibration Management Plan

5.1 This section has been written taking into account Horizontal Guidance Note IPPC H3 (part 2).

5.2 Receptors for noise as identified in the Acoustic Consultancy Report (4330-ENV-ATN-1B, *Appendix 1*) have already been described in 3.2, 3.3 and section 4 above. Additional

Receptor	*Description*	*Distance to installation boundary (metres)*	*Background noise level LAeq*	*Specific noise level when crushing LAeq*
MP1	Wedgewood Crescent	169	52	56
MP2	College	180	57	56
MP3	Crescent Road	166	51	52
MP4	Site Entrance	46	62	65
MP5	Roundabout	273	71	73
HS	Habitation Site (Ex Civic Amenity Site)	17.5		

5.3 Noise sources are shown in the table below:

Source of noise/ vibration	*Nature of noise/ vibration*	*Contribution to overall emission*
Crushing	Anticipated only operate one day per week and between the restricted hours of 08.15 to 17.30 Monday to Friday only, as permitted by planning permission TWC/2018/0060 Noise produced likely to include clatter, hum, bangs	Medium
Screening	Could occur between the hours of 07.30 to 17.30 Monday to Friday and 08.00 to 13.00 on Saturday as permitted by planning permission TWC/2018/0060 Noise produced likely to include clatter, hum, bangs	Medium
Loading	Will be a daily occurrence and likely between the hours of 07.30 to 17.30 Monday to Friday and 08.00 to 13.00 on Saturday as permitted by planning permission TWC/2018/0060 Loading will involve the use of mobile plant which will generate noise associated with engines, reversing alarms and falling material Noise produced likely to include clatter, hum, bangs	Medium
Unloading	Will be a daily occurrence and likely between the hours of 07.30 to 17.30 Monday to Friday and 08.00 to 13.00 on Saturday as permitted by planning permission TWC/2018/0060 unloading will involve the use of mobile plant which will generate noise associated with engines, reversing alarms and falling material Noise produced likely to include clatter, hum, bangs	Medium
Vehicle movements	Will be a daily occurrence and likely between the hours of 07.30 to 17.30 Monday to Friday and 08.00 to 13.00 on Saturday as permitted by planning permission TWC/2018/0060 Vehicle movements will generate noise associated with engines, reversing alarms and falling material Noise produced likely to include clatter, hum, bangs	Medium

5.4 Noise mitigation measures will include:

- Keeping reversing to a minimum
- Maintaining plant, vehicles and equipment including silencers
- Reducing drop heights of material especially when loading vehicles
- Switching plant off when not in use
- Carrying out crushing during the restricted operational hours
- Stockpiling of material on site to form ‘bunds’ and acoustic screening
- Maintain site roads in a good state of repair

6 Complaints procedure

6.1 Any actual incidents or potential non-conformances will be raised to management who will undertake an investigation to establish; if justified, date/ time location of incident, person reporting, root cause, review of procedures (EMS and Management Plans) and risk assessments (environmental and H&S) covering the activity, recommendations for improvement and review of improvements at a later date to assess benefits.

6.2 This procedure will cover potential non-conformances and complaints from neighbours/ regulators.

6.3 Complaints from the public will be investigated by either Richard Marsh or Dawn Marsh using the form in *Appendix 3.*

APPENDIX 1

SOUND ANALYSIS ACOUSTIC CONSULTANCY REPORT 4330-ENV-ATN-1B

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

SOUND ANALYSIS

Consultants in Noise and Vibration

Acoustic Consultancy Report
4330-ENV-ATN-1B

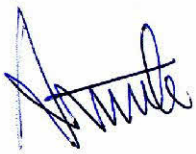
Report on: Concrete Crusher Noise in the Local Environment

Client: R.D.Marsh Surfacing Ltd

8th January 2020

An appraisal of Crusher noise at nearest residential properties, and at general locations

Report Author



Alan Nethersole M.I.O.A

Registered Office: Tucker Brook House, Tuckers Brook, Modbury, PL21 0UT
Tel: 01626 245040

Contents

i) Summary of Brief.

Sound Analysis Ltd (SAL), were commissioned to carry out an acoustic survey to establish the current working site noise levels of a Concrete Crusher at RD Marsh Surfacing Ltd, Whitchurch Drive, Telford, and then conduct an appraisal of the noise radiated to nearest residential property, and other selected locations

ii) Document History

Issue	Date	Issue Details	Issued by	Surveyed by
1	2.11.18	Initial Issue	ATN	LCP
1A	14.1.18	Operating time change	ATN	-
1B	8.1.20	BS4142 added	ATN	-

1 Introduction

Sound Analysis Ltd (SAL), were commissioned to carry out an acoustic survey to establish the current working site noise levels of a Concrete Crusher at RD Marsh Surfacing Ltd, Whitchurch Drive, Telford, and then conduct an appraisal of the effect on the local environment.

This was to establish the exposure levels at nearest residential properties, and compare the results to recommendations contained in BS8233:2014, and WHO Guidelines.

The site would operate from 07:30Hrs to 17:30 hrs Monday to Friday, and 08:00 to 13:00hrs on Saturday, therefore daytime criteria will be applied.

However, the Concrete Crusher will only operate one weekday per week.

2 Instrumentation

Sound pressure level measurements were obtained using the following instrumentation complying with the Class 1 specification of BS EN 61672:2003.

Meter No1

Svantek 977 Sound Level Meter S/N: 12232
Svantek pre-amplifier SV12L S/N: 13028 with GRAS microphone capsule 40AE S/N: 20859

Meter No 2

Svantek 949 Sound Level Meter S/N:36121
Svantek pre-amplifier SV12L S/N: 33636 with GRAS microphone capsule 40AE S/N: 58002

Calibration checks were made prior to and after completion of measurements using a Svantek SV30A calibrator, S/N: 10801 complying with Class 1 specification of BS EN 60942:2003, calibration level 114.0 dB @ 1.0 kHz.

3 Analysis Method.

The Crusher Noise Source was continually monitored by Meter 1 at 12.5m from the machine, from 08:44 hrs to 10:28 hrs, on 31st October 2018.

Using Meter No2, Crusher noise levels were measured at various locations, all taken with the Crusher machine ON and OFF.

Measurements were Sound Pressure levels taken, and provided L_{Aeq} dB(A) and LA90 dB(A) Sound Levels

4 Results.

The full record of the measurements taken is given in Appendix A and shows the sound pressure levels measured, at general locations MP1 to MP6 with the Crusher ON and OFF.

5 Environment Appraisal

The World Health Organisation (WHO) Guidelines for Community Noise (1999) gives guideline levels not to be exceeded for outdoor areas of residential properties.

Table 1: Guideline values for community noise, from Guidelines for Community Noise (WHO, 1999)

Specific Environment	$L_{Aeq, T}$ dB(A)
Outdoor living area (serious annoyance, daytime and evening)	55
Outdoor living area (moderate annoyance, daytime and evening)	50

BS8233 Recommended outdoor ambient noise levels is given as L_{Aeq} 55 dB(A)

6 Conclusion

The measured levels at the residential positions, generally align with the above standards.

The graph shown in Appendix A, indicates the level difference at the two residential areas, MP1 and MP3 and the levels only show a small level change as indicated in the Table below the graph.

As it is generally accepted that an increase of 3dB, is the first perceived increase by the human ear, we would not anticipate complaints from residents.

It should be borne in mind that the Crusher will not operate every day.

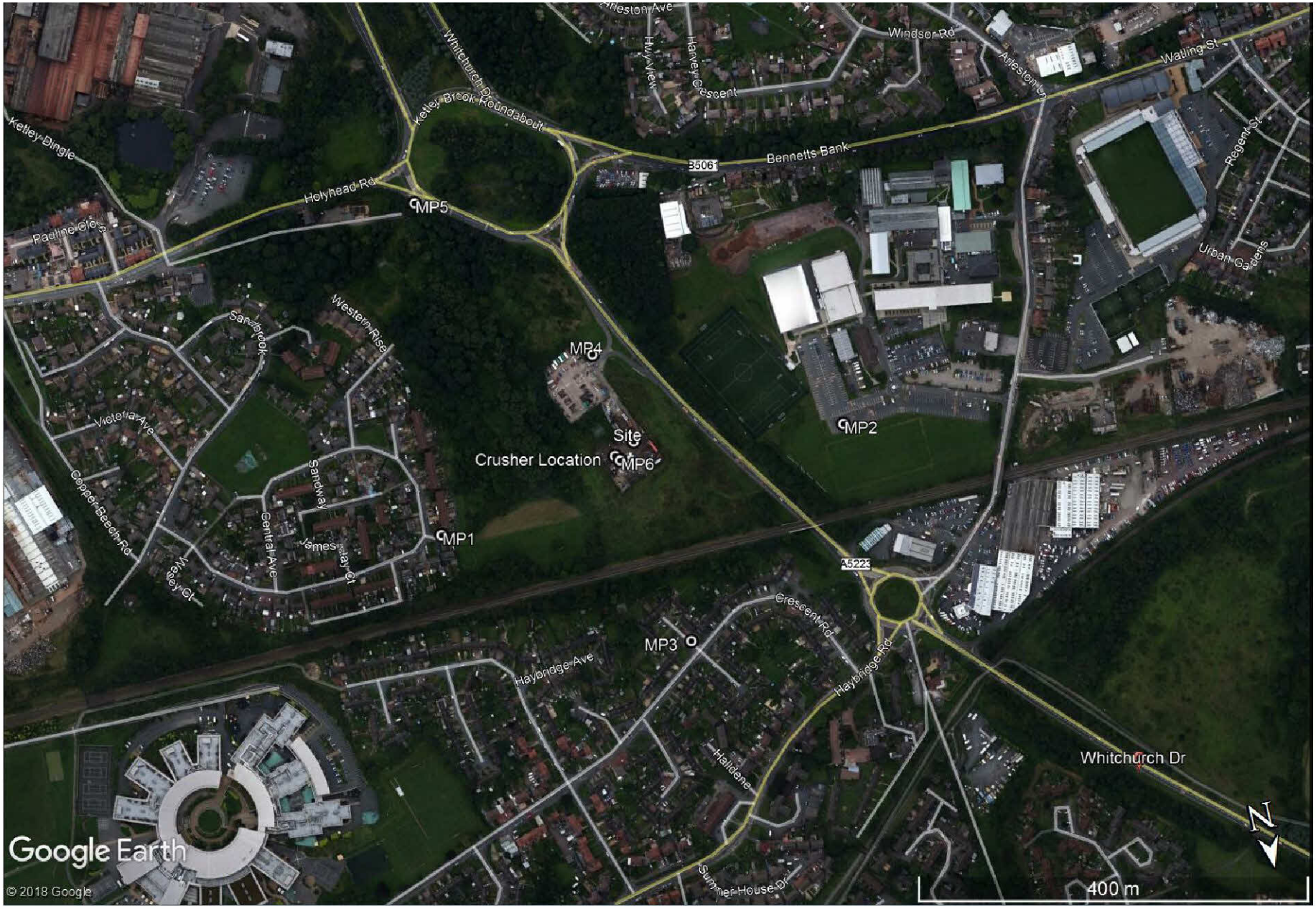
Appendix A: Graph and Table of Sound Pressure Level Measurements

AVERAGE OVER THE TWO MEASUREMENTS

Crusher	Site	Date & time	LAFmax	LASmax	LAeq	Diff
On	MP1 - Wedgewood Crescent	31/10/2018 08:54:30	59.3	57.5	56	
OFF	MP1 - Wedgewood Crescent	31/10/2018 08:55:00	59.3	58.2	52	4
On	MP2 - College	31/10/2018 09:03:30	57.1	56.2	56	
OFF	MP2 - College	31/10/2018 09:04:00	58.1	57.4	57	-1
On	MP3 - Crescent Road	31/10/2018 09:08:30	57.1	56.1	52	
OFF	MP3 - Crescent Road	31/10/2018 09:09:00	54.5	52.9	51	1
On	MP4 - Site Entrance	31/10/2018 09:12:32	69.7	68.6	65	
OFF	MP4 - Site Entrance	31/10/2018 09:13:02	68.5	67.3	62	3
On	MP5 - Roundabout	31/10/2018 09:16:30	82.5	79.2	73	
OFF	MP5 - Roundabout	31/10/2018 09:17:00	76.2	74.5	71	2

SOUND ANALYSIS

Appendix B: Location of Measurement positions MP1 to MP6



Addendum A

In response to Local Authority comments, this addendum considers the measured results using a BS4142:2014 appraisal, and also considers the new location of the Public Habitation Site which has been granted the location after the date of our original report.

BS4142:2014 Appraisal

The results of a BS4142 analysis are given in the following table.

SOUND ANALYSIS *Consultants in Noise and Vibration*

BS4142:2014 Assessments - Daytime operation Only 07:00hrs to 17:30hrs

Measurement Position		MP1	MP2	MP3	MP4	MP5	HS
Measured max ambient sound level	**LA eq**	56	57	52	65	74	67
Residual sound level	**LA eq**	52	55	51	62	71	62
Min Background sound level	**LA 90**	48	52	48	62	65	57
Calculated specific sound level		53	53	45	62	72	66
Acoustic Feature correction	Yes	3	3	3	3	3	3
Rating level		59	60	55	68	77	70
Min Background Level	**LA 90**	48	52	48	62	65	57
Excess of rating over background level		11	8	7	6	12	13
Excess of rating over BS8233:2014 recommended max external level of 55dB(A)		4	5	0	13	22	15

This would indicate that complaints are likely

HS = Closest perimeter position of Habitation Site

This form of assessment means that to comply, some form of noise control measure would need to be taken, in particular for positions MP4, MP5, and HS

Practically this would mean that the Crusher needs to be placed in one position so that a barrier can be in place.

Appendix C: Glossary

The list below details the major acoustical terms and descriptors, with brief definitions:

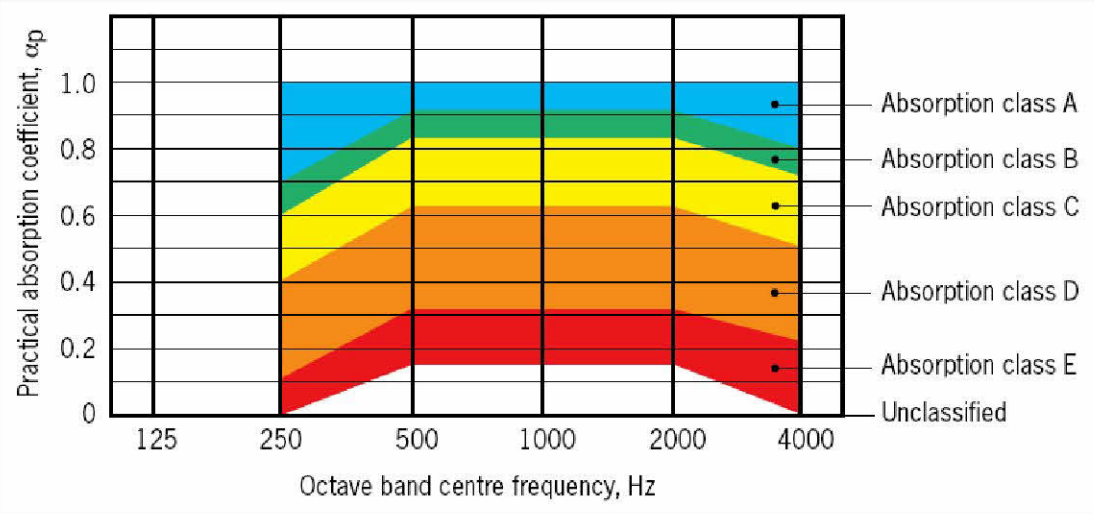
'A' Weighting

Weighting applied to the level in each stated octave band by a specified amount, in order to better represent the response of the human ear. The letter 'A' will follow a descriptor, indicating the value has been 'A' weighted. An 'A' weighted noise level may also be written as dB(A).

Absorption Class

In order to categorise the absorptive effects of different elements (such as ceiling tiles), classes from A to E were derived, as per BS EN ISO 11654:1997. A class 'A' absorber would be very acoustically absorptive, a Class 'E' absorber would be less absorptive and more reflective. A product that is highly reflective may not be classified.

The chart shown below has been extracted from BB93, and demonstrates the characteristics of each class according to BS EN ISO 11654:1997.



Absorption Coefficient (α)

A value usually between 0 and 1 assigned to a material to indicate how acoustically absorptive it is. 0 indicates a material is entirely reflective (and therefore not absorptive), and 1 indicates a material is entirely absorptive (and therefore not reflective). Absorption coefficients are usually given for each octave band between 125Hz and 4kHz, or as an overall 'practical' coefficient.

Airborne Noise

Noise transmitted through air.

Ambient Noise

The total noise level including all 'normally experienced' noise sources.

dB or Decibel

Literally meaning 'a tenth of a bel', the bel being a unit devised by the Bell Laboratory and named after Alexander Graham Bell. A logarithmically based descriptor to compare a level to a reference level. Decibel arithmetic is not linear, due to the logarithmic base. For example:

30 dB + 30 dB ≠ 60 dB	30 dB + 30 dB = 33 dB

$D_{nTw}+C_{tr}$

The weighted, normalised difference in airborne noise levels measured in a source room (L1) and a receive room (L2) due to a separating partition.

D	Is simply L1 – L2.
D_{nT}	Is the normalisation of the measured level difference to the expected (in comparison to the measured) reverberation time in the receiving room.
D_{nTw}	Is the weighted and normalised level difference. This value is the result of applying a known octave band weighting curve to the measured result.
C_{tr}	Is a correction factor applied to the D_{nTw} to account for the known effects of particular types of noise, such as loud stereo music or traffic noise.

Frequency (Hz)

Measured in Hertz (after Heinrich Hertz), and represents the number of cycles per second of a sound or tone.

Impact Noise

Re-radiated noise as a result of impact(s) on a solid medium, such as footfalls on floors. Measured in L'_{nTw}.

Insertion Loss, dB

The amount of sound reduction offered by an attenuator or louvre once placed in the path of a noise level.

$L_{A90, T}$

The 'A' weighted noise level exceeded for 90% of the time period T, described or measured. The '90' can be substituted for any value between 1 and 99 to indicate the noise level exceeded for the corresponding percentage of time described or measured.

$L_{Aeq, T}$

The 'A' weighted 'equivalent' noise level, or the average noise level over the time period T, described or measured.

L_{Amax}

The 'A' weighted maximum measured noise level. Can be measured with a 'slow' (1 sec) or 'fast' (0.125 sec) time weighting.

L_{Amin}

The 'A' weighted minimum measured noise level.

L'_{nTw}

The weighted, normalised impact sound pressure level measured in a receive room below a source room.

L	Is the spatially averaged impact sound pressure level measured in a receive room.
L'_{nT}	Is the normalisation of the measured impact sound pressure level to the expected (in comparison to the measured) reverberation time in the receiving room.
L'_{nTw}	Is the weighted and normalised impact sound pressure level. This value is the result of applying a known octave band weighting curve to the measured result.

NR

Noise Rating (NR) level. A frequency dependent system of noise level curves developed by the International Organisation for Standardisation (ISO). NR is used to categorise and determine the acceptable indoor environment in terms of hearing preservation, speech communication and annoyance in any given application as a single figure level. The US predominantly uses the Noise Criterion (NC) system.

Octave

The interval between a frequency in Hz (f) and either half or double that frequency (0.5f or 2f).

Pa

Pascals, the SI unit to describe pressure, after physicist Blaise Pascal.

Reverberation Time, T_{mf}, RT60, RT30 or RT20

The time taken in seconds for a sound to diminish within a room by 1,000 times its original level, corresponding to a drop in sound pressure of 60 dB. When taking field measurements and where background noise levels are high, the units RT20 or RT30 are used (measuring drops of 20 or 30 dB respectively). Sometimes given as a mid-frequency reverberation time, T_{mf} which is the average of reverberation time values at 500Hz, 1kHz and 2kHz.

R_w

The sound reduction value(s) of a constructional element such as a door, as measured in a laboratory, with a known octave band weighting curve applied to the result.

Sound Power Level

A noise level obtained by calculation from measurement data, given at the face of an item of plant or machinery. Referenced to 10^{-12} W or 1pW.

Sound Pressure Level

A noise level measured or given at a distance from a source or a number of sources. Referenced to $2x10^{-5}$ Pa.

Speech Intelligibility, Speech Transmission Index (STI)

Speech intelligibility is the measure of how well a speaker's voice can be heard within a given space. Speech intelligibility within a room depends on a number of factors, including reverberation time and background noise.

The Speech Transmission Index or STI has emerged as the favoured method of describing speech intelligibility.

Subjective Effect of Changes in Sound Pressure Level

A basic example to illustrate the assessment of difference in noise levels follows.

A background noise survey is undertaken that yields a lowest background noise level of L_{A90} 30 dB.

As the existing background noise level is low, a rating level for new plant noise of $L_{Aeq,\,T}$ 30 dB is set.

After calculation, the plant noise is predicted to achieve $L_{Aeq,T}$ 30 dB at the nearest residential property.

After the addition of the plant predicted noise level (or Rating Level), the new overall ambient noise level will be 33 dB. The background noise level measured originally will therefore be increased by 3 dB. In terms of the subjective impression of an increase of this order, the change in levels will be 'just perceptible'.

The table below details the subjective effects of variations in sound pressures (adapted from Bies and Hansen).

Difference between background noise and rating levels	Increase in ambient noise level in 'real terms'	Change in apparent loudness
+ 10 dB	+ 10 dB	Twice as loud
+ 5 dB	+ 6 dB	Clearly noticeable
0 dB	+ 3 dB	Just perceptible
-10 dB	0 dB	No change

W

Watts, the SI unit to describe power, after engineer James Watt.

APPENDIX 2

EMAIL FROM IAN LOWE (PRINCIPAL PLANNING OFFICER) RE: TRAVELLER SITE PERMISSION.

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

Martin.Womack@4wenvironmental.co.uk

From: Peter Mcphillips <pfjmcphillips@gmail.com>
Sent: 10 March 2020 11:26
To: Lowe1, Ian
Cc: Richard Marsh; Martin.Womack@4wenvironmental.co.uk
Subject: Re: DRM Aggregartes Recycling Opertation Ketley

Ian
Thanks for your prompt reply .
We will go to see EA tomorrow and report back .
Regards
Peter

Sent from my iPhone

On 10 Mar 2020, at 11:08, Lowe1, Ian <Ian.Lowe1@apt-group.co.uk> wrote:

Hi Peter,

Thank you for your call earlier. I have checked and it appears that the Traveller Site Permission granted 24/05/2016 was never implemented and the consent has since expired. The site is not allocated in any particular way and appears as 'white land' within the Telford and Wrekin Local Plan. I can also confirm that conditions for the traveller site were never applied to be discharged.

Drainage design is a condition of the application and will need to be considered by the Council's drainage team.

Bunding and additional planting may need to be dealt with as a minor non-material amendment to the existing application, unless it is considered more significant. If so, then a material amendment may be required. We can discuss this at a later date however once it is agreed what may be required.

Kind Regards

Ian

Ian Lowe BSc Hons, MA
Principal Planning Officer

01952 380380 www.apT-group.co.uk
01952 384127 ian.lowe1@apt-group.co.uk
LinkedIn Twitter

apT | Wellington Civic Offices | PO Box 457 | Telford | TF2 2FH | Sat Nav TF1 1

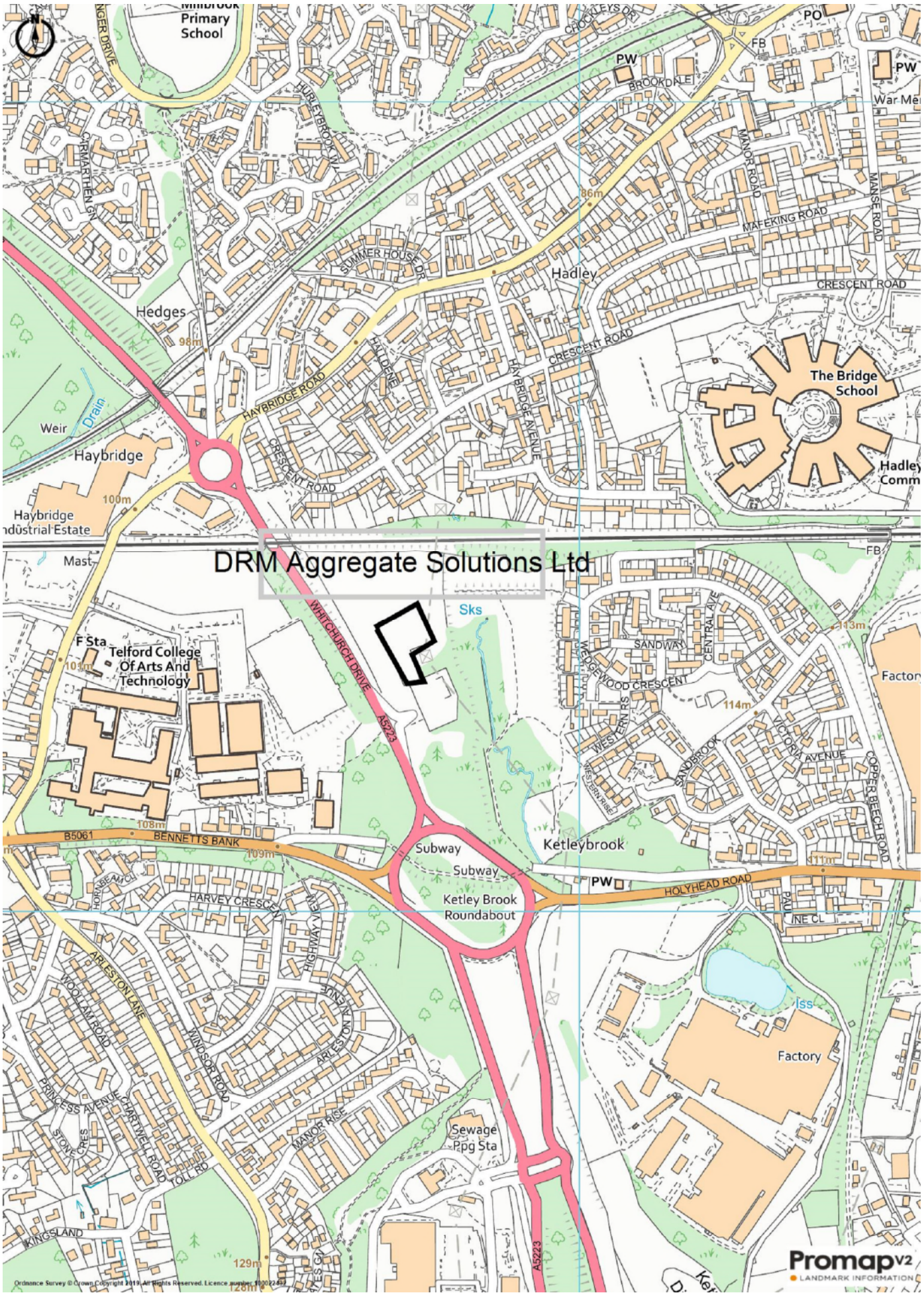
APPENDIX 3

NOISE COMPLAINT REPORT FORM

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

DRM Aggregate Solutions Limited - Noise Complaint Form

	Date:	Ref No.	
Name and address of complainant			
Tel no. of complainant			
Time and date of complaint			
Date, time and duration of offending noise			
Weather conditions (e.g., dry, rain, fog, snow)			
Wind strength and direction (e.g.,light, steady, strong, gusting)			
Complainant's description of noise (e.g., hiss, hum, rumble, continuous, intermittent)			
Has complainant any other comments about the offending noise?			
Any other previous known complaints relating to installation (all aspects, not just noise)			
Any other relevant information			
Potential noise sources that could give rise to the complaint			
Operating conditions at the time offending noise occurred (e.g., flow rate, pressure at inlet and pressure at outlet)			
Action taken:			
Final outcome:			
Form completed by		Signed	



DRM Aggregate Solutions Ltd
Whitchurch Drive
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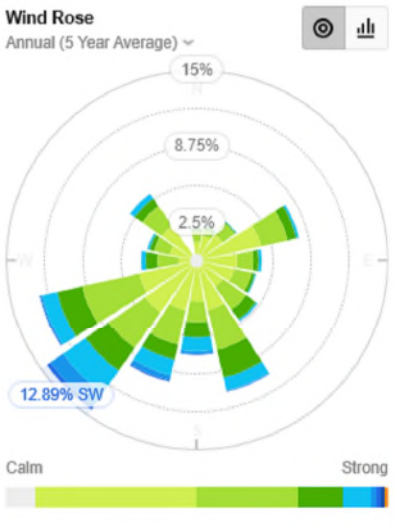
TF1 5BY

NGR: SJ 66780 11347



4W Environmental Limited

Rev	Revision Note	Date

Site Location

DRM Aggregate Solutions

4W Environmental Limited
Unit 26 Redhill House
Hope Street
Saltney
Chester
CH4 8BU
Email: Martin.Womack@4wenvironmental.co.uk
Tel: 07764 894499
Fax: 01244 661750

Date: 18th July 2019

Drawing Number: DRM/01/A | Scale NTS | Sheet A3

N

0 10 20 30 40 50
Metres

3M SECURITY GATE
TOPPED WITH BARBED WIRE

CONCRETE BUND WALL

CONCRETE BUND WALL

CCTV, LIGHTS

3M SECURITY FENCE
TOPPED WITH BARBED WIRE

TOPSOIL STOCKPILE AND PROCESS AREA
15M x 12M x 4M HIGH
936 TONNES

Screen

4M STAND OFF

ROAD PLANINGS
15M x 12M x 4M HIGH
936 TONNES

4M STAND OFF

3M SECURITY FENCE
TOPPED WITH BARBED WIRE

TARMAC TO BE PROCESSED
15M x 14M x 4M HIGH
1798 TONNES

FUEL STORE

CANTEEN / WELFARE

CANTEEN / WELFARE

FOUL WATER

CCTV, LIGHTS

ELECTRICITY SUPPLY
WATER SUPPLY

CONCRETE PAD

TEMPORARY STOCKPILE PROCESSED TARMAC 1000 TONNE

OFFICE

Crusher

4M STAND OFF

CONCRETE BUND WALL

CLEAN CONCRETE TO BE PROCESSED
15M x 14M x 4M HIGH
2016 TONNES

PRODUCT STORAGE

TARMAC & HARD STANDING

TEMPORARY STOCKPILE PROCESSED CONCRETE 1000 TONNE

CONCRETE BUND WALL

BH (APPROX LOCATION)

PRODUCT STORAGE

GRID

FALL

SAND

PRODUCT STORAGE

SAND

SAND

3M SECURITY FENCE
TOPPED WITH BARBED WIRE

CONCRETE PAD

GRID

COVER

3M SECURITY FENCE

HERAS FENCE

GRID

GRID

HARD STANDING

Existing 150 mm flow

Silt pit

BH

CONCRETE PAD

STORE

EXISTING OIL INTERCEPTOR

Pumped well

FALL

CCTV, LIGHTS
& ACCESS SENSOR

Existing interceptor

TP

SPILL KIT

STORE

Sampling point

GRIDS

GRIDS

GATES 3M HIGH
TOPPED WITH BARBED WIRE

To existing outfall

SIGN

ACCESS BARRIER

WASTE INSPECTION AREA

TP

SIGN - INSPECTION AREA

WATER ISOLATION TAP

SIGN

SINK

FLOW

Protected Woodland

Protected Woodland

CR

Boro Const & Ward Bdy

Co Const Bdy

Path (dmy)

TEL

Environmental Setting

- Site lies within a Groundwater Source Protection Zone 3 – Defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source. In confined aquifers, the source catchment may be displaced some distance from the source. For heavily exploited aquifers, the final Source Catchment Protection Zone can be defined as the whole aquifer recharge area where the ratio of groundwater abstraction to aquifer recharge (average recharge multiplied by outcrop area) is >0.75. There is still the need to define individual source protection areas to assist operators in catchment management (Source: Environment Agency)
- Superficial Deposits – Glaciofluvial Deposits, Devensian – Sand And Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (UGF) – Source: BGS.
- Bedrock Deposits – Bridgnorth Sandstone Formation – Sandstone. Sedimentary Bedrock formed approximately 272 to 299 million years ago in the Permian Period. Local environment previously dominated by wind blown deposits (Source: BGS).
- The site was formerly a scrap metal yard (Taurus Metals UK Ltd), landfill –operated by Wellington Rural District Council pre Control of Pollution Act 1974, sand pit and agricultural land.

4W Environmental Limited

Rev	Revision Note	Date

Schematic Site Layout

DRM Aggregate Solutions

4W Environmental Limited
Unit 26 Redhill House
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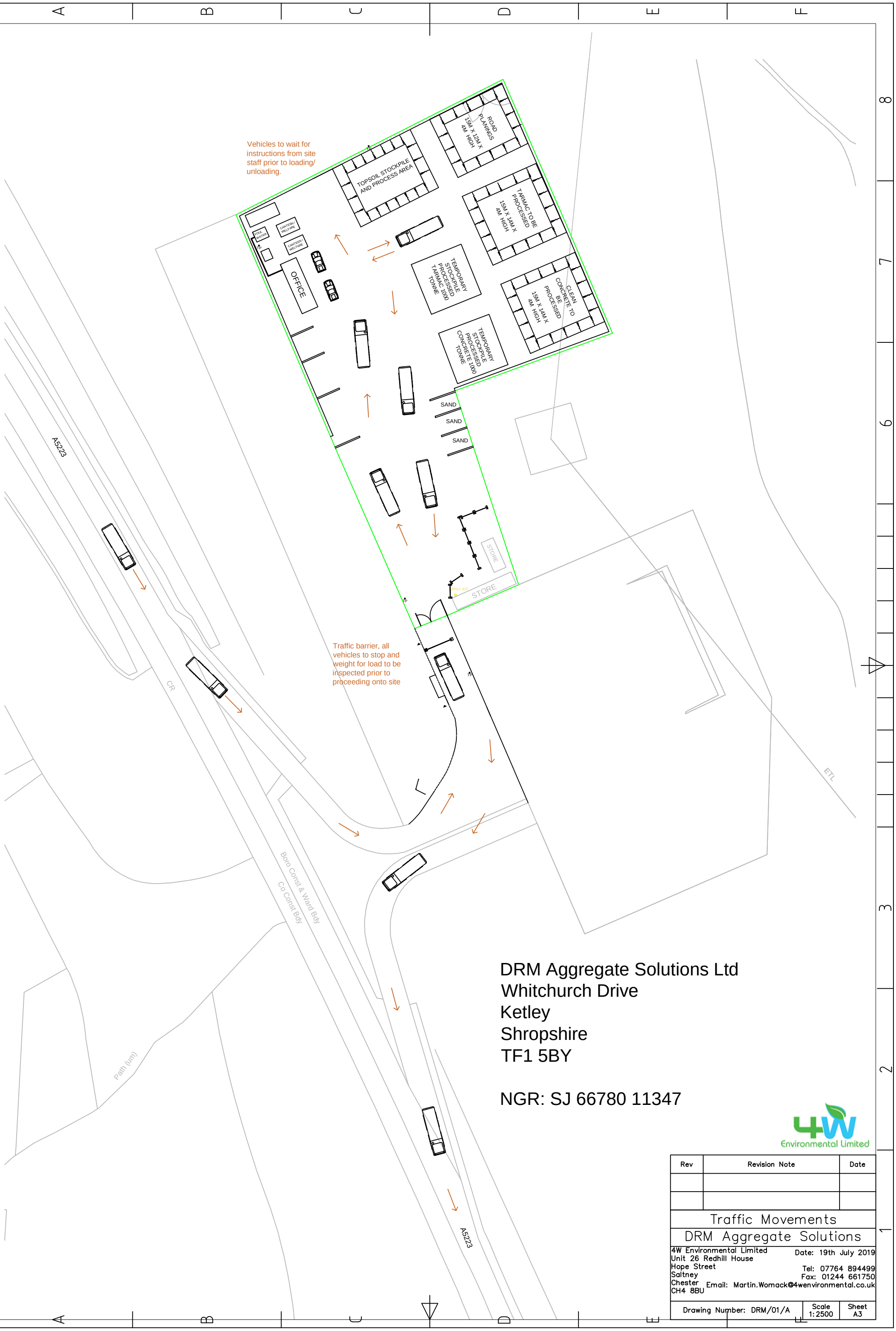
Tel: 07764 894499
Fax: 01244 661750

Date: 18th July 2019

Drawing Number: DRM/02/A | Scale 1:600 | Sheet A3



DRM Aggregate Solutions Ltd
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4W Environmental Limited

Rev	Revision Note	Date

Traffic Movements

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Tel: 07764 894499
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Date: 19th July 2019

Drawing Number: DRM/01/A	Scale 1:2500	Sheet A3

APPENDIX 11

ACCIDENT MANAGEMENT PLANS & ENVIRONMENTAL RISK ASSESSMENT

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Odour	Commercial properties Residential properties Industrial properties Public Sector	Airborne	Section 4.5 of EMS Odour monitoring undertaken daily, waste types accepted should not give rise to odour issues. Waste pre-acceptance and acceptance procedures, Section 3.1 and 3.2 of EMS	Potential comes from malodorous waste discovered after acceptance and left for long period of time in still weather conditions (temperature inversion). Very low potential for odours from storage and processing of waste.	Nuisance - most likely for neighbouring commercial properties with probability reducing with distance from the site.	Low if management techniques followed.
Noise and vibration	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne	Noise Impact Assessment, Noise and Vibration Management Plan. Section 4.9 of EMS Noise most likely from crushing/ screening operations and reversing of vehicles and plant/ machinery on the site. Waste to be stored in stockpiles which will act as a buffer to reduce noise levels off site. Currently planning permission in place for a large earth bund to the north and west of the site. Crushing and screening will take place adhoc on a campaign basis. It is anticipated that these activities will average only 1 day per week. Crushing operations are limited to 08.15 to 17.30 Monday to Friday only (See EMS Section 1.4). Noise from road vehicles, plant/ machinery intermittent. Max speed limit on site 10mph. Road vehicles are serviced and MOT in place. Plant/ machinery maintained and regularly serviced.	Probable exposure from damaged exhaust causing increase in noise level from vehicles travelling to and from the site. Probable exposure from crushing operations. Noise survey undertaken as part of the planning application process. Low frequency of crushing/ screening – anticipated that max equivalent to one day per week.	Localised nuisance for commercial properties with possible effects for birds/ wildlife that use the deciduous woodland to the East. Measurements taken at residential properties (Ketley Brook, Haybridge) and Telford College of Arts & Technology show levels align with those of BS823	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Dust	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Wind blown	Dust and Emissions Management Plan. Visual dust monitoring Section 4.4 of EMS Stocks of waste kept low (<4m), material stored in stockpiles, water spray to be used to damp down site. Brush attachment for skid steer to be used to clean road surfaces. Covering of stockpiles with heavy gauge tarpaulin. Crusher drop heights kept to a minimum; crusher fitted with dust suppression system. Crushing estimated to take place one day per week.	Dust could possibly reach the receptors highlighted in Table 1 below, if inert stocks were excessive, crushing with no dust suppression; wind direction and wind speed was of sufficient strength to entrain particulate matter. The nearest receptors likely to be affected are; Deciduous woodland, Haybridge and Ketley Brook if the wind was from the south and west respectively and of sufficient strength to entrain particulate matter. The probability of annoyance from dust will diminish with distance from the site. The adjacent commercial property owned by Telford & Wrekin (former HWRC) are at a greater risk. However low probability of exposure due to site no longer in use and now classed as 'white land' in Telford and Wrekin Local Plan. Previous planning permission for a temporary traveller site has expired and was never implemented. Potential for dust to settle on deciduous woodland to the East and South West. Dust could possibly reach residential properties of Probability low of exposure due to crushing and screening activity infrequent (estimated at an average of one day per week).	Nuisance - residential Dust on cars/ washing Research by DETR concluded that 'The issue of dust on ecological receptors is largely confined to the associated chemical effect of dust, and particularly the effect of acidic or alkaline dust influencing vegetation through soil'. The waste types accepted and that are likely to generate dusts are mainly inert i.e. concrete, rubble, soils.	Low if management techniques followed.
Pests	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne, land	No food source for pests. Putrescible /food waste not accepted. Section 4.7 of EMS	Very low probability as waste types accepted do not provide an attraction for pests.	Nuisance/ annoyance Spread of disease and potential adverse health impacts on vulnerable Possible effects for birds/ wildlife that use the deciduous woodland to the East.	Very low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Spillage – oil/ fuel from road vehicles and plant on site, adblue from road vehicles, waste from site escaping the boundary.	Groundwater (the superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer)/ surface water Land/ local soils	Percolation through ground/ surface water	Fuel/ liquids stored in bunded containers (Section 2.6 EMS), additionally fuel stored in secure container. Main processing site has impermeable surface surrounded by concrete bund wall, oil interceptor and catch drains at site entrance. All runoff/ liquids drain towards the grids at near the site entrance which drain into an oil interceptor prior to discharging to existing outfall. Proposed surface water system has a penstock valve to allow all discharges to be stopped in the event of a major spill. Road vehicles serviced regularly, tested and MOT. Plant inspected prior to use for leaks/ defects. Spill kits and spillage procedure (EMS Section 4.1). TWC Desk Study and Contamination Report highlights a significant thickness of cohesive glacial clay between the made ground under the site and the aquifers.	Low probability of spillage. Spillage most likely during loading of vehicles. Or from damaged road vehicles, mobile plant (hydraulic leaks).	Spillage of waste sticking to road vehicles and tracking off site and been deposited on the public road. Hydraulic leaks flowing into oil interceptor prior to discharging into existing outfall. Land beneath site contaminated from previous land uses. Clay layer above bedrock (aquifer). Liquid flowing into Ketley Brook (unlikely due to concrete bund). There are no surface water sewers or foul sewers located near the site.	Low if management techniques followed.
Fire	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne	Section 4.8 of EMS Waste types accepted should not present a high risk of flammability, waste pre-acceptance and inspection procedure (Section 3.1 and 3.2 of EMS).	Fire could potentially be a problem for neighbouring industrial unit (used for storage and not regularly occupied). Residential properties could be affected if the wind was blowing from the South and West.	Nuisance Deposits on cars/ washing. Possible effects for deciduous woodland and birds/ wildlife that use the woodland to the East.	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Fire water	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils Groundwater (the superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer)	Percolation through ground/ surface water	Section 2.7 & 4.8 of EMS Drainage from the site is collected via a drainage system and drains to an oil interceptor prior to discharging to an existing outfall. The proposed surface water system has a penstock valve fitted to prevent off site flow. TWC Desk Study and Contamination Report highlights a significant thickness of cohesive glacial clay between the made ground under the site and the aquifers. Waste types accepted should not present a high risk of flammability, waste pre-acceptance and inspection procedure (Section 3.1 and 3.2 of EMS). Therefore, volumes of any fire water should be relatively low i.e. no waste stockpiles to put out.	Low probability of exposure as volumes of any fire water generated would be relatively low.	Localised contamination of surface. If not cleaned up, then could lead to contaminated water drains. Possible effects for deciduous woodland and birds/ wildlife that use the woodland to the East.	Low if management techniques followed.
Mud	Commercial properties Residential properties Industrial properties Public Sector	Airborne Percolation/ drains	Section 4.3 of EMS Running surface to be kept clean Main processing facility is fully concreted, tarmac, hard standing. Vehicles not to track through waste stocks	Mud only realistically possible in if excessive vehicle movements during wet conditions. Deposit on the A5223 which then has the potential to wash off into a surface water sewer drainage system.	Increase in suspended solids from surface water discharge which if enters surface water could cause localised impact on wildlife. Due to potential for very small volumes of mud produced consequences would be localised and minimal.	Low if management techniques followed.
Receipt of waste	Commercial properties Residential properties Industrial properties Public Sector	Airborne Percolation/ drains	Waste pre-acceptance and acceptance procedures, Section 3.1 and 3.2 of EMS	Waste will be accepted daily. Only hazard will be from non-conforming wastes.	Discharge of contaminated water/ liquid to existing outfall.	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Storage of waste	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Airborne Percolation/ drains	Section 2.7, 2.8 and 3.3 of EMS Waste pre-acceptance procedure. Wastes stored on concrete pad/ tarmac/ hardstanding. Main waste reception and processing area has sealed drainage system.	Low probability of waste material leaving the site. Storage in itself should not pose an environmental issue. See Dust above and section 4.4 of the EMS.	Any free liquids would be collected in the sealed drainage system in the main processing area and pass through the silt trap and oil interceptor prior to discharging into existing outfall.	Low if management techniques followed.
Overfilling of vessels	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils Groundwater (the superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer)	Airborne Percolation/ drains	Fuel storage tank is double bunded and stored in a secure container. Spill kit available in the yard. Overfilling of mobile plant. Fuel handle has cut off. See section 4.1 of EMS Drainage from the site is collected via a drainage system and drains to an oil interceptor prior to discharging to an existing outfall. The proposed surface water system has a penstock valve fitted to prevent off site flow.	Will only occur when delivery of fuel to the site and when fuelling mobile plant.	Any free liquids would be collected in the sealed drainage system in the main processing area and pass through the silt trap and oil interceptor prior to discharging into existing outfall.	Low if management techniques followed.
Failure of containment	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils Groundwater (the superficial deposits are classed as a Secondary A aquifer and the solid bedrock is classed as a principal aquifer)	Airborne Percolation/ drains	Section 2., 2.7, 3.1, 3.2, 4.1of EMS Drainage from the site is collected via a drainage system and drains to an oil interceptor prior to discharging to an existing outfall. The proposed surface water system has a penstock valve fitted to prevent off site flow.	Greatest risk will be from the failure of hydraulic hoses on mobile plant.	Any free liquids would be collected in the sealed drainage system in the main processing area and pass through the silt trap and oil interceptor prior to discharging into existing outfall.	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Emissions from the processing plant	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Airborne Percolation/ drains	See Section 4.2 of the EMS Inspections carried out on plant and equipment and any defects noted are reported and repairs initiated. Routine preventative maintenance and cleaning carried out. Any leaks of fluid will be contained by the sealed drainage system and contained within the oil interceptor. Odour Section see Section 4.5 of the EMS.	Low probability of exposure	Any free liquids would be collected in the sealed drainage system in the main processing area and pass through the silt trap and oil interceptor prior to discharging into existing outfall. Possible effects for deciduous woodland and birds/ wildlife that use the woodland to the East.	Low if management techniques followed.
Incompatible substances coming into contact	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Airborne Percolation/ drains	Section 3.1 and 3.2 of the EMS	Very low probability due to the waste types accepted. Non-conforming wastes are more likely to be plastic, tree stumps rather than posing a chemical hazard or potential hazard.	Unwanted reaction between chemicals could give rise to odorous, noxious emissions affecting the immediate area.	Low if management techniques followed.
Failure of main services	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne Percolation/ drains	Failure of electricity would not affect the process plant and equipment from operating and would not affect containment. Failure of gas – no gas services are on site. Failure of water would potentially prevent the crushing process but would not affect containment. Proposed reuse of grey water collected from surface water system.	Has the potential to happen although highly unlikely.	Potential loss of production increase in storage of waste waiting to be processed. No effects on containment.	Low if management techniques followed.
Operator error	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland	Airborne Percolation/ drains	Section 1.6 of EMS Directors involved in the production process (hands on) and will observe staff activity.	Potential for human error – greatest risk would be from not following the waste reception procedure. Operator error on spray bars of crusher would potentially affect dust emissions.	Nuisance Dust on cars/ washing	Low if management techniques followed.

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of exposure	Consequence	Overall Risk
Vandalism	Commercial properties Residential properties Industrial properties Public Sector Deciduous Woodland Land/ local soils	Airborne Percolation/ drains	Section 2.3 of EMS	Potential for vandalism as near housing estates and another commercial unit.	Loss of containment for fuel diesel storage tank. However unlikely that that bunds and drainage system would also be compromised.	Low if management techniques followed

Receptor	*Distance (m)*	*Direction*	*Type*	*At Risk?*
T & W	0	SE	Industrial	Workers, Public, Contractors
Deciduos Woodland - Protected	23	E	Open Space	Workers, Public, Contractors
A5223	38	W	Road	Workers, Public, Contractors
Ketley Brook	51	E	Open Water	Workers, Public, Contractors
Railway Line	71	N	Industrial	Workers, Public, Contractors
Telford College of Arts & Technology	78	W	Public Sector	Workers, Public, Contractors
Residential Properties - Haybridge	110	N	Residential	Workers, Public, Contractors
Residential Properties - Ketley Brook	147	E	Residential	Workers, Public, Contractors
Car Wash, Filling Station	220	NW	Commercial	Workers, Public, Contractors
Residential Properties - Ketley Sands	233	SW	Residential	Workers, Public, Contractors
Residentail Properties - Arleston	274	SSW	Residential	Workers, Public, Contractors
Fire Station	314	W	Public Sector	Workers, Public, Contractors
Haybridge Industrial Etate	336	NW	Commercial	Workers, Public, Contractors
B5061	385	SE	Road	Workers, Public, Contractors
The Bridge School (primary & secondary)	385	NE	Public Sector	Workers, Public, Contractors
New Buck's Head Football Ground	500	W	Commercial	Workers, Public, Contractors
Pond (Works)	509	SE	Open Water	Workers, Public, Contractors
Works	530	SE	Industrial	Workers, Public, Contractors
Bridge Builder Public House	545	S	Commercial	Workers, Public, Contractors
Residential Properties - Wellington	601	W	Residential	Workers, Public, Contractors
Filling Station	607	S	Commercial	Workers, Public, Contractors
Wrekin Retail Park	665	S	Commercial	Workers, Public, Contractors
Field Drain	715	N	Open Water	Workers, Public, Contractors
Field Drain	730	NW	Open Water	Workers, Public, Contractors
Residential Properties - Ketley	777	E	Residential	Workers, Public, Contractors
Millbrook Primary School	785	NNW	Public Sector	Workers, Public, Contractors
Post Office	883	NE	Commercial	Workers, Public, Contractors
The Old Hall School	904	WNW	Public Sector	Workers, Public, Contractors
Residential Properties - Hadley	945	ENE	Residential	Workers, Public, Contractors
Sports Leisure Centre	982	NE	Commercial	Workers, Public, Contractors

Date of assessment: 15th March 2020

Date next assessment/ review due (max. 4 years): 15th March 2024

Assessor: Martin Womack

Signature: M. Womack

Incident Response Plan – DRM Aggregate Solutions Ltd

DRM Aggregate Solutions Ltd Whitchurch Drive Ketley Shropshire TF1 5BY	*NGR*: SJ 66780 11347 *Map References*: DRM*/01/A, DRM/02/A* *Link to map:*
Overview of the activities on site (including the number of employees at different times of the day): The site comprises the following waste management activities; Waste Transfer/ Treatment to produce soil, soil substitutes and aggregate– operational and currently used for the processing of non hazardous commercial/ industrial and domestic wastes. The above activity is permitted by an Environmental Permit. The facility is operated under a bespoke permit based upon standard rules permit SR2010 No.12 Other activities on site include: N/a During the period 07.30 to 17.30 there can be up to 2 staff on a typical day. Outside of these hours the site is locked.	
Description of the surrounding area: The Site forms part of the land previously used as a scrap metal dealer, landfill site, sand pit and agricultural land. Neighbouring and surrounding land uses are a mixture of commercial, residential and educational establishments. The nearest residential properties are located at Haybridge and Ketley Brook.	
Date and version of the plan 24th July 2019 Version 1	*Name or position of person responsible for compiling/ approving the plan:* *Compiling:* Martin Womack *Approving:* Richard Marsh

Review Date: 24th July 2019	*Date of next exercise:* TBC
Objectives of the plan: This accident and emergency plan is designed to comply with the requirements of the Environmental Permitting Regulations (England and Wales) 2010. The plan will provide the necessary information for use in the event of an emergency and will provide details for the relevant contacts so that any emergency situation can be dealt with effectively.	
List of external organisations consulted in the preparation of the plan with contact details: Environment Agency (Part of environmental permit application process)	
Distribution list, number of copies of the plan and version: External distribution list includes; Environment Agency	

External contacts		
Contact	Office hours	Out of hours
Emergency services (Fire/ Police/ Ambulance)	999	999
Local Police	101	
Local hospital/ NHS Trust	Princess Royal Hospital, TF1 6TF, 01952 641222 1.2 miles, 5 minutes from the site	
Environmental Regulator Incident hotline	0800 807060	0800 807060
Environment Regulator Local contact	0800 807060	0800 807060
Local Authority Emergency Planning Department	01952 380000	01952 383977
Local water company/ authority	Severn Trent 0800 783 4444	Severn Trent 0800 783 4444
Electricity company	Western Power: 0800 096 3080	Western Power: 0800 096 3080
Gas company	Cadent: 0345 835 1111	Cadent: 0800 111 999
Specialist advice	Xenon Technical Services: 07713 563650	Xenon Technical Services: 07713 563650
Specialist clean up contractor	Xenon Technical Services: 07713 563650	Xenon Technical Services: 07713 563650
Internal contacts		
Names and positions of staff authorised/ trained to activate and coordinate the plan		
Staff		
Site Manager Site Supervisor Technically Competent Manager	Richard Marsh Dawn Marsh	01952 770056 01952 770056

Chemical Product and Waste Inventory						
Trade name/ substance	Solid/ liquid, gas or powder	UN number	Maximum amount	Location marked on site plan	Type of containment	COSHH data sheet attached?
No chemicals, fuels or oils stored on site as a matter of routine.						

Pollution Prevention Equipment Inventory (on and off site resources)			
Item	Location	Use	Contact
Inert waste	Stocks on site	Spills and smothering of fire	Site Manager
360-degree excavator	Site	Spreading of inert material to suffocate fires	Site Manager
Spill kit	Site entrance/ store	Spills	Site Manager

APPENDIX 12

LOG OF CHANGES

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

DRM Aggregate Solutions Ltd - Management System Change Tracker

Date	EMS Reference No.	Reason for change?	Approved by	Date

APPENDIX 13

SITE CONDITION REPORT

DRM AGGREGATE SOLUTIONS LTD
MARCH 2020

SITE CONDITION REPORT TEMPLATE

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.

1.0 SITE DETAILS	
Name of the applicant	DRM Aggregate Solutions Ltd
Activity address	Whitchurch Drive, Ketley, Shropshire, TF1 5BY
National grid reference	SJ 66780 11347

Document reference and dates for Site Condition Report at permit application and surrender	Location of Receptors DRM Aggregate Solutions Ltd – July 2019. TWC – Desk Study & Contamination Assessment Report, September 2018

Document references for site plans (including location and boundaries)	DRM/02/A

Note:
In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	**Geology** Superficial Deposits - Glaciofluvial Deposits, Devensian - Sand and Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (UGF) - Source: BGS. ·Bedrock Deposits - Bridgnorth Sandstone Formation - Sandstone. Sedimentary Bedrock formed approximately 272 to 299 million years ago in the Permian Period. Local environment previously dominated by windblown deposits (Source: BGS). **Hydrogeology** Site lies within a Groundwater Source Protection Zone 3 - Defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source. In confined aquifers, the source catchment may be displaced some distance from the source. For heavily exploited aquifers, the final Source Catchment Protection Zone can be defined as the whole aquifer recharge area where the ratio of groundwater abstraction to aquifer recharge

	(average recharge multiplied by outcrop area) is >0.75. There is still the need to define individual source protection areas to assist operators in catchment management (Source: Environment Agency) **Surface Waters** The nearest surface water feature is Ketley Brook located 51m to the East of the site. This brook runs South to North and sinks parallel with the Northern edge of the site. There are no other adjacent surface water features.
Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	The site was formerly a scrap metal yard (Taurus Metals UK Ltd), landfill -operated by Wellington Rural District Council Pre-Control of Pollution Act 1974, sand pit and agricultural land. For further details please see the Telford and Wrekin Council Desk Study and Contamination assessment Report, September 2018 – The Former Site of Taurus Metals Whitchurch Drive
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	As above
Baseline soil and groundwater reference data	Telford and Wrekin Council Desk Study and Contamination assessment Report, September 2018 – The Former Site of Taurus Metals Whitchurch Drive
Supporting information	• Source information identifying environmental setting and pollution incidents • Historical Ordnance Survey plans • Site reconnaissance • Historical investigation / assessment / remediation / verification reports • Baseline soil and groundwater reference data

3.0 Permitted activities	
Permitted activities	Treatment of waste to produce soil, soil substitutes and aggregate.
Non-permitted activities undertaken	Operation of commercial yard for activities associated with R D Marsh Surfacing Contractors Ltd.
Document references for: • plan showing activity layout; and • environmental risk assessment.	Drawing No. DRM/02/A – Site Layout Environmental Risk Assessment DRM Aggregate Solutions Ltd.

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	
Have there been any changes to the permitted activities?	
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	
Checklist of supporting information	• Plan showing any changes to the boundary (where relevant) • Description of the changes to the permitted activities (where relevant) • List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)

5.0 Measures taken to protect land	
Checklist of supporting information	• Inspection records and summary of findings of inspections for all pollution prevention measures • Records of maintenance, repair and replacement of pollution prevention measures

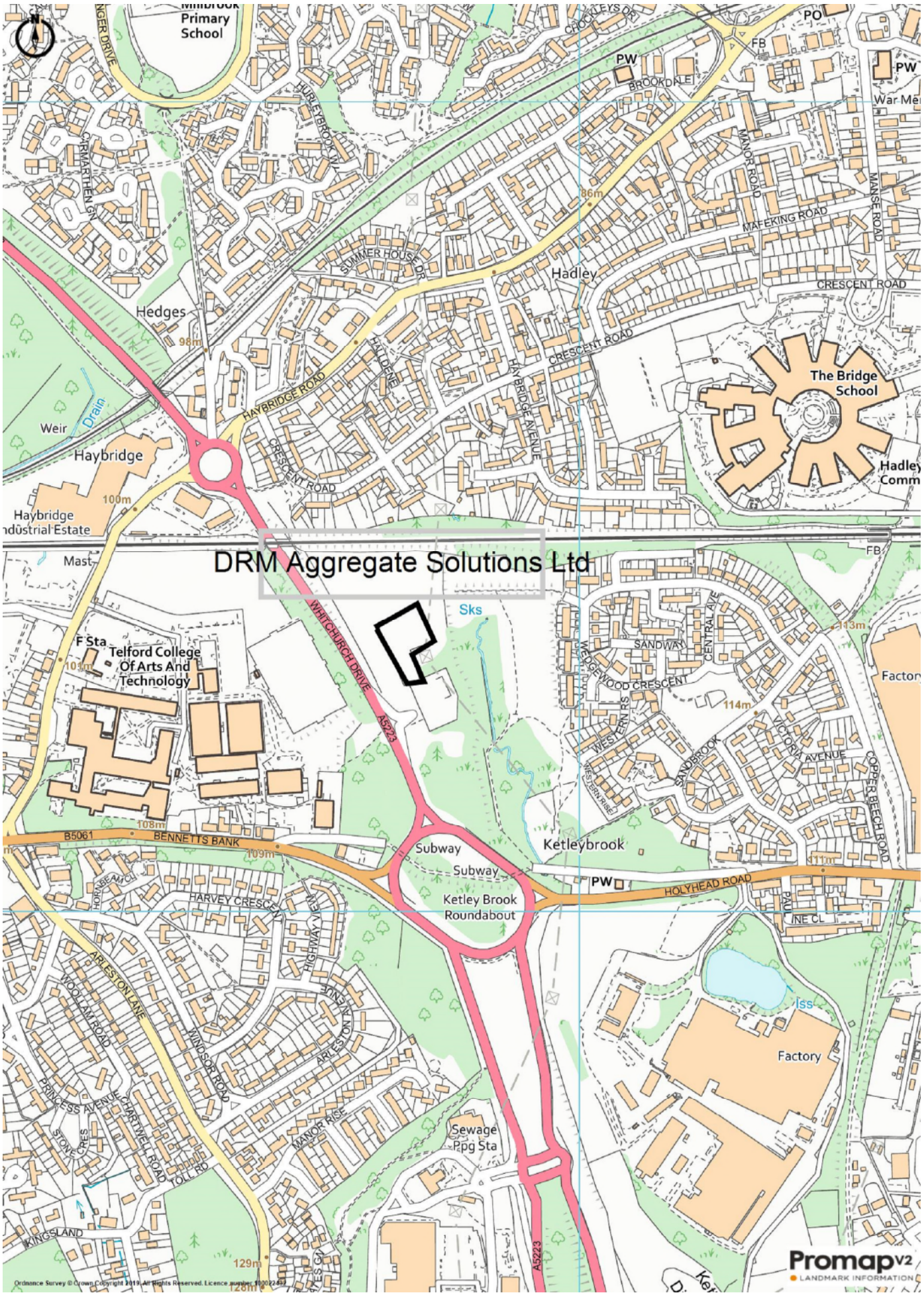
6.0 Pollution incidents that may have had an impact on land, and their remediation	
Checklist of supporting information	• Records of pollution incidents that may have impacted on land • Records of their investigation and remediation

7.0 Soil gas and water quality monitoring (where undertaken)	
Checklist of supporting information	• **Description of soil gas and/or water monitoring undertaken** • **Monitoring results (including graphs)**

8.0 Decommissioning and removal of pollution risk	
Checklist of supporting information	• **Site closure plan** • **List of potential sources of pollution risk** • **Investigation and remediation reports (where relevant)**

9.0 Reference data and remediation (where relevant)	
.	
Checklist of supporting information	• Land and/or groundwater data collected at application (if collected) • Land and/or groundwater data collected at surrender (where needed) • Assessment of satisfactory state • Remediation and verification reports (where undertaken)

10.0 Statement of site condition
•



DRM Aggregate Solutions Ltd
Whitchurch Drive
Ketley
Shropshire
TF1 5BY

NGR: SJ 66780 11347

4W Environmental Limited

Rev	Revision Note	Date

Site Location

DRM Aggregate Solutions

4W Environmental Limited
Unit 26 Redhill House
Hope Street
Saltney
Chester
CH4 8BU
Email: Martin.Womack@4wenvironmental.co.uk
Tel: 07764 894499
Fax: 01244 661750

Date: 18th July 2019

Drawing Number: DRM/01/A	Scale NTS	Sheet A3

N

0 10 20 30 40 50
Metres

3M SECURITY GATE
TOPPED WITH BARBED WIRE

CONCRETE BUND WALL

CONCRETE BUND WALL

CCTV, LIGHTS

3M SECURITY FENCE
TOPPED WITH BARBED WIRE

TOPSOIL STOCKPILE AND PROCESS AREA
15M x 12M x 4M HIGH
936 TONNES

Screen

4M STAND OFF

ROAD PLANINGS
15M x 12M x 4M HIGH
936 TONNES

4M STAND OFF

3M SECURITY FENCE
TOPPED WITH BARBED WIRE

TARMAC TO BE PROCESSED
15M x 14M x 4M HIGH
1798 TONNES

FUEL STORE

CANTEEN / WELFARE

CANTEEN / WELFARE

FOUL WATER

CCTV, LIGHTS

ELECTRICITY SUPPLY
WATER SUPPLY

CONCRETE PAD

TEMPORARY STOCKPILE PROCESSED TARMAC 1000 TONNE

OFFICE

Crusher

4M STAND OFF

CONCRETE BUND WALL

CLEAN CONCRETE TO BE PROCESSED
15M x 14M x 4M HIGH
2016 TONNES

PRODUCT STORAGE

TARMAC & HARD STANDING

TEMPORARY STOCKPILE PROCESSED CONCRETE 1000 TONNE

CONCRETE BUND WALL

BH (APPROX LOCATION)

PRODUCT STORAGE

GRID

FALL

SAND

PRODUCT STORAGE

SAND

SAND

3M SECURITY FENCE
TOPPED WITH BARBED WIRE

CONCRETE PAD

GRID

COVER

3M SECURITY FENCE

HERAS FENCE

GRID

GRID

HARD STANDING

Existing 150 mm flow

Silt pit

BH

CONCRETE PAD

STORE

EXISTING OIL INTERCEPTOR

Pumped well

FALL

CCTV, LIGHTS
& ACCESS SENSOR

Existing interceptor

TP

SPILL KIT

STORE

Sampling point

GRIDS

GRIDS

GATES 3M HIGH
TOPPED WITH BARBED WIRE

To existing outfall

SIGN

ACCESS BARRIER

WASTE INSPECTION AREA

TP

SIGN - INSPECTION AREA

WATER ISOLATION TAP

SIGN

SINK

FLOW

Protected Woodland

Protected Woodland

CR

Boro Const & Ward Bdy

Co Const Bdy

Path (dmy)

TEL

Environmental Setting

- Site lies within a Groundwater Source Protection Zone 3 – Defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source. In confined aquifers, the source catchment may be displaced some distance from the source. For heavily exploited aquifers, the final Source Catchment Protection Zone can be defined as the whole aquifer recharge area where the ratio of groundwater abstraction to aquifer recharge (average recharge multiplied by outcrop area) is >0.75. There is still the need to define individual source protection areas to assist operators in catchment management (Source: Environment Agency)
- Superficial Deposits – Glaciofluvial Deposits, Devensian – Sand And Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (UGF) – Source: BGS.
- Bedrock Deposits – Bridgnorth Sandstone Formation – Sandstone. Sedimentary Bedrock formed approximately 272 to 299 million years ago in the Permian Period. Local environment previously dominated by wind blown deposits (Source: BGS).
- The site was formerly a scrap metal yard (Taurus Metals UK Ltd), landfill –operated by Wellington Rural District Council pre Control of Pollution Act 1974, sand pit and agricultural land.

4W Environmental Limited

Rev	Revision Note	Date

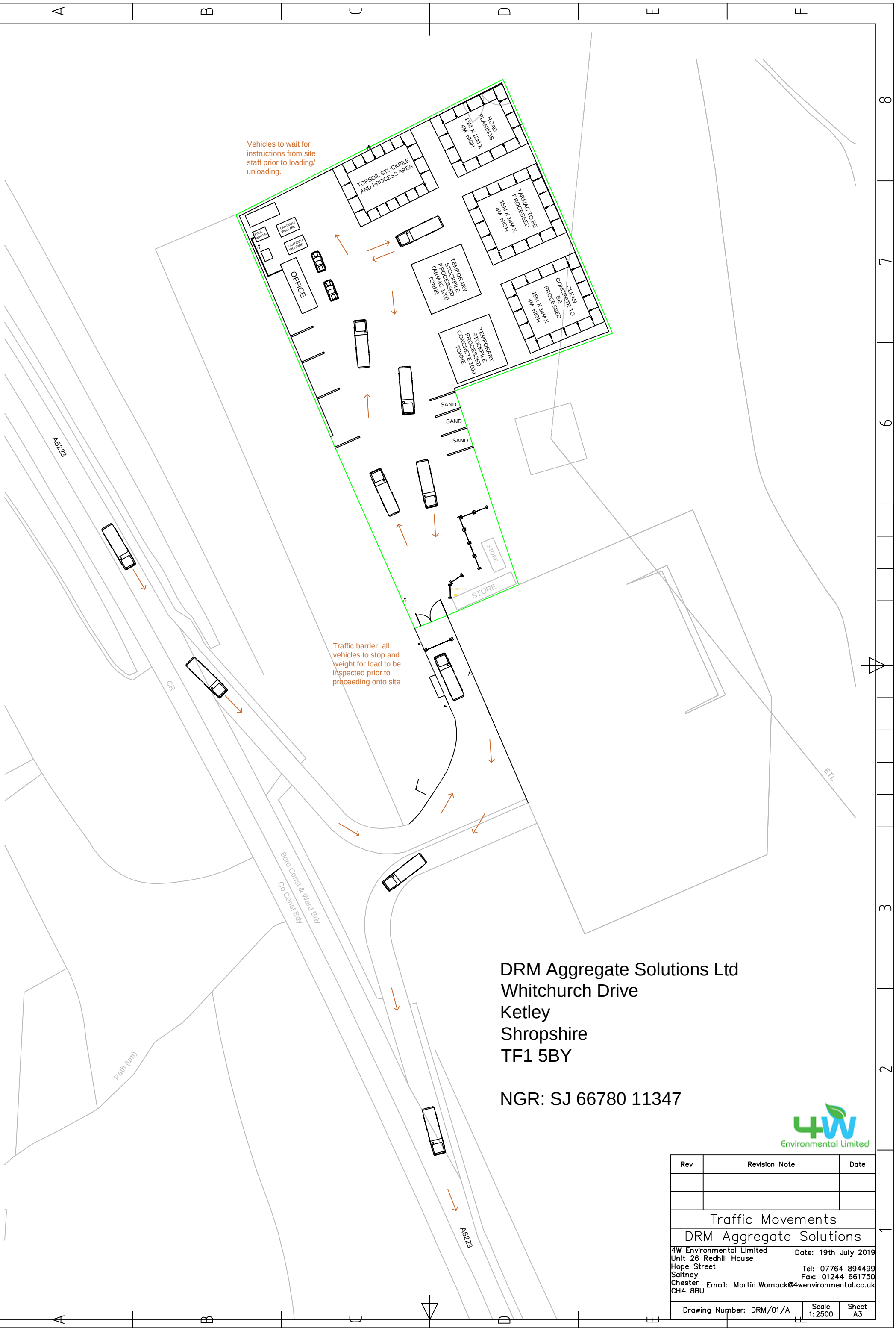
Schematic Site Layout

DRM Aggregate Solutions

4W Environmental Limited
Unit 26 Redhill House
Hope Street
Saltney
Chester
CH4 8BU
Email: Martin.Womack@4wenvironmental.co.uk
Tel: 07764 894499
Fax: 01244 661750

Date: 18th July 2019

Drawing Number: DRM/02/A | Scale 1:600 | Sheet A3



DRM Aggregate Solutions Ltd
Whitchurch Drive
Ketley
Shropshire
TF1 5BY

NGR: SJ 66780 11347

4W Environmental Limited

Rev	Revision Note	Date

Traffic Movements

DRM Aggregate Solutions

4W Environmental Limited
Unit 26 Redhill House
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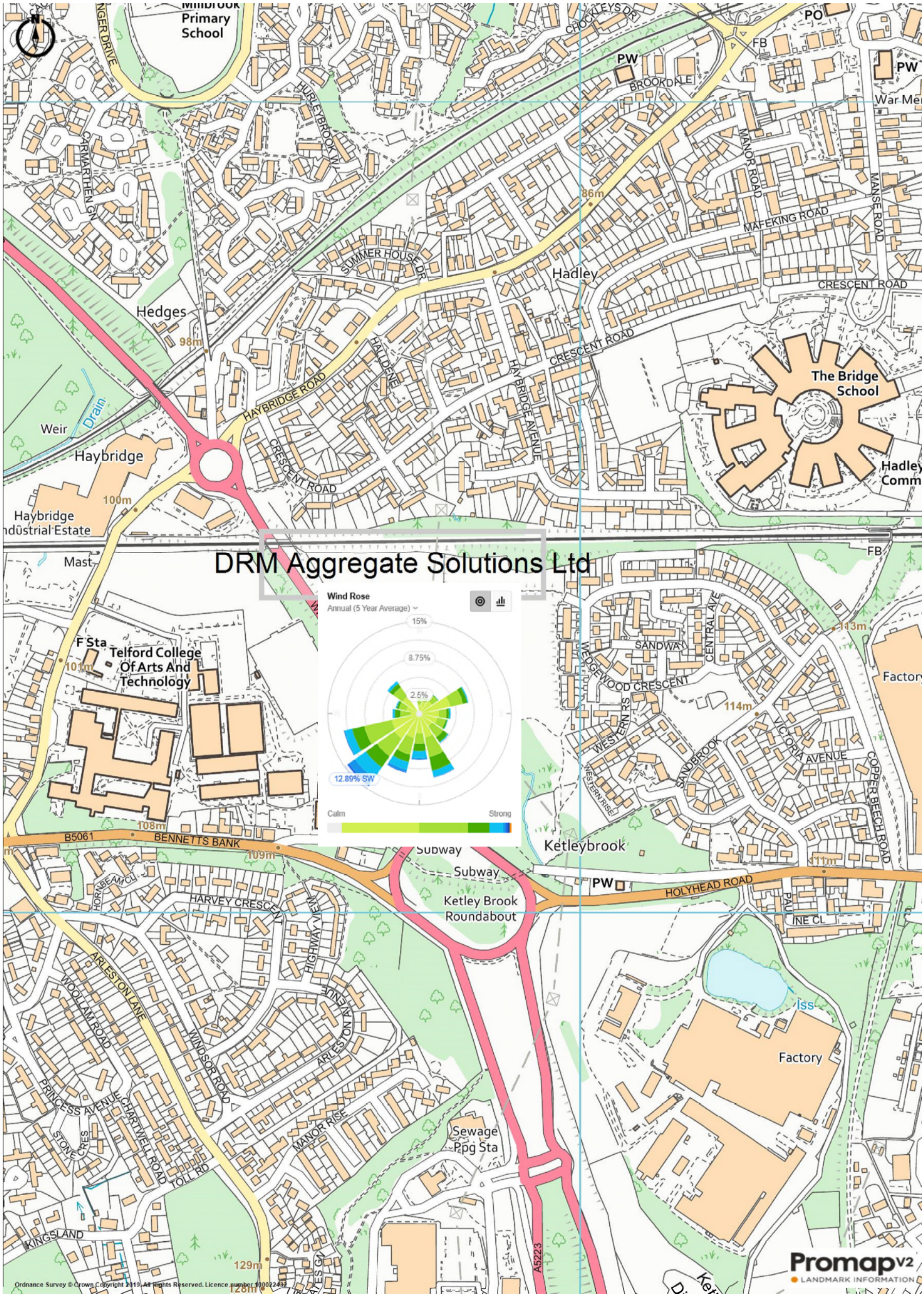
CH4 8BU
Email: Martin.Womack@4wenvironmental.co.uk
Tel: 07764 894499
Fax: 01244 661750

Date: 19th July 2019

Drawing Number: DRM/01/A	Scale 1:2500	Sheet A3



4W Environmental Limited

Rev	Revision Note	Date

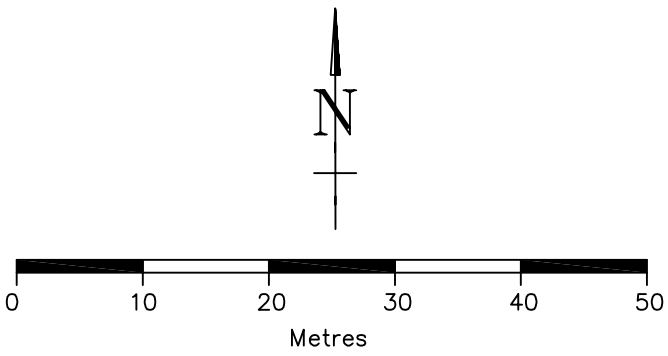
Receptor & Wind rose

DRM Aggregate Solutions

4W Environmental Limited
Unit 26 Redhill House
Hope Street
Saltney
Chester
CH4 8BU
Email: Martin.Womack@4wenvironmental.co.uk
Tel: 07764 894499
Fax: 01244 661750

Date: 19th August 2019

Drawing Number: DRM/04/A	Scale NTS	Sheet A3



Location 3 - targeted location
Selected on site for security purposes, location out of main operational area, will indicate the effect of stockpile wind whipping with winds from South to South East

Location 2 - general site location
Selected on site for security purposes and to try and give a general overview

Location 1 - 'Upwind'
Selected as on site for security purposes, distance from the main road

TOPSOIL STOCKPILE AND PROCESS AREA

ROAD PLANINGS 15M X 12M X 4M HIGH

TARMAC TO BE PROCESSED 15M X 14M X 4M HIGH

TEMPORARY STOCKPILE PROCESSED TARMAC 1000 TONNE

CLEAN CONCRETE TO BE PROCESSED 15M X 14M X 4M HIGH

TEMPORARY STOCKPILE PROCESSED CONCRETE 1000 TONNE

SAND
SAND
SAND

OFFICE
CANTEEN / WELFARE
CANTEEN / WELFARE
FOUL WATER
TP

STORE
STORE
SPILL KIT

A5223
CR
Boro Const & Ward Bdy
Co Const Bdy
Path (um)
ETL

4W Environmental Limited

Rev	Revision Note	Date

Location of Dust Gauges

DRM Aggregate Solutions

4W Environmental Limited
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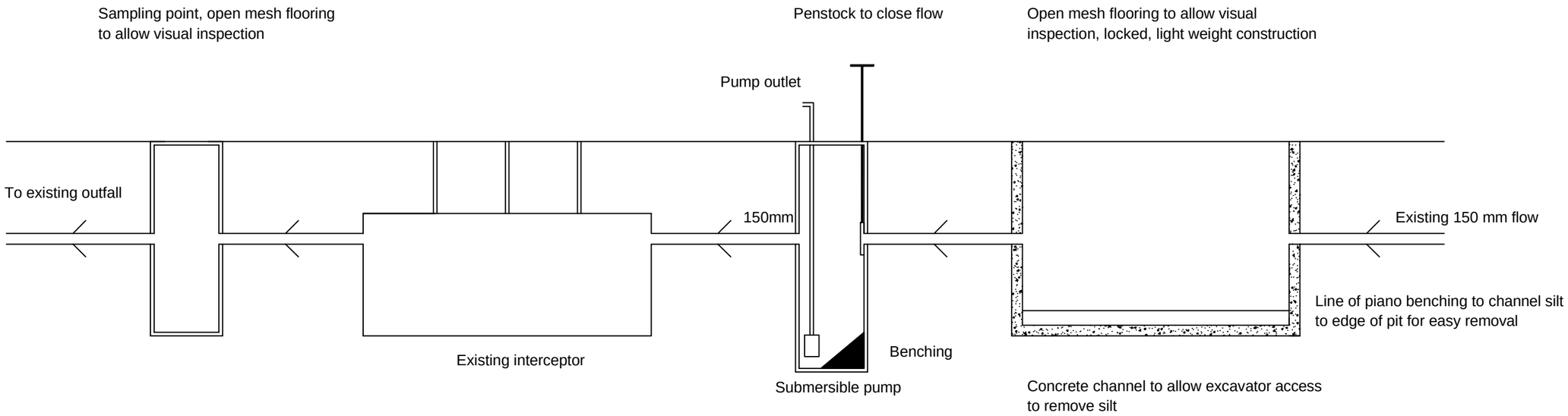
Tel: 07764 894499
Fax: 01244 661750

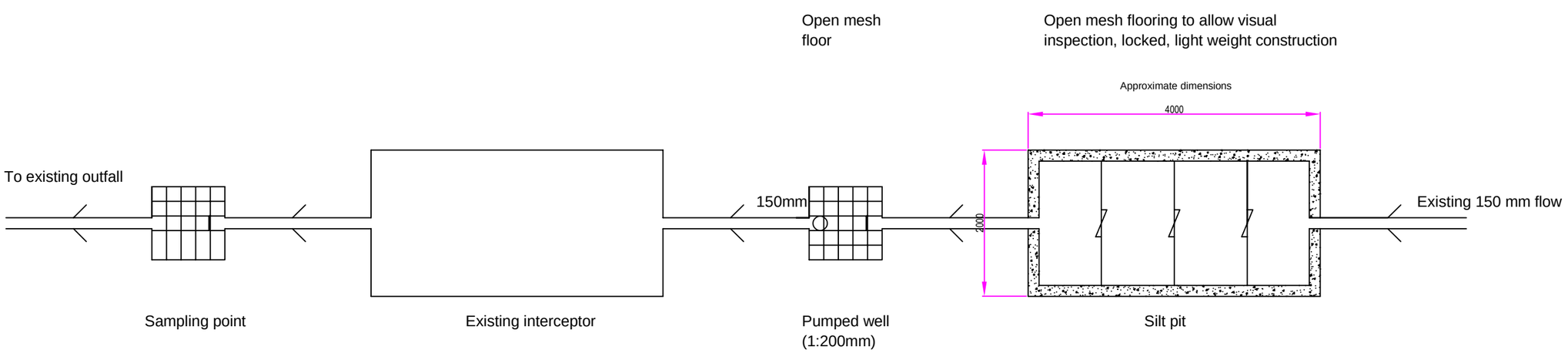
Date: 22nd August 2019

Drawing Number: DRM/05/A | Scale 1:600 | Sheet A3

Plan and section of measures to capture water for reuse and suspended silt

Depth to be determined on site





Rev	Revision Note	Date

Schematic - Upgraded Drainage System

DRM Aggregate Solutions Limited

4W Environmental Limited
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Date: 14th March 2020
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Drawing Number: DRM/06/A	Scale n-t-s	Sheet A3