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# VARIATION – OPERATING TECHNIQUES SOIL WASH PLANT



## Table of Contents

### TABLE OF CONTENTS

1.0	Introduction
2.0	Operating Procedures
3.0	Regulated Facility Infrastructure
4.0	Emissions Control
5.0	Accident Management
6.0	Site Management
7.0	Management of Documentation
8.0	Incidents and Non-Conformances

### LIST OF CONTENTS

Table 1 :	R Codes
Table 2 :	Permitted Waste Types at Yokesford Hill Industrial Estate for Soil Washing
Table 3 :	Sampling frequencies and sampling tests
Table 4 :	Acceptable level for Wash Water

### DRAWINGS

001	Site Location
002	Site Layout and Permit Boundary (red)
003	Site CDE Wash Plant Layout

### APPENDICES

Appendix A	-	Certificate of Technical Competence
Appendix B	-	Ace Liffaway Limited Quality Management System for the Production of Aggregates from Inert Waste

1.0	Introduction	
1.1	Report Context	
1.1.1	This section of the Environmental Permit Application corresponds to Section 3 of Part C4 of the Environmental Permit Application forms and specifically details the operating and management procedures that will be in place at the site in relation to the Soil Washing Facility. This document does not relate to or amend the current operations associated with the waste transfer station.	
1.1.2	The applicant is seeking to vary the current environmental permit to allow for the addition of a new soil washing plant for inert wastes and increase the EWCs permitted.	
1.2	Site Setting	
1.2.1	Yokesford Hill Industrial Estate lies on the far northern outskirts of Romsey, on the north side of Yokesford Hill, linking Braishfield Road with the A3057. The Estate, which was once part of a larger gravel pit, is set in a terrace on the slope of the valley of the River Test. It is screened from the public vantage point of the road, by being set below it with intervening screen vegetation and bunding in between.	
1.2.2	To the southwest, above the site, is reclaimed land which has been returned to grass. Beyond this lies Yokesford Hill, some 160m from the site. Abutting the southeast boundary of the Estate and on higher ground than the field, to the southwest is Wynyford Industrial Park, which has been redeveloped and extended for B1, B2 and B8 uses.	
1.3	Geology	
1.3.1	Bedrock/solid geology: Bedrock is shown as Clay, Silt and Sand of the London Clay Formation. Mixed flow is present and permeability is classified as very low to Moderate.	
1.4	Hydrogeology	
1.4.1	With reference to the Multi Agency Geographic Information for the Countryside's website (MAGIC) website, the site is not situated within a Groundwater Source Protection Zone (GSPZ).	
1.5	Hydrology	
1.5.1	According to the Flood Map for Planning Service (FMPS), the application site is not situated in an area at risk of flooding.	

1.6 Ecology

1.6.1 The site is an existing waste management site comprising of concrete hardstanding there is no presence of any nature or heritage conservation or protected species or habitats that may be impacted by the proposal.

**Operating Procedures**

**2.1 Operating Hours**

2.1.1 The hours of operation are as follows :  
 Monday to Friday 0600 to 1800  
 Saturday 0700 to 1300

**2.2 Permitted Activities**

2.2.1 Ace Liffaway are seeking to add a soil washing activity to the environmental permit. This activity aims to produce aggregates from inert waste washing arising from the building, civil engineering and demolition industry.

2.2.2 The soil washing plant is already on site and is situated in an area to the south-west of the site – see site location plan.

2.2.3 The following Recovery Codes will be used in the soil washing facility.

**Table 1: R Codes**

R Codes	Activity
R3	Recycling/reclamation of organic substances which are not used as solvents.
R4	Recycling/reclamation of metals and metal compounds.
R5	Recycling/reclamation of other inorganic materials
R13	Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).

These R Codes are already permitted in existing Waste Permit – limits of activities to be amended to include washing

**2.3 Waste Types**

2.3.1 The following waste types will be accepted at the site for treatment within the soil washing plant.

**Table 2 : Permitted Waste types at Yokesford Hill for Soil Washing**

EWC Code	Description
17	Construction and demolition wastes (including excavated soil from contaminated sites)
17 01	Concrete, bricks, tiles and ceramics
17 01 01	Concrete
17 01 07	Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
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

- 2.4.1 Prior to delivery to the site, the waste producer or holder will be required to provide the following information of the waste to allow Ace Liffaway to assess that the waste has been properly assessed and classified in accordance with Technical Guidance WM3 "Waste Classification – Guidance on the classification and assessment of waste".
  - Details of the waste producer/holder including their organisation name, address and contact details.
  - A description of the waste
  - The waste classification code
  - Source of the waste
  - Information on the nature and variability of the waste production process
  - Information about the history of the producer site if it may be relevant to the classification of the waste (for example soils and other construction and demolition arising from a site contaminated by previous industrial uses).
  - The waste's physical form
  - The waste's composition (based on representative samples if necessary)
  - A description of the waste's odour and whether it is likely to be odorous
  - An estimate of the quantity you expect to receive in each load and in a year
- 2.4.2 Ace Liffaway when necessary request a waste characterisation or testing report from the holder of the waste. Photographs of the materials may be provided to enable verification during the waste acceptance stage. The reports (and photos if provided) are reviewed by an individual who possesses the required level of technical competence for the permitted waste activities. In addition Ace Liffaway have staff who have received IATP Approved asbestos awareness training which will facilitate the identification of any waste material containing asbestos. All wastes in are seen in by Ace Liffaway's trained banksman, who controls waste in via a tablet linked directly to the control desk's ISYS system, allowing pictures, classification, incidental waste reporting, waste reports, emails direct to the system on each load received.
- 2.4.3 On occasion, if required, Ace Liffaway will go to the site where the waste is produced/stored and obtain representative samples for chemical analysis by an accredited laboratory.
- 2.4.4 The operator will not accept waste onto the site unless the above information is established.

**Pre-acceptance procedures (for specific jobs)**

**2.4 Waste Acceptance Procedures**

17 05 08	Track ballast other than those mentioned in 17 05 07
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 02	Garden and park wastes (including cemetery waste)
20 02 02	Soil and stones

<u>Acceptance Procedures</u>	
2.4.5	For mirror entry List of Waste (LoW) codes, if the information provided by the waste producer indicates that the waste has not been properly assessed, Ace Liffaway will contact the waste producer and request further information to verify the waste assessment. If the waste producer is unable to verify the assessment, Ace Liffaway will assume that the waste is hazardous and therefore will not be accepted.
2.4.6	If the information provided demonstrates that the waste is acceptable, the Site Manager will assess the waste's suitability for storage and treatment at the site. If the waste is deemed suitable for storage and treatment, arrangements will be made to deliver the waste to site.
2.4.7	Ace Liffaway will undertake pre-acceptance checks for all contracts that deliver waste to the site. Details of these checks will be documented under a Waste Information Form (WIFs) and a record will be maintained for a minimum of 3 years. All records relating to the pre-acceptance will be kept for cross-reference at verification at the waste acceptance stage. These records will be kept for a minimum of 3 years.
2.4.8	Ace Liffaway will reassess the information required at pre-acceptance on an annual basis or if the following apply :- <ul style="list-style-type: none"> <li>• Waste changes</li> <li>• Process giving rise to the waste changes</li> <li>• Waste received does not conform to the pre-acceptance information</li> </ul>

2.4.9 Waste will only be accepted if there is sufficient capacity. The delivery of waste will always be planned in advance with the delivery date agreed by Ace Liffaway and the waste holder.

2.4.10 All vehicles delivering waste will be licenced waste carriers and each delivery must be accompanied by the Waste Transfer Note consistent with fulfilling the company's responsibilities under the Duty of Care Regulations. Before the waste vehicles arrives on site, a check will be made to ensure that the waste carrier is properly licenced. This information can be checked by the following methods:-

- By phoning the Environment Agency on 03708 506 506 and requesting an instant Waste Carrier Validation Check; or
- Checking online on the Environment Agency's waste carrier register on their website.

2.4.11 All waste delivery vehicles will be directed to the weighbridge where the load will be weighed. The weighbridge will be manned at all times during operational hours and clearly signed to direct all visitors to report to on arrival to site. Drivers will then report to the weighbridge office and provide documents detailing the source and description of the waste. These documents will be inspected by an appropriately trained operator to ensure that the information corresponds with the information provided during the pre-acceptance stage and therefore complies with the conditions of the environmental permit.

2.5	<b>Unauthorised and Rejected Wastes</b>	<p>2.4.12 Loads where possible, will be visually inspected by an appropriately trained operator to ensure compliance. Wastes will be brought to site by Ace Liffaway drivers, account customers or third parties. The majority of vehicles delivering waste will be self charging tipper vehicles or skip vehicles.</p> <p>2.4.13 During the winter, adequate lighting will be provided at the Control Office and waste reception are to ensure the wastes can be inspected.</p> <p>2.4.14 If the document checks show that the waste is acceptable, the driver will report back to the waste delivery vehicle and be directed to the waste reception area. Staff will supervise the waste being discharged from the waste delivery vehicle and a further inspection will be undertaken via the banksman tablet reporting system.</p> <p>2.4.15 In accordance with the extant Environmental Permit, specified wastes may be stored on the impermeable surface or on hard standing. The waste will be discharged from the waste delivery vehicle and a further inspection will be undertaken.</p> <p>2.4.16 If the documentation provided at the main office is incorrect or the visual inspections indicate that the waste does not match the written description provided during the acceptance or pre-acceptance stage, then the waste will be rejected in accordance with Section 2.5.</p>
2.5.2	<p>During these operations, site staff will perform visual and olfactory checks on the load to confirm the earlier categorisation. This re-inspection will also consider the acceptance criteria. If the load is acceptable at this point, it will be pushed up into the relevant stockpile of feedstock. If the load does not conform to the acceptance criteria, the waste will be rejected and the appropriate documentation will be completed.</p>	
2.5.3	<p>In the event that small amounts of contaminants are found to be present in the load that do not render the whole load unacceptable, ie, one piece of wood or plastic etc, these contaminants may be removed prior to processing without causing rejection of the whole load.</p>	
2.5.4	<p>If the waste material does not meet the acceptance criteria then it will be rejected. This material will either be reloaded onto the vehicle which deposited the waste or placed within the quarantine area for disposal at an authorised facility. A copy of the Waste Transfer Note will be kept in the Control Office to ensure that an audit trail can be followed. The Environment Agency will be informed.</p>	
2.5.5	<p>The incident management procedures in the company Management System will be employed and appropriate records will be kept of the incident and subsequent action. A summary of the incident report will include;</p>	
<ul style="list-style-type: none"> <li>• Date and time of deposit of waste</li> <li>• Producer and carrier details</li> </ul>		



- 2.7.1 A visual inspection is carried out on every load entering the site that are tipping directly at the wash plant, on initial receipt on arrival at Ace Liffaway.
- 2.7.2 Material for washing is also produced on site from the dry screening quality protocol onsite from the building 1 inert pre-sorting MRF. This material has been screened to -30mm and will be sent to the wash plant for final refinement and end of waste. This material consists of mixed inert waste brought in on skips, and tipping bodies that requires further separation and processing. Any non-inert materials are removed, clean hardcore is crushed for 6F5 recycled, -30mm soil is sent to the Agg Max for end of waste.
- 2.7.3 Building 3 C&I MRF under the dry screening quality protocol, is also extracted from this plant. Typically skips and tipping bodied movements are in this building. Impact Air hood systems are operating on this MRF. The air hood is situated after the screening process at -6 to collect the +6mm -50mm through an air vortex system into a cyclone to extract any light fraction away from inert material. This -50mm material will be sent to the Agg Max for end of waste.
- 2.7.4 In the event that small amounts of contaminants are found to be present in the load that do not render the whole load unacceptable (such as one piece of wood or plastic etc.), these contaminants may be removed prior to processing without causing rejection of the whole load.
- 2.7.5 The soil washing facility would produce 6F2/6F5, Type 1 Sub-Base, recycled clay and sand (0-2mm, 0-5mm, -10mm, -20mm, -40mm and +40mm).

**Soil Washing**

**2.7 Process Description**

*See Appendix B*

Materials processed under the WRAP Quality Protocol will no longer be considered waste and will therefore not be subject to the storage limitations associated with the permit. There will be a maximum storage capacity of pre-treated waste material of 20,000 tonnes.

**2.6 Waste Storage**

Records will be kept of all rejected loads and these will be made available to the Environment Agency.

- Transfer note reference
- Description of waste, including quantity
- Non-conforming waste
- Details of any samples taken
- Details of communications with the regulatory authorities and actions agreed and taken

## Production of Recycled 6F2/6F5

2.7.6 The waste materials deemed suitable for use in the manufacture of recycled 6F2/6F5 are listed below:

- Tarmac
- Limestone
- Blast furnace slag
- Bricks
- Concrete blocks

2.7.8 The following list of equipment is used in the manufacture of recycled 6F2/6F5:

- 360 Excavator / Grab
- Loading Shovel
- Crusher
- Screener

2.7.9 Following the pre-start checks, pre-breaking / nibbling of the material may be required if the material contains large fragments. Once the feedstock material is of a suitable size a 360 Tracked Excavator is used to place the feedstock into a crusher. The operator of the crusher is responsible for the removal of as much debris and steel as possible. The material then travels along a conveyor under an overhead magnet belt to recover any missed material. Once the material has passed through the crusher it is transferred to a stockpile. It is at this point the recycled material is sampled and tested in accordance with the Companies existing WRAP testing protocol (summary provided in Table 4 below).

## Production of Recycled Type 1/ Granular Sub-base

2.7.10 The waste materials that are suitable for the manufacture of recycled Type 1 sub-base generally arise from construction, civil engineering and demolition projects, highway maintenance schemes and blended materials from the Agg Max Wash Plant. The waste materials deemed suitable for use in the manufacture of recycled Type 1 sub-base are listed below:

- Mass concrete
- Reinforced concrete
- Tarmac
- Limestone
- Blast furnace slag
- Brick (10%)
- Concrete blocks
- Blended materials from the AggMax wash plant

The following list of equipment is used in the manufacture of recycled type 1 sub-base:

- 360 Excavator/Grab
- Loading Shovel

2.7.13 The following list of equipment is used in the manufacture of screened recycled aggregates

- Mass concrete
- Tarmac
- Limestone
- Brick
- Concrete blocks
- Muck away
- Mixed soils, flints and stones
- Clay

2.7.12 The waste materials that are suitable for the manufacture of various grades of recycled aggregates generally arise from construction and demolition projects and highway maintenance schemes. The waste materials deemed suitable for use in the manufacture of these materials are listed below:

**Production of Washed Recycled Clay, Sand, 0-2mm, 0-5mm, -10mm, -20mm, -40mm and +40mm**

2.7.11 Following the pre-start checks, pre-breaking / nibbling of the material may be required if the material is large in size. Once the feedstock is of a suitable size a 360 Tracked Excavator is used to place the feedstock into a crusher. The operator of the crusher is responsible for the removal of as much debris and steel as possible. The material then passes under an overhead magnet belt to recover any missed material. The material then passes through a Screener with a 55mm top screen deck. Any oversized material is removed and placed in designated treated aggregate bays. All treated material of 55mm and smaller will also be stockpiled on site. It is at this point the recycled material is sampled and tested in accordance with the testing protocol (summary provided in Table 4 below).

- Crusher
- Screener
- AggMax wash plant which comprises the following items
- S20 feed hopper with +80mm screen separation
- S2610 – 26m galvanised static conveyor
- Aggmax 161SR (Model D1-63) RX160 Logwasher with D1-63 Dewatering Screen and D1-63 Dewatering screen and D1-63, 2 x trash screens
- Evowash with CFCU102 split screen
- 2 x M1265 stocking conveyor
- 1 x Eddie current conveyor
- 2 x overband magnets
- 1 x product conveyors
- 2 x M1565 sand conveyors
- Eddie current separator
- A400 Aquacyle (400m<sup>3</sup> per hour capacity) high-rate thickener with Flocc station
- 300m<sup>3</sup> concrete water tank
- 400m<sup>3</sup> concrete buffer tank
- CF8000 centrifuge

- AggMax
- 360 Tracked excavator
- Loading shovel
- Materials Handler

2.7.14 Following the pre-start checks the material is pre-sorted to remove extra-large items that could damage the Screener. Once the large items have been removed the material is fed into a Finger Screener that rejects oversized materials. Any material which is smaller than 80mm passes under an overhead band magnet to remove ferrous material. The material then passes along a conveyor into a pre-washer which allows for the sand / clay and aggregates to be scrubbed.

2.7.15 Following scrubbing the material is then passed through the log washer where it is sprayed with wash water and light contaminants are washed out via the organic screens.

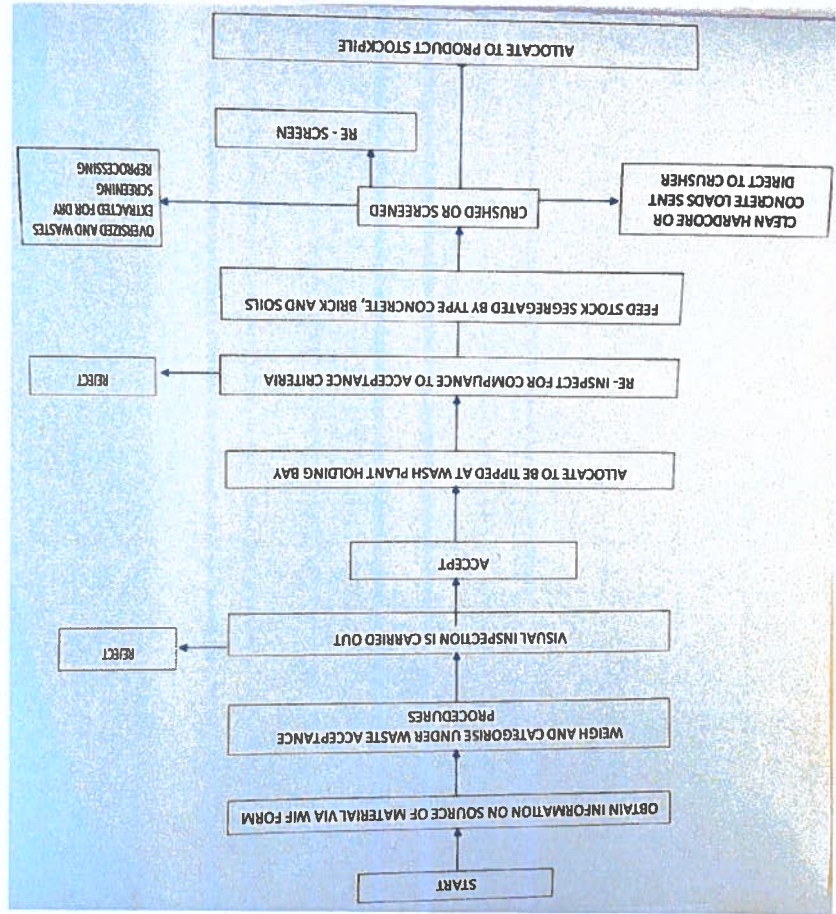
2.7.16 Once the material has passed along the log washer it is then separated into two fractions, materials which are 5mm and smaller and materials larger than 5mm. The first fraction is sent to the sand processing cyclone where it is then separated into sand and grit when any excess water is captured and sent back to the sludge tank. The sand is then sent to the sand plant. The second fraction (>6mm) is then passed through an Eddie current and ferrous metal recovery station, then separated into a further three fractions (-10mm, -20mm, -40mm and +40mm) by passing through a series of screen decks. Any remaining material which is smaller than 6mm is sent to the sand plant.

2.7.17 Sludge which is generated in the process is sent to a centrifuge where water can be separated, and it can be recirculated and used back in the process to reduce water consumption.

2.7.18 It is at this point the recycled material is sampled and tested in accordance with the testing protocol (summary provided in Table 3 below).

## Summary of Material Production and Quality Control Protocol

Figure 1 below details the production and quality control protocol:



## 2.8 Sampling and Testing

2.8.1 Ace Liftaway will have in place an appropriate sampling and analysis protocol and verification procedure with separate testing regimes depending on the intended recovery/disposal options. This will ensure that all materials are suitable for the recovery/disposal option chosen and are compliant with the necessary standards and regulatory requirements

2.8.2 Testing will be undertaken on a batch frequency and not on a calendar frequency as this will provide more accurate sample results. Ace Liftaway only use UKAS accredited testing laboratories for all external testing of recycled aggregate, on site sampling may be used as required. Table 3 below provides the sampling frequencies and sampling tests that will be adhered.

2.8.3 The below assumes a consistent input of mixed material from feed stocks; if the input of materials varies from the normal feedstock additional samples may need to be taken to ensure quality of the product

Table 3 Sampling frequencies and sampling tests

Material Produced	Sampling Frequencies	Sampling Tests
Recycled 6F2/6F5	<p>Production day is on average 1200 tonnes of processed material</p> <p>Production week is 5.5 production days (every 6600 tonnes)</p> <p>Production month is 4 production weeks (every 26400 tonnes)</p>	<p>Particle Size test and Particle Distribution test should be carried out every production week.</p> <p>Constituent test every production month</p> <p>Los Angeles test every 6 months if producing a product which requires this test.</p> <p>Frost Heave every 6 months if producing Type 1.</p> <p>Plasticity test every 6 months if producing a product which requires this test.</p>
Type 1/ Granular Sub-base	<p>A production day is on average 500 tonnes of processed material</p> <p>A production week is 5.5 production days (every 2 750 tonnes)</p> <p>A production month is 4 production weeks (every 11 000 tonnes)</p>	<p>Particle Size test and Particle Distribution test should be carried out every production week.</p> <p>Constituent test every production month</p> <p>Los Angeles test every 6 months if producing a product which requires this test</p> <p>Frost Heave every 6 months if producing Type 1</p> <p>Plasticity test every 6 months if producing a product which requires this test</p>
Washed Recycled Clay, Sand, 6-10mm, 10mm – 20mm, 20mm-55mm, 75mm	<p>A production day is on average 500 tonnes of processed material</p> <p>A production week is 5.5 production days (every 2 750 tonnes)</p> <p>A production month is 4 production weeks (every 11 000 tonnes)</p>	<p>Particle Size test and Particle Distribution test should be carried out every production week.</p> <p>Constituent test every production month</p> <p>Los Angeles test every 6 months if producing a product which requires this test</p> <p>Frost Heave every 6 months if producing Type 1</p> <p>Plasticity test every 6 months if producing a product which requires this test</p>

2.9 Storage of treated aggregate

2.9.1 Aggregates exiting the treatment process will fall into separate bays according to their particle size. The aim of the soil washing process is to create recycled aggregates which are suitable for use in construction projects. It is intended that the majority of the recycled aggregate will be compliant with the 'WRAP Quality Protocol for the Production of Aggregates from Inert Waste' and therefore classed

as a non-waste subject to agreement with the Environment Agency. If the materials are found to comply with the requirements of the factory acceptance standard, it will cease to be considered a 'waste' and will become a 'product'. There are designated bays for the storage of the aggregate products pending sale in order to prevent the contamination of these materials with waste materials.

2.9.2 If the testing of the recycled aggregates reveals that the materials are not compliant with the relevant standard, then the materials may be reprocessed or they will be transferred off site to an appropriately authorised facility for further treatment or disposal.

## 2.10 Site Surfacing

2.10.1 The Soil Washing Plant is situated on an impermeable concrete surface which has been engineered to ensure that any incidental surface water run off drains through a drain network to the site interceptor. The soil washing area has a 300mm upstand around the perimeter along with drainage channels to return any water back to the pumping station. 450mm wide x 250mm deep channels are also networked to run any water back to the pumping station.

## 2.11 Water Treatment and Testing

2.11.1 Processing water used in the sand and clay treatment is treated by a CDE AquaCycle Thickener. This equipment recycles up to 90% of the processing water by separating the suspended solids from the Hydrocycclone overflow with the assistance of a flocculant. The remaining 10% is either lost through evaporation or contained in the processed material. As such, the soil washing plant is topped up with water on a daily basis. Suspended solids sink to the bottom of the thickener tank whilst the clean water overflows to a peripheral weir for recirculation in the washing plant.

Settled sludges are discharged into a centrifuge that recovers more water for recirculation in the washing plant. To ensure that the water is deemed acceptable for recirculation, visual checks are undertaken by appropriately trained staff at the CDE AquaCycle Thickener, feed tanks and at the centrifuge. The purpose of these checks is to ensure that there are no visible signs of contamination within the water. In addition, any water that is recovered from the centrifuge is discharged into a clear vessel where visual checks are undertaken and the water is tested on a daily basis under the parameters detailed in Table 4 below.

Table 4: Acceptable Levels for Wash Water

Determinand	Acceptable Levels
pH	7.2 – 7.8
Cyanuric Acid	30 – 100 ppm

2.12.1 The resultant material is discharged to a site storage area where it will undergo appropriate testing to allow the material to be characterised in accordance with the WM3 guidance. This will determine the most appropriate disposal or recovery option for the material. The material is predominantly clay and can be reused.

**2.12 Testing of Material**

2.11.5 The wash water will initially be tested for the above parameters on a monthly basis. If the results indicate that the wash water does not present a significant contamination risk, Ace Liftaway would seek to reduce the testing to a quarterly basis upon agreement with the EA local area officer.

- Arsenic
- Cadmium
- Chromium (III) and Chromium (VI)
- Lead
- Mercury
- Copper
- Nickel
- Zinc
- TPH
- Chloride
- Sulphate
- Ammoniacal Nitrogen
- Electrical Conductivity
- pH

2.11.4 The wash water will also be tested for the following parameters:-

2.11.3 In the event that the daily checks identify any visible signs of contamination or the test results indicate that the water is not within the acceptable limits in Table 4, the water would be removed from the system and replaced accordingly. The water that is removed from the system is discharged into a tanker where it will undergo chemical analysis by an accredited laboratory in order to determine the most appropriate disposal or recovery option. Once the disposal or recovery option has been determined, the water will be tankered off site to an appropriate permitted facility.

Hardness	250 – 500 ppm
Alkalinity	80 – 120 ppm
Free Chlorine	0 – 6 ppm



**3.0 Regulated Facility Infrastructure**

**3.1 Security**

No changes required to existing EMS.

- 4.1 Emissions Control
- 4.1 Point Source Emissions to Air
- 4.1.1 There are no point source emissions to air as a result of this application.
- 4.2 Point Source Emissions to Groundwater
- 4.2.1 There are no point source emissions to groundwater as a result of this application.
- 4.3 Point Source Emissions to Surface Water and Sewers
- 4.3.1 There are no point source emissions to surface water or sewer as a result of this application.
- 4.4 Fugitive Emissions
- 4.4.1 Fugitive emissions have been identified as a potential environmental risk resulting from the proposal, as detailed in the Environmental Risk Assessment that accompanies this application.

Particulate Matter (Dust)

- 4.2 A Dust Management Plan is included within the EMS and sets out the management techniques which are employed to minimize the effects of dust emissions from the site. The Site Manager will undertake daily visual assessments of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. The following operational procedures may be implemented to reduce the risk of dust:-
  - Enforcement of a speed limit on site to prevent re-suspension and entrainment;
  - Use of water to dampen site roads and operational area as necessary;
  - Utilisation of a road sweeper to maintain site roads as necessary; and
  - Operations will be halted if necessary.
- 4.3 The Site Manager is responsible for monitoring wind strength and direction and implementing any necessary preventive measures. A wind sock is located at the weighbridge opposite the Control Office and daily logs of wind speed and direction are logged in the site diary.
- 4.4.4 It is not envisaged that the soil wash plant will increase dust concerns on the site.

Contaminated Surface Water Runoff

- 4.4.5 The potential fugitive emissions of contaminated surface water runoff resulting from the proposed activities must be considered. However, the proposed waste types are inert and therefore should not pose a risk to surface water.
- 4.4.6 Surface run-off runs through a drain network and on to the site interceptor.

- 4.4.10 All noise and vibration generating activities are confined to the operating hours stipulated in the planning permission, with the exception of emergency repairs.
- 4.4.11 All equipment and vehicles will have effective silencers where practicable and are maintained in accordance with the manufacturer's requirements. Further, all equipment and vehicles are switched off when not in regular use.
- 4.4.12 All noise generating activity is monitored closely and site operatives are vigilant and report any excessive noise or vibration issues to the Site Manager.

**Noise**

- 4.4.8 HGV movements are unlikely to result in the tracking of mud on to the access road and local highways due to impermeable surfaces throughout the site.
- 4.4.9 Any mud brought out of the site is monitored and in the event that mud is deposited, a road sweeper is utilised as necessary.

**Mud**

- 4.4.7 There are strict waste acceptance procedures in place at the site to prevent the acceptance of non-conforming waste types.

<p><b>5.0</b></p> <p><b>Accident Management</b></p>	<p>5.0.1 All necessary measures are taken to prevent the occurrence of accidents. The types of accidents and the potential environmental consequences associated with them have been identified within the site risk assessments.</p> <p>5.0.2 It is considered that the most significant risk associated with the site is the unauthorised acceptance of non-compliant waste types. The waste acceptance procedures listed in Section 2 of this document aim to control and minimise this risk.</p>	<p><b>5.1</b></p> <p><b>Fire Control</b></p>	<p>5.1.1 Fires from the acceptance of inert waste are considered unlikely due to the nature of the waste material and provision has been made within the site Fire Prevention Plan. The wash plant is an inert process. However, the operation and/or maintenance of mobile plant do pose a potential fire hazard, if precautions are not taken.</p> <p>5.1.2 Firefighting equipment of a suitable type shall be kept at appropriate locations as advised by the Health and Safety Manager or the local Fire Service. Where appropriate, mobile plant is fitted with firefighting equipment. All firefighting equipment shall be kept in good condition, be unobstructed and be serviced at least once a year by a competent person. Smoking is restricted to site specific locations away from operations.</p> <p>5.1.3 Any fire on the site will be treated as an emergency and will be extinguished at the earliest opportunity. If necessary, the Fire Service will be summoned. Any incidents of fire will be reported to the Environment Agency and recorded in the Site Diary.</p>	<p><b>5.2</b></p> <p><b>Spillage Procedure</b></p>	<p>5.2.1 Material accepted at the site for the purposes of the soil washing activity will be inert. The most likely source for spillages will be from fuel tanks or spillages of fuel or oil associated with plant and machinery.</p> <p>5.2.2 In the event of a spillage of fuel/oil from site machinery or vehicles, the following procedures will be implemented:-</p> <ul style="list-style-type: none"> <li>• Clear the area straight away;</li> <li>• Lay absorbent granules over the spill to soak up the spillage;</li> <li>• Use Personal Protective Equipment (PPE) provided on site if required;</li> <li>• Once the liquid has all been absorbed, use a shovel to clear up the waste, put it in a plastic sack and then place it in the container for non-compliant waste for disposal at a suitably permitted facility; and</li> <li>• Record the spill incident and remedial action taken in the Site Diary.</li> </ul>	<p>5.2.3 Spillage kits are maintained on site in order to respond to any spillage incident. The spillage kits are kept securely in the Control Office.</p> <p>5.2.4 Site specific risk assessments are in place.</p>
---	--	--	---	--	---	--

- 5.3 Maintenance Procedures
  - 5.3.1 A Planned Preventative Maintenance programme (PPM) is in place to minimise the risk to safety, health and the environment by ensuring that all appropriate items and elements within the site are serviced and inspected on a regular basis or to the manufacturers' maintenance schedules.
  - 5.3.2 Details of faults, breakdowns and repairs are documented and records are maintained in the Commercial Workshop. Faults and breakdowns are investigated and the service schedule revised if necessary.

6.0	Site Management	
6.1	Technical Competence	
6.1.1	The Site Manager possesses the required level of technical competence as outlined in the EMS.	
6.2	Management System	
6.2.1	The operator, Ace Liffaway, has their own Environmental Management System (EMS) It also provides a methodical approach to planning, reviewing and amending any procedures in place.	
6.2.2	All site operatives are adequately trained in health, safety and environmental issues. Staff will only be permitted to undertake activities that they have been trained for. They are made aware of the procedures they must follow in the event of an accident or incident and are able to access any relevant documentation that they may require. All training, experience and qualifications of staff are noted and these records are maintained and kept up to date.	

**7.0 Management of Documentation**

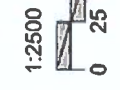
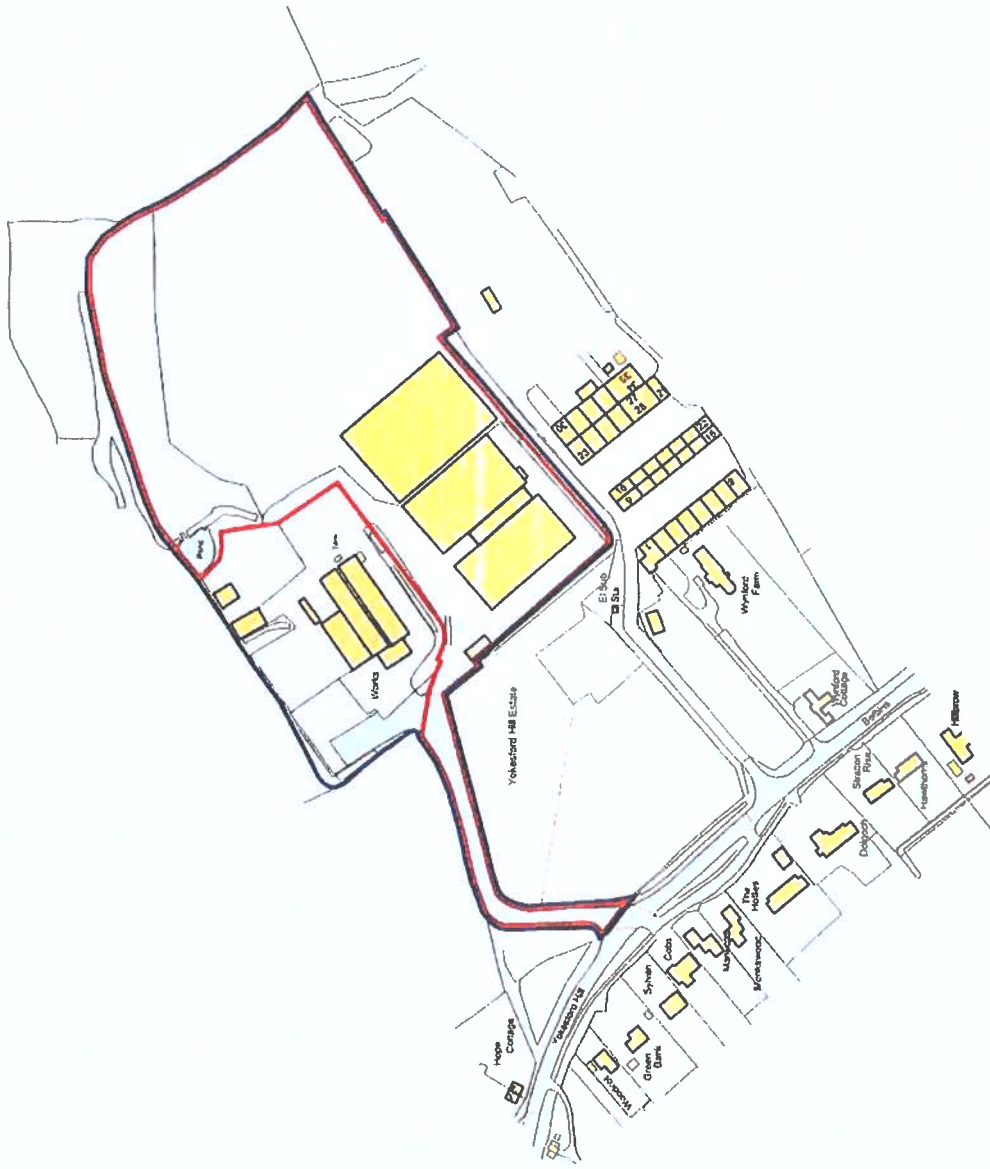
**7.1 Record Keeping**

- 7.1.1 A record of all waste delivered to the site and recycled/residual waste leaving the site is maintained, along with transfer notes and weighbridge tickets for a minimum of 6 years. The computer programmes Isys/Weighsoft.
- 7.1.2 A Site Diary is kept in the Control Office and updated daily. This diary is used to record all incidents on site involving accidents, spillages, vandalism, complaints etc. This will provide an ongoing record and allow for investigative and corrective action to take place in line with the requirements of the Management System.
- 7.1.3 A Visitors Book is kept in the Control Office and records the details of all visitors - including arrival and departure times.
- 7.1.4 A Production Diary is kept in the Recycling Control Office and details maintenance, modification, repair, replacement, delivery and return, and breakdown of any plant and machinery in line with the principals of planned preventative maintenance; weather conditions; non-conforming wastes and actions taken; and damage to vehicles, fences, gates, etc and incidents of trespass.
- 7.1.5 A copy of the site's Environmental Permit is stored in the Group Operations Managers' office allowing suitable access for all persons working on or visiting the site.

## 8.0 Incidents and Non-Conformances

- 8.1.1 Ace Liffaway has procedures for investigating and recording any incidents and non-conformances at the site, and for taking any corrective action.
- 8.1.2 The following types of incidents will require investigation: -
- Malfunction, breakdown or failure of plant and equipment;
  - Deviation from site procedures and operating techniques;
  - Near misses; PPE breaches, Dangerous Occurrences.
  - Complaints from external parties.
- 8.1.3 All staff are trained to detect and report any such occurrences. Procedures are taken to allow operations to resume and preventative measures may be put in place to ensure that the incident does not reoccur.

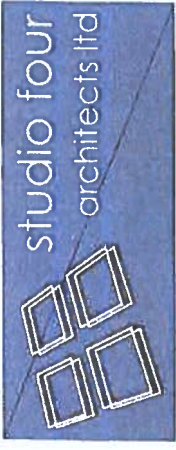




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## SITE LOCATION PLAN 1:2500

# PLANNING



Yokesford Estate, Srambridge Eoib, Romsey SO51 0HE  
 T: 01794 511255  
 romsey@studiofourarchitects.co.uk  
 www.studiofourarchitects.com

client **Ace Liftaway Ltd**

project **Wash-Down Facility to  
 Yokesford Hill Estate, Romsey**

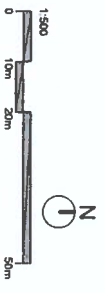
title **Proposed Site Location Plan**

date	scale	paper	drawn	checked
05.06.21	1:2500	A3	ML	GJ
job no.	dwg. no.	rev. no.		
38135	010	P1		

# DRAWING 002



PROPOSED BLOCK PLAN 1:500



1	1:1000	1:1000	1:1000
2	1:1000	1:1000	1:1000
3	1:1000	1:1000	1:1000
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27	1:1000	1:1000	1:1000
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32	1:1000	1:1000	1:1000
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42	1:1000	1:1000	1:1000
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48	1:1000	1:1000	1:1000
49	1:1000	1:1000	1:1000
50	1:1000	1:1000	1:1000



101 The Square, Marlow, Bucks, England MK11 1DE  
 01494 411111  
 www.studio101architects.com

client: Ave Linnery Ltd  
 project: Wash-Down Facility to  
 Yokesford Hill Estate, Romsey  
 the Proposed Block Plan & Proposed Section

date: 05.06.21 as shown A1 M.L. G.U.  
 scale: 1:500  
 sheet: 010 P5

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00020067



Date of issue: 21 June 2013

Director: *[Signature]*

Chief Executive Officer: *[Signature]*

Authorising Signatures:

Managing Transfer Hazardous Waste (4TSH)

Level 4 in Waste Management Operations -

Facility Type

Has demonstrated the standard of technical competence required for the management of a facility of the type set out below

Russell Delves

This Certificate confirms that

# CERTIFICATE OF TECHNICAL COMPETENCE

Certificate No: 13026



00021658



Date of issue: \_\_\_\_\_

14 June 2018

Director: \_\_\_\_\_

Chief Executive Officer \_\_\_\_\_

Authorising Signatures:

Managing Transfer Hazardous Waste (4TSH)

Level 4 in Waste Management Operations -

Facility Type

*Has demonstrated the standard of technical competence required for the management of a facility of the type set out below*

\_\_\_\_\_

Helen Liddell

*This Certificate confirms that*

# CERTIFICATE OF TECHNICAL COMPETENCE

Certificate No: 14499



00136066



Date of issue: 18/02/2020

Director:

Chief Executive Officer:

Authorising Signatures: *[Signature]*

Managing Transfer Hazardous Waste (4TSH)

Level 4 in Waste Management Operations -

*Facility Type*

*Has demonstrated the standard of technical competence required for the management of a facility of the type set out below*

Thomas Brown

*This Certificate confirms that*

# CERTIFICATE OF TECHNICAL COMPETENCE

Certificate No: 5160450





ACE LIFTAWAY LTD  
THE WASTE CENTRE  
YOKESFORD HILL ESTATE  
BELBINS  
ROMSEY  
HAMPSHIRE  
SO51 0PF

Quality Protocol for the Production of Aggregate Products from  
Inert Waste  
WRAP – Dry Screened Products



17-85424-MS/SJW-Rev 5 – 10/08/2022

August 2021



!!

# REPORT CONTENTS

SECTION	Page
1.0 INTRODUCTION.....	1
2.0 ACCEPTANCE CRITERIA FOR INCOMING MATERIALS.....	3
3.0 MATERIAL PROCESSING AND PRODUCT TESTING SCHEDULES.....	8
4.0 PRODUCT SALES.....	16
5.0 RECORDS.....	17
6.0 QUALITY STATEMENT.....	18





A	SITE PLAN – 17-85424/01
B	HAMPSHIRE COUNTY COUNCIL – 6 NUMBER GRANT(S) OF PLANNING
C	ENVIRONMENT AGENCY LICENCE AND PERMIT
D	PHOTOGRAPHIC RECORD PLATE(S) – 1-20

## APPENDICES





## 1.0 INTRODUCTION

- 1.1 This document details the acceptance procedure of inert waste materials coming into ACE Liffaway Ltd 'The Waste Centre', Romsey, and protocols in place for turning inert waste into saleable products in accordance with the Quality Protocol (Aggregates from Inert Waste) as produced by WRAP (Waste and Resources Action Programme).
- 1.2 The term Site within this document refers to the land at:  
The Waste Centre,  
Yokesford Hill Industrial Estate  
Belbins  
Romsey  
Hampshire  
SO451 0PF
- 1.3 As shown on plan(s) included as Appendix A.  
The ACE Liffaway Ltd Inert Waste Facility forms part of a larger operation at the Site, which also includes the receipt and recycling of wood, cardboard, paper, plastic and general skip waste. These items are accepted into a large processing area (Building 3) for separation / processing / recycling and these items are touched on briefly in this report. The scope of this report however, is limited to the processing of inert wastes (which are received into Building 1) and processed to produce saleable products.
- 1.4 Inert materials at the Site are recycled into saleable products in accordance with the Environment Agency Licence No. EAWML 100121 dated 04/12/07 with a Variation to the permit Reference EPR/WP3895EA dated 04/03/2015. This Permit covers a large range of recycling operations at the Site of which the inert waste recycling forms part. A copy of both the Licence and Permit are enclosed in Appendix C.
- 1.5 **Land Ownership / Planning Permission**  
1.5.1 The land on which the facility operates is owned by ACE Liffaway Ltd.  
1.5.2 Six Planning Applications in relation to the Site dated in 2001, 2006, 2007, 2010, 2012 and 2015 are enclosed in Appendix B.



**1.6 Contact Details**

**Client**

ACE Liffaway Ltd  
The Waste Centre  
Yokesford Hill Estate  
Belbins  
Romsey  
Hampshire  
SO51 0PF  
Ph: - 01794 367 939  
Fax:- 01794 367 938  
Info@Aceliffaway.co.uk

**Materials Testing, Site Sampling & WRAP Consultants**

ACS Testing Ltd (UKAS 0999)  
Unit 14  
Blackhill Road West  
Holton Heath Trading Park  
Poole  
Dorset  
BH16 6LE  
Ph: - 01202 622 858  
Fax:- 01202 625 045  
Testing@acstesting.co.uk

ACS Environmental Testing Ltd (UKAS 4150)  
Unit 14B  
Blackhill Road West  
Holton Heath Trading Park  
Poole  
Dorset  
BH16 6LE  
Ph: - 01202 628 680  
Fax:- 01202 628 630  
Testing@acstesting.co.uk



## 2.0 ACCEPTANCE CRITERIA FOR INCOMING MATERIALS

- 2.1 Waste acceptance criteria for the waste arriving at the site follows the strict licensing guidelines documented in the EA Permit which is included in Appendix C and as per following documented procedure.
- 2.2 **Site Waste Acceptance Procedure**
- 2.2.1 All inert waste accepted at Yokeford Hill is assessed for waste type. This is done by the control desk who asks the customers what type of waste they will be placing at the point of order, by the weighbridge, when the customer arrives on the site.
- The Waste Carrier is expected to supply the following details:
1. Waste Carriers license details
  2. Details of waste description (European Waste Catalogue Code)
  3. Address of waste origin
  4. Details of who has generated waste (Hazardous only)
  5. Transportation Data
- 2.2.2 All Skips and Containers that are transported by ACE Liffway Ltd are inspected prior to collection to assure that the waste type and description conforms with the EWC code supplied. Any non-conforming loads will be left on site whilst the waste producer is notified of correct procedures along with any additional charges.
- New carriers will be informed of the site rules (displayed at the rear of the tipping station tickers) and will be asked to sign that they have read and understood the information.
- All waste carriers are to be expected to wear the PPE as outlined in the site rules at all times.
- All loads received on the weighbridge must be sheeted, any loads that are not sheeted are reported in the day diary. Should the carrier reoffend more than three times they will be banned from the site for a 1 month period.
- The carrier informs the weighbridge what the waste type is where after the carrier will be directed to the following area:
1. Hazardous Waste (Unit 2 Orange Zone)
  2. Inert Waste (Building 1)
  3. Hot Loads (Mixing Bay Building 3)
- All tipped loads will again be inspected to ensure that the correct waste type has been received.
- 2.2.3 If the material is visually acceptable and the paperwork complete and in order, the material is accepted.
- 2.2.4 If the material is visually unacceptable or the paperwork not complete or not in order, the material is not accepted.



2.2.4.1 Non-conforming loads will be logged in the daily diary and the tipping reference sheet and the waste carrier or waste producer will be informed immediately. Where the waste producer is not on site, photographs will be taken as evidence.

According to the severity of the non-conforming load, the following steps will take place:-

1. **Minor (Non Hazardous Materials)**  
Items such as tyres, fridges and electrical items will be segregated by hand and a report made to the waste producer of the non-conforming item along with any additional charges. The items will be photographed and stored in a designated area until such times as it is economically and environmentally viable to transport them to a licensed facility for recycling or disposal

2. **Major (Hazardous or Suspect Materials)**  
The operations manager or site supervisor will be informed of the incident and photos taken. In extreme circumstances where materials could cause harm to health or the environment the area will be evacuated until such times as suitably qualified persons can safely remove the offending items and the authorities will be informed.

- 3 **Non-immediate threats** (Hazardous materials that do not cause an immediate threat) will still require the operations manager/ site supervisor to be informed of the incident and photographs taken. And assessment will be made on the type of material, the risk of cross contamination and the ease of segregation along with where the offending material originated from. The waste producer will be contacted and informed of the possible breach along with the course of action and any additional costs.

The tipping bay will be shut to any other wastes until such time and the load has been reloaded for return to its origin or the hazardous waste has been segregated and quarantined. The EA is to be informed of the above.

## 2.2.5 Hazardous or Suspect Materials – FRONT END SUPERVISOR & PRE-SORT OPERATOR

In order to prevent cross contamination of hazardous waste with material destined for the product the continued waste inspection procedure is as follows:

- The front end supervisor and the machine operator operating the pre-sort machine will inspect the waste materials.
- The machine operator loading the material into the recycling plant will inspect the material; thereafter competent members of staff are placed in the oversize viewing area and at the front end of the picking station.
- All materials are scanned on the picking line by ten other members of staff prior to the materials being transported to final process.
- Any small amounts of hazardous material will be segregated from the material stream and placed in suitable containers and thereafter placed in the quarantined area.





- In the unlikely circumstance that large amounts of hazardous materials are found in the waste stream, the recycling manager / site supervisor will be informed of the incident and photographs taken. In extreme circumstances where materials could cause harm to health or the environment the area will be evacuated until such times as suitably qualified persons can safely remove the offending items and the authorities will be informed.
- Hazardous materials that do not cause an immediate threat will still require the operations manager/ site supervisor to be informed of the incident and photographs taken. An assessment will be made on the type of material, the risk of cross contamination and the ease of segregation along with where the offending material originated from.

2.2.6 Quarantined material undergoes chemical analysis to fully assess Waste Classification Criteria before being sent to an appropriate licensed disposal facility.

2.2.7 The wastes tipped on any of the "to be processed" stock piles are again visually inspected for contamination by the Excavator/Shovel Drivers. Contaminated materials are moved to the quarantine area for testing / removal as necessary.

2.2.8 If the material is accepted, but when tipped is found to be unsuitable, then arrangements are made for the material to be returned to the originator, or placed in Quarantine Building 2, to prevent rainwater ingress / contaminant leaching. The Customer is then contacted and asked to either collect the waste or to provide instructions to allow correct disposal of the material.

2.2.9 After tipping, the vehicles again cross the weighbridge so that the weight of material accepted can be calculated. This weight is added to the details of a ticket (receipt) given to the driver which also includes the following information:

- ✓ Vehicle Registration
- ✓ Haulier
- ✓ Driver
- ✓ Customer
- ✓ Product (origin of load)
- ✓ Site Name
- ✓ Date
- ✓ Time
- ✓ Weight
- ✓ Order No.
- ✓ EWC Code

2.2.10 The operator signs the ticket, as does the customer and this is used for invoicing purposes.

2.2.11 Received materials are first processed at the 'dry screened' production area in Building 1. The Oversize +30mm hardcore material and -30mm screenings are taken separately to Area 4 for further processing e.g. crushing or dry screening.





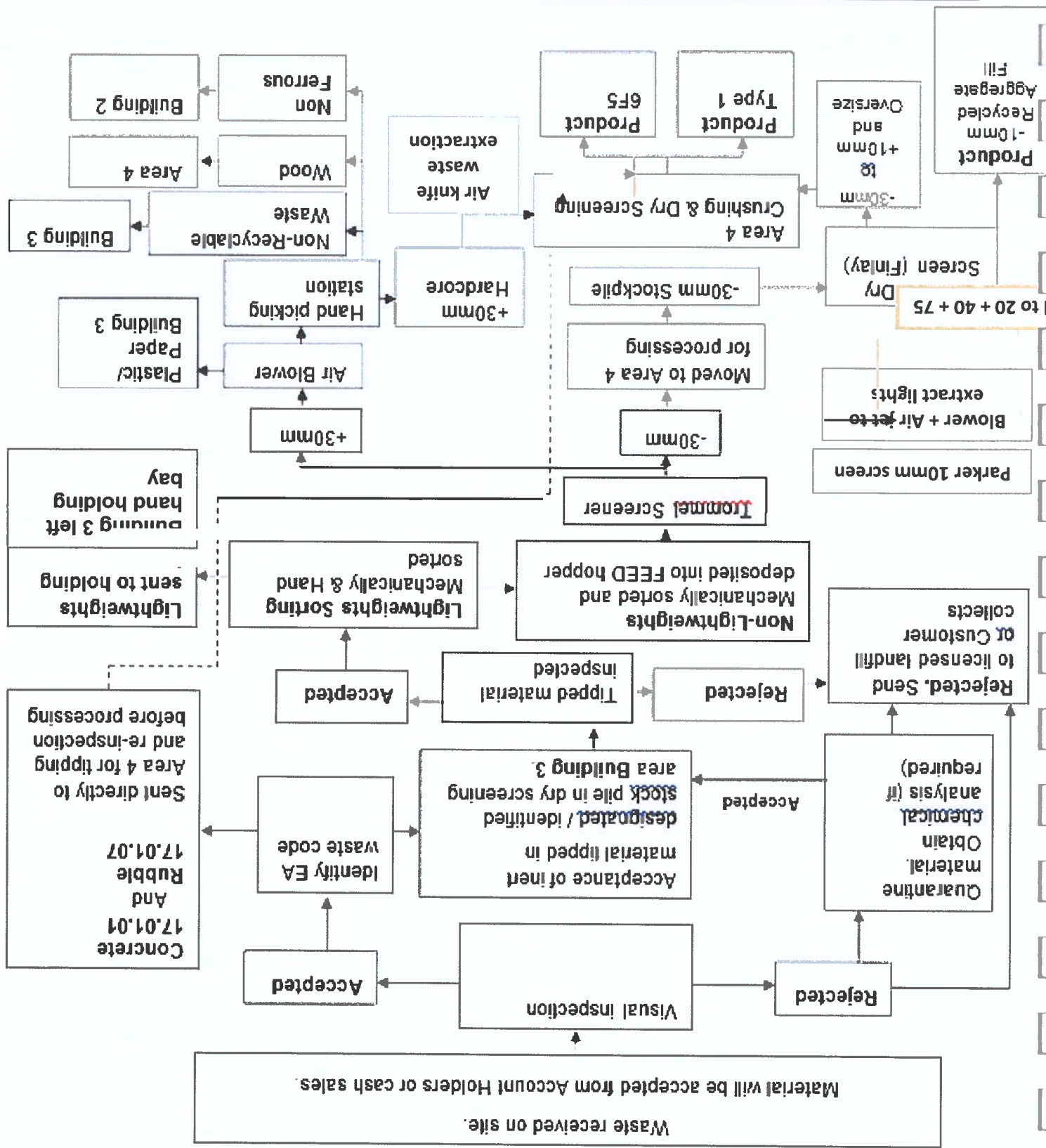
2.3

**Recycling Department Front End Pre-Sort Procedure**

1. Traffic Controller to meet each driver while waiting to tip
2. Check and record ticket number and waste type on tipping bay reference sheet
3. Allocate and direct driver to the correct tipping bay and log on tipping bay reference sheet
4. After load is tipped inspect the load for hazardous waste and correct waste type
5. Any issues take a photo and log on the tipping bay reference sheet
6. Radio through findings to the weighbridge stating the ticket number for reference
7. Place hazardous waste into either temporary storage or the quarantine area in Unit 2 putting the ticket number with the item
8. Weighbridge to contact the customer and log into the database and respond to the front end whether the item will be charged or collected (Customer has 7 working days to respond or they will be charged)
9. Ensure that the waste type on the ticket matches the waste in the container
10. For specialized waste (Asbestos, Difficult Waste, and Non-Conforming Waste) take a photo and record the ticket number then report to the line manager
11. Loads tipped in any other areas must be overseen and checked
12. Tipping bay reference sheets to be handed to the line manager at the end of each day



2.4 Waste acceptance criteria and processing flow chart – INERT WASTES





### 3.0 MATERIAL PROCESSING AND PRODUCT TESTING SCHEDULES

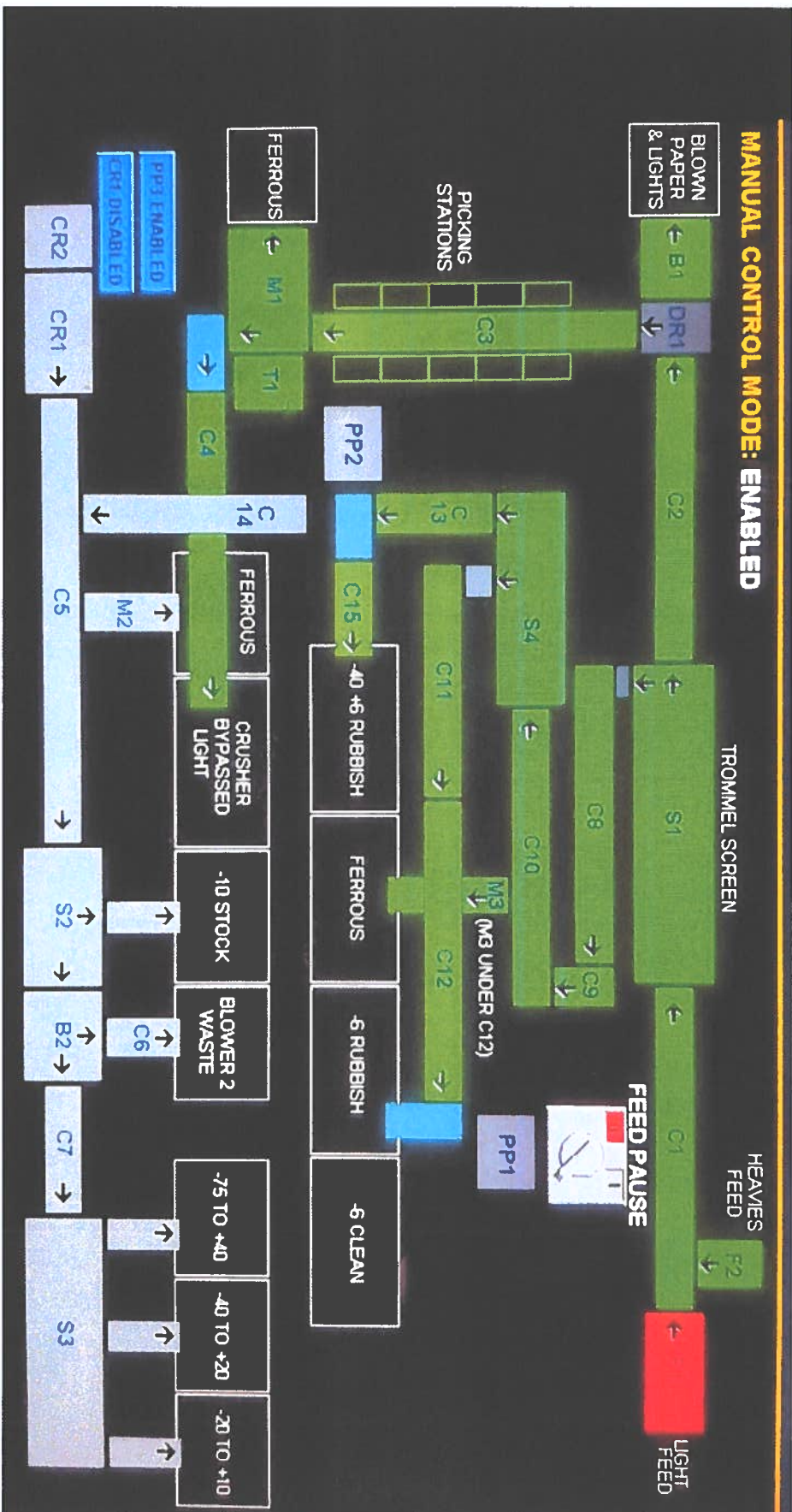
- 3.1 **Stage 1 (+30mm Hardcore from Building 1)**  
Jaw crusher produces crushed recycled aggregates for 6F5 and/or Type 1\*  
\*Separate clean feed source product is used to produce the Type 1.
- 3.2 **Stage 2**  
Oversize (Recrushed)\*  
\*All work done in Area 4
- 3.3 **Stage 3 (-30 Screened Fines from Building 3)**  
Finlay Dry  
Screen Plant  
-30mm / +10mm Recycled Aggregate (Back to Stage 2)  
-10mm Recycled Aggregate Fill
- 3.4 If or when requested by the purchaser, the producer (ACE Liffaway Ltd) shall provide the following documentation:  
a) Current physical and chemical test certificates; product specific  
b) Contamination test results (if required)  
c) Mathematical blending results(if required)  
d) Test method procedures(if required)





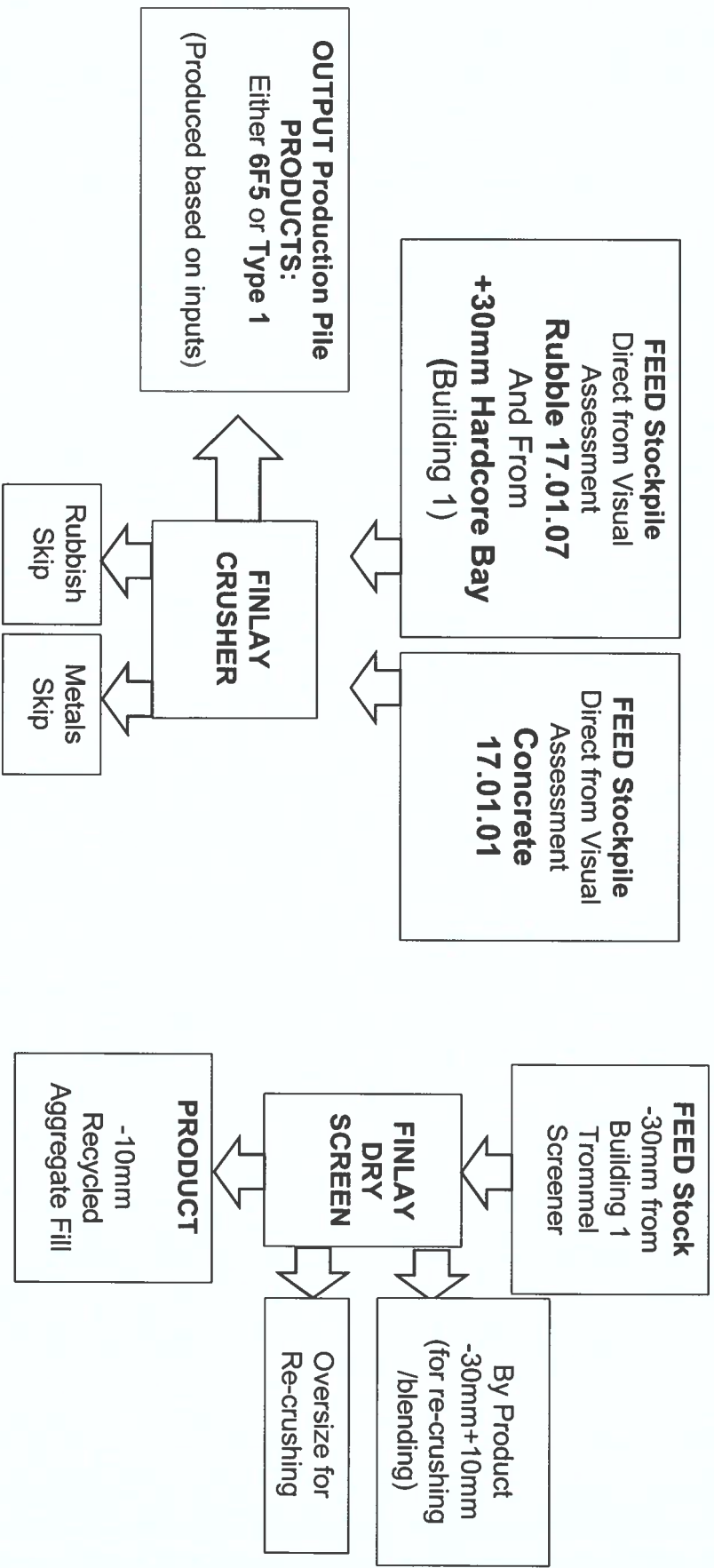
### 3.5 Schematic Layouts

#### 3.5.1



3.5.2 – Schematic Site Layout – Building 3

3.5.2 - Schematic Site Layout – Area 4



**OUTPUT Production Pile**  
**PRODUCTS:**  
Either 6F5 or Type 1  
(Produced based on inputs)



**3.6 Product Lists**

**3.6.0 Saleable Products**

Location	Plant	Product	Alternative Name	Specification
Area 4	FINLAY DRY SCREEN PLANT	-10mm	-10mm Recycled Aggregate Fill	SHW: Series 600
Area 4	FINLAY CRUSHER	6F5	0/61.5mm Crushed Recycled Aggregate	SHW: Series 600
Area 4	FINLAY CRUSHER	Type 1	0/31.5mm Crushed Recycled Aggregate	SHW: Series 800
Building 3	LJH BIVITEC SCREEN	-6mm	-6mm Recycled Aggregate Fill	SHW: Series 600
Building 3	LJH PARKER SCREEN	-20MM	Recycled Aggregate	SHW: Series 600
Building 3	LJH PARKER SCREEN	-40MM	Recycled Aggregate	SHW: Series 800
<b>3.6.1 By Product</b>				
Area 4	FINLAY	-30mm/+10mm	Crushing and Blending Material	N/A



- 3.7.4 The results certificates for each individual product are kept at ACE Liffaway's Head Office Production Department.
  - 3.7.3 Chemical and contamination tests will be carried out by ACS Environmental Testing Limited under UKAS Accreditation No 4150.
  - 3.7.2 All on site sampling and physical laboratory analysis of the products will be carried out by ACS Testing Limited under UKAS Accreditation No. 0999.
  - 3.7.1 The Quality Control, testing schedules and frequencies relating to individual products are outlined in Tables below. In addition testing will be required for blended products, subject to the Client's requirements and production rates.
- 3.7 Quality**

ACE Liffaway Ltd  
The Waste Centre  
Romsey



WRAP Protocol  
August 2017  
17-85424-MS/SJW-Rev 0

Test Name	Test Method	BS EN 13285/ 13242/ Series 800: Specification / Clause	Min. Test Frequency	Certificate Required (Yes / Not Req'd)
Various (See below tables)	Various (See below tables)	Various (See below tables)	Various (See below tables)	Yes
Particle Size Distribution (Wet Sieve)	BS EN 933-1	SHW: Series 800: CI 801. Table 8/1	1 per production month	Yes
Particle Size Distribution (Wet Sieve)	BS EN 933-1	SHW: Series 800: CI 801. Table 8/1	1 per production month	Yes
Dry Density/ Water Content Relationship (Vibrating Hammer)	BS EN 13285-4	BS EN 13285, CI 5.3 (Declared)	1 per year	Yes
Water soluble sulphate content	BS EN 1744-1	BS EN 13285, CI 5.4 & SHW: Series 800: CI 801.2	1 per year	Yes
Determination of Frost Heave	BS 812: Part 124: 2009 (Annex B) & SHW: Clause 801.8: 2009	SHW: Series 800: CI 801.7	1 per year	Yes
Horizontal Permeability	1 SHW: Series 600: Class 640	None	As Required	No
Contamination Suite	BS EN 12457 – 2002 & ENV2	LQM/ CIEH S4UL for Human Health Risk Assessment	1 per year	Yes
Resistance to Fragmentation Los Angeles	BS EN 1097-2	SHW: Series 800: CI 801. Table 8/2	2 per year	Yes
Resistance to Wear (Micro Deval)	BS EN 1097-1	SHW: Series 800: CI 801. Table 8/2 (Declared)	2 per year	Yes
Particle Density & Water Absorption	BS EN 1097-6	SHW: Series 800: CI 801. Table 8/2 (Declared)	1 per year	Yes
Freeze Thaw Resistance (Magnesium Sulphate Soundness)	BS EN 1367-2	SHW: Series 800: CI 801. Table 8/2	1 per year	Yes
Classification Test for the Constituents of Coarse Recycled Aggregate	BS EN 933-11	SHW: Series 800: CI 801. Table 8/3	1 per month	Yes
Water Content	BS EN 1097-5	N/A	1 per year	Yes
Plastic Limit	BS 1377: Part 2	SHW: Series 800: CI 803.4	1 per year	Yes
Total Sulphur	BS EN 1744-1	SHW: Series 800: CI 801.2	1 per year	Yes
Sulphide	BS EN 1744-1	SHW: Series 800: CI 801.2	1 per year	Yes
pH Value	BS 1377: Part 2	SHW: Series 800: CI 801.2 (Declared)	1 per year	Yes

Test Name	Test Method	BS EN 13285/ 13242/ Series 800 : Specification / Clause	Min. Test Frequency	Certificate Required (Yes / Not Req'd)
Various (See below tables)	Various (See below tables)	Various (See below tables)	Various (See below tables)	Yes
Particle Size Distribution (Wet Sieve)	BS EN 933-1	SHW: Series 600: Table 6/5	1 per production month	Yes
Particle Size Distribution (Wet Sieve)	BS EN 933-1	SHW: Series 600: Table 6/5	1 per production month	Yes
Dry Density/ Water Content Relationship (Vibrating Hammer)	BS EN 13285-4	BS EN 13285, Cl 5.3 Declared)	1 per year	Yes
Water soluble sulphate content	BS EN 1744-1	BS EN 13285, Cl 5.4 (Declared)	1 per year	Yes
Determination of Frost Heave	BS 812: Part 124: 2009 (Annex B) & SHW: Clause 801.8: 2009	None	As Required	No
Horizontal Permeability	1 SHW: Series 600: Class 640	None	As Required	No
Contamination Suite	BS EN 12457 – 2002 & ENV2	LQM/ CIEH S4UL for Human Health Risk Assessment	1 year	Yes
Resistance to Fragmentation Los Angeles	BS EN 1097-2	SHW: Series 600: Table 6/1	2 per year	Yes
Classification Test for the Constituents of Coarse Recycled Aggregate	BS EN 933-11	SHW: Series 600: Table 6/1	1 per month	Yes
Water Content	BS EN 1097-5	SHW: Series 600: Table 6/1	1 per year	Yes
Bitumen Content	BS EN 12697-1 & BS EN 12697-2	SHW: Series 600: Table 6/1	<i>*When class Ra (Asphalt) exceeds 20%</i>	Yes

Name	Test Method	In-House Specification/Clause	Min. Test Frequency	Certificate Required (Yes / Not Req'd)
: Distribution (: Sieve)	BS 1377: Part 2	SHW: Series 600	1 per month	Yes
e Content	BS 1377: Part 2	SHW: Series 600	1 per month	Yes
and Liquidity/Plasticity Index	BS 1377: Part 2	SHW: Series 600	1 per month	Yes
Condition Value	BS 1377: Part 4	SHW: Series 600	1 per month	Yes
. Strength in Triaxial at measurement of pore diffinitive Method	BS 1377: Part 7	SHW: Series 600	1 per month	Yes
ation Suite	BS EN 12457 – 2002 & ENV2	LQM/ CIEH S4UL for Human Health Risk Assessment	1 per year	Yes



## 4.0 PRODUCT SALES

4.1 The stockpiles are to be regularly tested by ACS Testing to ensure compliance with the appropriate specifications.

### 4.2 Products collected from site

4.2.1 Products sold on site are loaded into the customer's vehicle by site staff. A ticket is provided which notes the following information:

- Date
- Product Type
- Quantity
- Purchaser
- Vehicle Registration Number

### 4.3 Products delivered by ACE Liffaway Ltd

4.3.1 Products delivered to sites are loaded by site staff. A ticket is provided to the delivery address which notes the following information:

- Date
- Product Type
- Quantity
- Purchaser
- Vehicle Registration Number
- Delivery address
- Signature of acceptance from customer





## 5.0 RECORDS

- 5.1 Records of all material movements will be kept in line with the site licence.
- 5.2 Quarterly returns are sent to the EA.
- 5.3 Material inspections results will be kept on site and filed accordingly. All test results will be kept at ACE Liffaway's Head Office Production Department.
- 5.4 The appropriate changes to the records requirements will be made when the EA permitting status has been determined and this WRAP Protocol will be amended if/where appropriate.



## 6.0 QUALITY STATEMENT

- 6.1 We confirm that in preparing this report we have exercised reasonable skill and care in order to produce accurate details.
- 6.2 We confirm that work has been conducted in accordance with relevant Standards, as requested by the Client, with reference to the Organisation's Quality Manual Procedures.
- 6.3 ACS Testing warrants only the accuracy of the information contracted to be supplied to the Client but will accept no liability in respect of the use to which the Client puts such information or the purpose for which such information was requested.
- 6.4 Unless specifically assigned and confirmed in writing within the terms of the Agreement/Written Order the Organisation asserts and retains all Copyright and other Intellectual Property rights, in and over the report and its contents

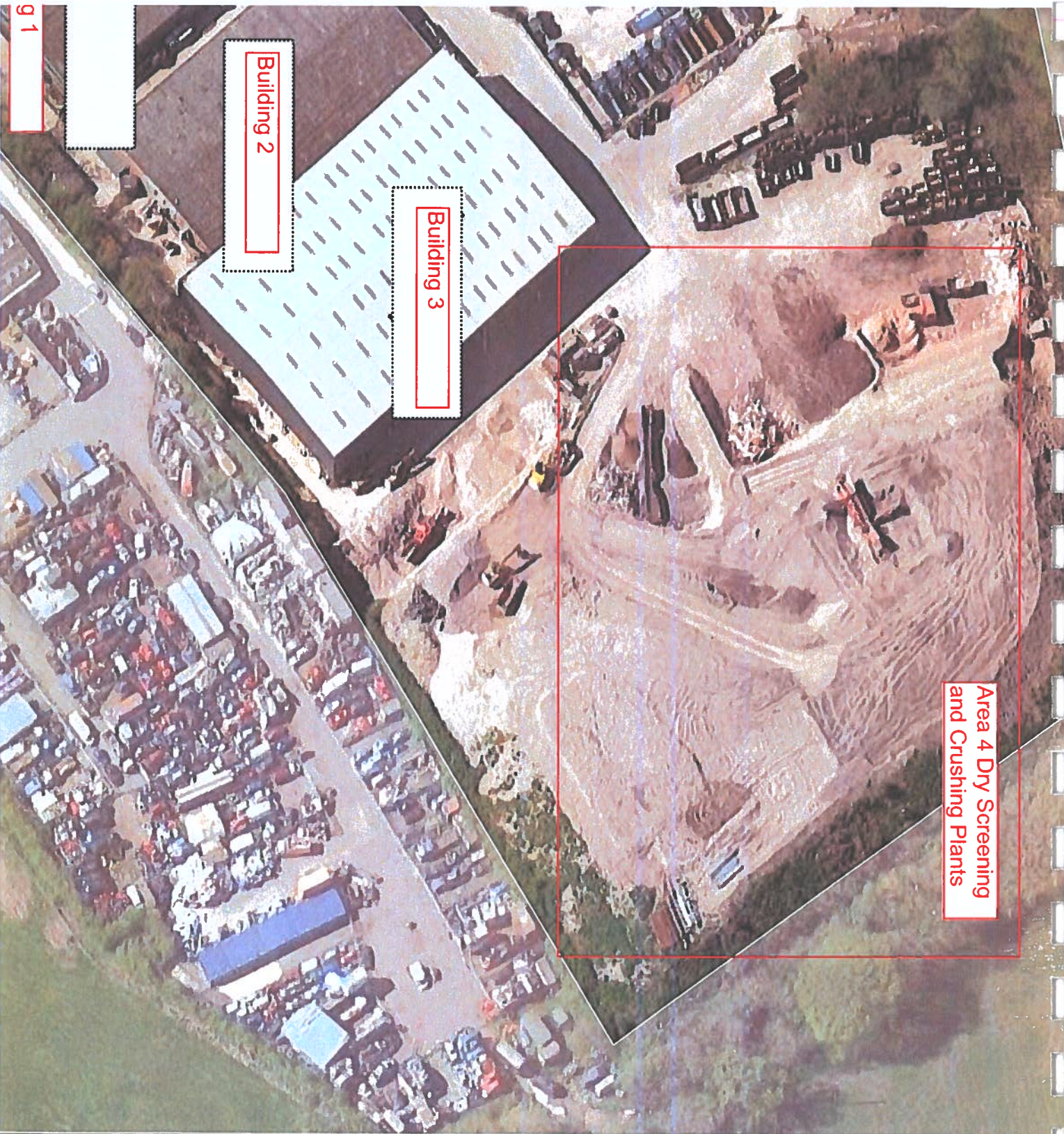




SITE PLAN - 17-85424/01

**APPENDIX A**





Area 4 Dry Screening and Crushing Plants

Building 2

Building 3

Key:



DO NOT SCALE

Drawing: SITE PLAN

Client: ACE LIFTAWAY LIMITED

Project: THE WASTE CENTRE Project No: 17-85424

Client: YOKESFORD HILL ESTATE Drawing No: 17-85424/01

Client: BELBINS ROMSEY HAMPSHIRE S051 0PF Revision: 07/08/17

Drawn By: Date: