

# Caulmert Limited

Engineering, Environmental & Planning  
Consultancy Services



## Proposed Corbriggs Wood Processing Facility

Silva Recycling Limited

Bespoke Environmental Permit Application

Operating Techniques & BAT Review Report

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**APPROVAL RECORD**

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## Operating Techniques & BAT Review Report

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### DRAWINGS

<b>14866</b>	Concept Drainage Plan
<b>12008_004 Phase 1</b>	Site Layout Plan
<b>12008_004 Phase 2</b>	Site Layout Plan

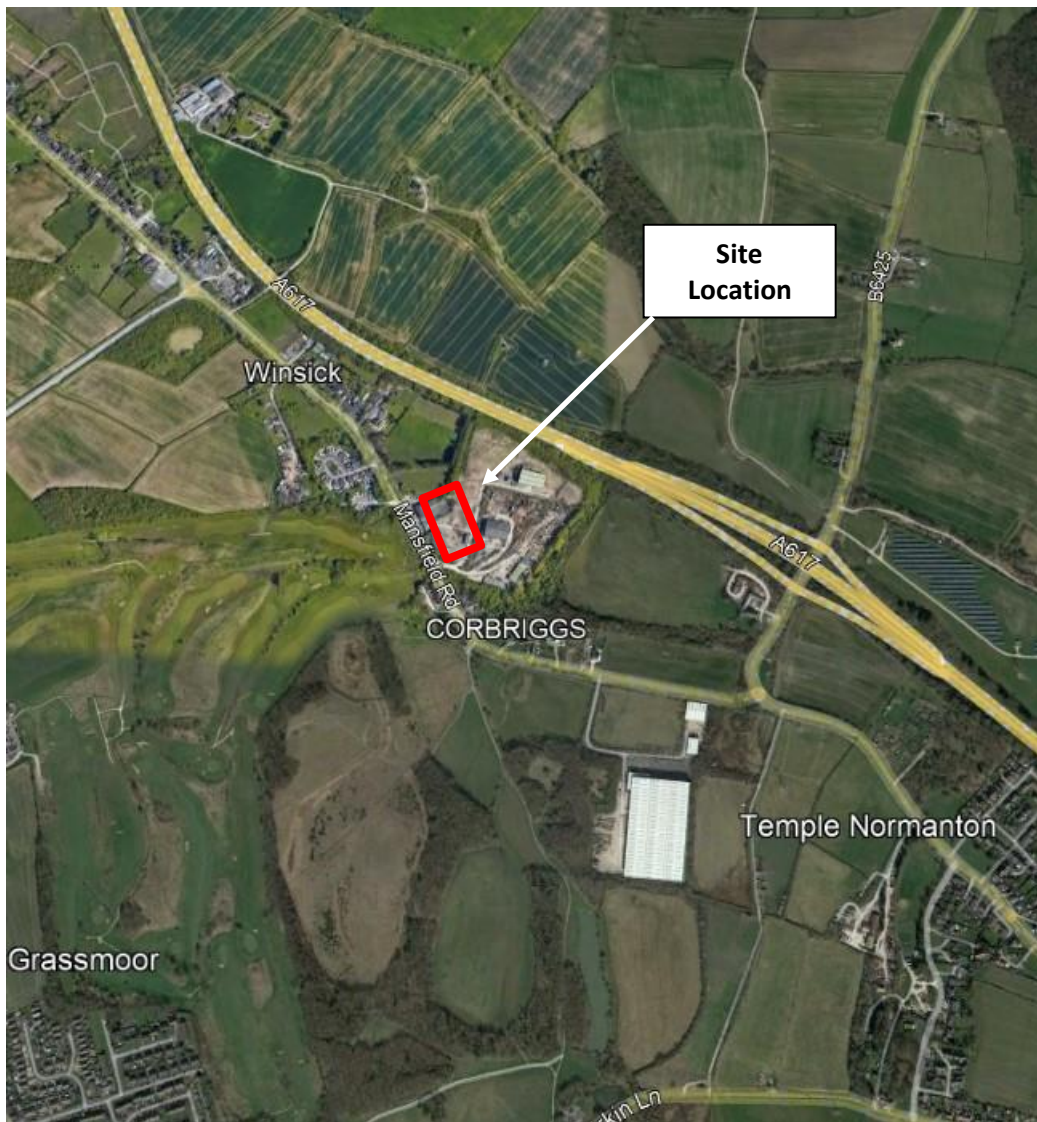
## 1.0 INTRODUCTION

### 1.1 Application Context

- 1.1.1 Caulmert Limited have been appointed by Silva Recycling Limited to prepare a bespoke environmental permit application for a new wood processing facility ('the site') off Mansfield Road, Corbriggs, Chesterfield, postcode S41 0JW.
- 1.1.2 This report comprises an integrated approach of the Activities & Operational Techniques in application form Part B4, a process description and also an assessment of compliance with Best Available Techniques (BAT). Activities are required to conform to BAT to show that operations at the site demonstrate that no significant pollution will be caused from the activity as a whole.
- 1.1.3 The Part B4 form requests information about the activities the application relates to and the operating techniques that will apply to them, which includes:
- a) Types of activities;
  - b) Types of waste to be accepted;
  - c) Point source emissions (to air, water, sewers, land etc.);
  - d) Operating Techniques including technical standards;
  - e) General requirements in relation to managing emissions (substances, noise, vibration etc.); and,
  - f) Monitoring of point source emissions.

### 1.2 Site Location and Surrounding Land Use

- 1.2.1 The site is located in an industrial estate on the eastern side of Mansfield Road, at Corbriggs, southeast Chesterfield, at postcode S41 0JW and National Grid Reference SK 41002 68251.
- 1.2.2 The closest residential properties to the site are within the Corbriggs area, located approximately 30m to the west, 45m to the southwest and 75m south of the site boundary. The nearest watercourse is the Calow Brook, located 110m to the southeast of the site. The site location is shown below in Figure 1.
- 1.2.3 The surrounding area is predominantly agricultural land to the north and east, with South Chesterfield Golf Club located 30m to the southwest and Grassmoor Country Park 130m to the south. In between the site and the fields to the north is the A617 dual carriageway. The settlement of Temple Normanton is located approximately 940m to the southeast and Grassmoor is located 910m to the southwest of the site.
- 1.2.4 An indicative site location plan is shown below in Figure 1:



**Figure 1 - Site Location Plan**

### **1.3 Site Plans**

1.3.1 The following site plans have been included in the application:

- Site Layout Plan, drawing ref. 12800\_004 'Phase 1';
- Site Layout Plan, drawing ref. 12800\_004 'Phase 2';
- Sensitive Receptor Plan, drawing ref. 5448-CAU-XX-XX-DR-V-1800; and,
- Proposed Permit Boundary Plan, drawing ref. 5448-CAU-XX-XX-DR-V-1801.

### **1.4 Best Available Techniques**

1.4.1 The proposed waste treatment activities will be a recovery operation and therefore do not fall under the requirement of the Industrial Emissions Directive (IED) 2010/75/EU for waste treatment. However, it is good practice to follow the principles of Best Available Techniques (BAT) within the IED and therefore reference has been made to 'Best Available Techniques Reference Document for Waste Treatment' (2018) for the proposed activities at Corbriggs

Wood Processing Facility. The following chapters are included within the waste treatment BAT document:

Chapter 1: General information on the waste treatment sector;

Chapter 2: Processes and techniques commonly used for waste treatment;

Chapter 3: Mechanical waste treatment;

Chapter 4: Biological waste treatment;

Chapter 5: Physico-chemical waste treatment.

- 1.4.2 The BAT conclusions which apply to the proposed wood processing activities at the site is covered by Chapters 1, 2, 3 and 5 of the IED for waste treatment. The BAT conclusions for the site are reviewed in Section 3 of this report.

## 2.0 ACTIVITIES & OPERATING TECHNIQUES – PART B4 FORM

### 2.1 Q1a What waste operations are you applying for?

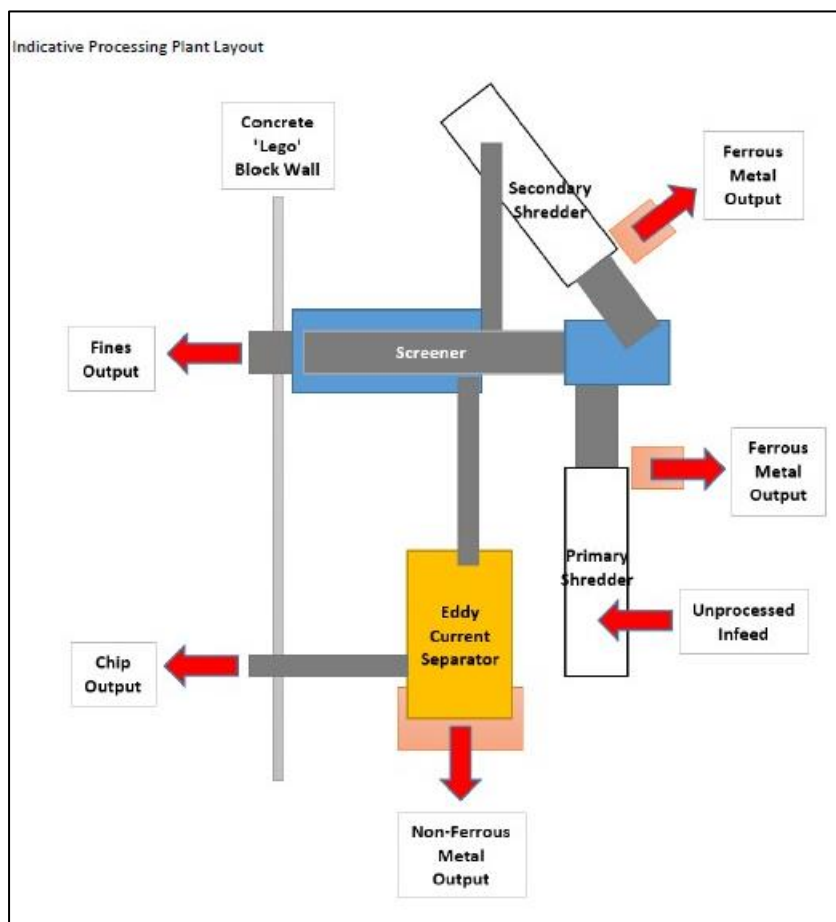
- 2.1.1 The permit application is for a proposed wood processing facility off Mansfield Road in Corbriggs, Chesterfield, for the reception, storage, treatment and transfer of non-hazardous wood wastes. The facility will accept and treat up to 75,000 tonnes per year of wood waste.
- 2.1.2 The proposed treatment activities will include shredding, screening, separating and temporary storage of wood wastes. Storage of other separated constituents will include small amounts of ferrous and non-ferrous metals, wood fines, and incidental contamination and production wastes (such as litter and plastics) removed from the wood wastes during processing. The good quality woodchip produced will be sent off-site for manufacturing into chip-board products. The proposed activities are under Annex II codes (R codes) for recovery:
- R3 Recycling /reclamation of organic substances which are not used as solvents (including composting and biological transformation); and,
  - R13 Storage of wastes pending any of the operation numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).

#### **Process Description**

- 2.1.3 The operator, Silva Recycling Limited, are proposing to operate a wood processing facility at an existing industrial site on the eastern side of Mansfield Road, at Corbriggs, Chesterfield. The operations will include storage, shredding, screening and separation of non-hazardous wood wastes, which is to be undertaken outside in the processing area on-site (see attached drawing ref. 12800\_004 Site Layout Plan).
- 2.1.4 The site will treat up to 75,000 tonnes per year of non-hazardous wood waste as a recovery activity, with the temporary storage of up to 6,000 tonnes non-hazardous waste at any one time. Seasonal fluctuations will affect the volume of incoming waste loads to the site, and as such this will be managed with a phased approach.
- 2.1.5 The site will be operated in a phased approach to accommodate the supply of incoming waste loads and the requirements of Kronospan which will dictate the specification of the shredded wood sent to their chipboard factory in Chirk. The initial site operations will be to produce a 'pre-shred' wood chip, with very little processing and refining, as shown in layout drawing ref. '12800\_004 Phase 1'. This will be for the pre-shredding of wood and limited storage of wood wastes prior to transfer off-site for further processing at Kronospan's chipboard manufacturing site in Chirk.
- 2.1.6 The move of into the proposed Phase 2 expansion of the operation will be dictated by either an increase in throughput of wood wastes at the site and/or the need for greater storage capacity at the site due to seasonal demands. This then will involve the Corbriggs site accepting greater volumes of incoming wood waste and will require the temporary storage of

larger volumes of wood waste on-site. Therefore, further processing may also be required, where the shredded wood will be fed through a screener to remove the wood fines and any other incidental contamination and production wastes, and an Eddy Current Separator may be used to remove non-ferrous metals prior to sending to Chirk (see Figure 2 below). For this expanded operation, the operator proposes to use the site layout plan as shown in the drawing ref. '12800\_004 Phase 2' which shows a greater storage capacity of both unprocessed and processed waste streams. Both plans show the proposed locations of the weighbridge, processing area, quarantine area, storage bays, site entrances, parking areas and other site infrastructure at each operational stage.

- 2.1.7 To reiterate, the transition from the proposed Phase 1 operations to the expanded Phase 2 operations will depend on the increase in throughput and/or the need for greater storage capacity at the site.



**Figure 2 – Simple processing plant flow diagram (Phase 2)**

- 2.1.8 The temporary storage of waste wood (unprocessed and processed) and wood fines will be outside in designated bays. The storage of ferrous or non-ferrous metals will be in bays or skips. Any incidental contamination and production wastes (litter and plastics etc.) will be stored in skips prior to removal from site. Stockpiles of unprocessed and processed wood will be up to 4 metres high, with the modular movable concrete storage bay walls up to 5 metres high, allowing a 1m freeboard area above each stockpile.



- 2.1.1 The processing plant to be used on site will include a shredder(s) fitted with over-band magnets, a screener and potentially an Eddy Current Separator, with other mobile plant to include a Materials Handler and Wheeled Loading Shovel(s) or telehandler(s). HGVs arriving at site will tip inbound waste wood within a designated tipping area in the site yard for visual inspection by staff prior to stockpiling the waste in an 'unprocessed' bay. Loading of outbound processed materials will be by using a loading shovel onto HGVs for removal off-site.
- 2.1.2 It is proposed the site will operate 24hours a day, 7days a week, with the waste reception, shredding, screening and separating undertaken between the hours of 07:00 and 19:00, and the loading of outbound waste and site maintenance undertaken 24hours a day. The staff will work on a shift system. It is anticipated that there will be a maximum of four shifts. The applicant has advised that a maximum of 10 employees will be on site at once (this will vary depending on the scale of operations being undertaken at the site).
- 2.1.3 An existing site entrance off Mansfield Road will be reopened, allowing site visitors and staff to park vehicles in the designated car park areas. The entrance will be opposite the location of the site office containers, which will provide welfare facilities, including offices, toilets and canteen.
- 2.1.4 The site surface is proposed to be constructed of impermeable concrete or tarmac, with installed drainage system and interceptor, and connections to surface water and foul sewer discharge. The site's surface water run-off will be directed by the site's drainage system via an oil/water interceptor into the local surface watercourse (the Calow Brook).
- 2.1.5 Only in exceptional incidents, such as uncontrolled spillages on site or in the event of a fire where firewater is generated, would potentially contaminated waters be temporarily contained on site by the installed stop valves, attenuation tank/sump and bunded areas, before either being discharged to sewer (subject to meeting discharge consent parameters) or pumped and tankered off-site for disposal. Other waste water streams generated by the site would be limited to domestic foul water from the site's offices, toilets and canteen, which will be discharged directly into the foul sewer.
- 2.1.6 The site will be inspected daily when operational and subject to regular cleaning and maintenance, with remedial actions required to be fully documented in the site diary, which is to be kept at all times in the Site Offices.

#### Waste Acceptance

- 2.1.7 Strict waste acceptance procedures at the site will be adhered to, ensuring only the permitted waste codes (as listed in Table 1 below) are to be accepted and treated at the site. Acceptance procedures aim to confirm the characteristics of the waste, as identified in the pre-acceptance stage. Waste wood will be delivered to site by HGV via the site entrance on the south-eastern permit boundary of the site. The main access road off Mansfield Road is to be shared with existing business premises adjacent.

- 2.1.8 When the waste arrives at the facility, incoming waste loads will be checked by trained site staff at the weighbridge by visual inspection. All wastes will be checked and verified against pre-acceptance information and waste transfer documentation prior to the waste being accepted onto the site. These checks will ensure waste descriptions and waste codes match the waste load being delivered. Any non-conforming wastes will be rejected from the site.
- 2.1.9 If, upon tipping onto site, the waste load is discovered to be contaminated by other non-permitted wastes or found to be any way non-conforming to the permitted waste types listed in the permit (e.g. excessively wet, dusty or contaminated), the waste load will be reloaded and sent off-site. Where immediate removal from site is not possible, the waste load will be moved into the quarantine area until it can be removed from site as soon as practicable. No non-conforming wastes will be accepted into the wood processing area.
- 2.1.10 Unloading of unprocessed incoming wood waste loads is by tipping directly onto a designated area of the yard surface. Material will then be stockpiled in the unprocessed waste bays by mechanical shovel once visual inspections are complete. Bulk items such as MDF chipboard will be removed from deposited waste loads and stored in designated bays. The 'unprocessed' waste wood bays will be capable of holding up to 1,500m<sup>3</sup> of material (see site layout drawing ref. 12800\_004 Phase 1 and 2).
- 2.1.11 The operator will ensure that the facility has the necessary capacity to receive the waste for all storage areas (quarantine, reception, storage bays) and treatment processes. Wastes are not received if capacity at the site is not available for storage or processing.
- 2.1.12 Incoming permitted waste loads may contain small amounts of other materials such as metals and plastics, which will be screened out during the processing on site (sorting, screening, shredding, separating). As a result of the waste processing, the operator expects the following proportions of the various separated constituents to be produced (these are approximate only dependent upon treatment process and waste accepted):
- 67% good quality woodchip, suitable for onward manufacturing
  - 20% wood fines and MDF chipboard suitable for combustion
  - 10% ferrous metals
  - 2% non-ferrous metals
  - 1% rejects/waste for disposal or onward recycling (i.e. plastics, litter etc.).

### Storage

- 2.1.13 Storage requirements will differ from the initial operations proposed in Phase 1 ('pre-shred' activities with small amounts of temporary storage), to expanded operations with greater storage of wood wastes (more processing including screening and separating to remove metals, wood fines and other incidental contamination and production wastes). The proposed storage arrangements and bay sizes for both Phase 1 and Phase 2 are shown in the respective site layout drawings, attached as ref. '12800\_004 Phase 1' and '12800\_004 Phase 2'.

- 2.1.14 In the initial operations at the site (Phase 1), where it is expected less storage and processing capacity will be required, the 'Phase 1' Site Layout Plan (drawing ref. 12800\_004) shows a total of 4 'unprocessed' waste storage bays and an additional 'unprocessed grade c' bay, all capable of holding a maximum of 1,500m<sup>3</sup> of material. The 'grade c' bay will hold MDF waste that has been pulled out of the incoming loads upon arrival. Three 'pre-shred' storage bays will also exist, one capable of holding 450m<sup>3</sup> and two able to hold 750m<sup>3</sup>, to hold the roughly shredded wood waste (approximately 300mm size chip) prior to removal from site for further processing at Kronospan's site in Chirk. Extra material storage bays capable of holding up to 250m<sup>3</sup> will also be available on site and utilised where necessary.
- 2.1.15 Once operational capacity is increased at the site and larger volumes of shredded wood are required to be stored, the operator will undertake further processing to produce a better quality, smaller woodchip (less than 300mm) and to remove wood fines, metals and incidental contamination and production wastes (litter, plastics etc.) which will reduce the ability for processed wood stockpiles to self-combust and allow longer storage times.
- 2.1.16 In this scenario (Phase 2), there are proposed to be five 'unprocessed waste' bays on site and one 'unprocessed grade c' bay (for MDF), all capable of holding up to 1,500m<sup>3</sup> of material, as shown on the 'Phase 2' Site Layout Plan drawing ref. 12800\_004. Three of the 'unprocessed' storage bays will be located next to the site entrance and weighbridge area in the southern portion of the site, and three (including the 'grade c' bay) will be located around the 'processing area' in the north-eastern section of the site. As before, any MDF furniture or other MDF pieces will be pulled out of incoming loads and stored separately in the 'unprocessed grade c' storage bay. Once filled, this 'grade c' storage bay will be processed on a 'campaign basis' all at once, when enough MDF has been collected.
- 2.1.17 Extra material storage bays capable of holding up to 250m<sup>3</sup> are located to the north of the 'processing area' on site and these will be used to hold the segregated ferrous and non-ferrous metals stockpiles, prior to collection from site for recycling.
- 2.1.18 There will also be two concrete storage bays in the centre of the site to store wood fines produced from the screening of wood waste. These will have short residence times and will be no more than 300m<sup>3</sup> stockpiles.
- 2.1.19 Finally, there will be six 'paddock' bunkers constructed on movable modular concrete walls on three sides, in the northern part of the site, capable of holding up to 1,500m<sup>3</sup> of 'processed woodchip', ready for export off site to Kronospan's chipboard manufacturing site in Chirk.
- 2.1.20 For all waste piles, the stockpile height limit will be 4m, with lines marked out on all bays indicating the stockpile height limit. Caution will be exercised to ensure fire prevention measures are adhered to for the storage of combustible wastes (see Fire Prevention Plan ref. 5448-CAU-XX-XX-RP-V-0304) including limiting pile sizes and heights.
- 2.1.21 The unprocessed and processed wood and wood fines will be stored outside in designated concrete bays. Metals (ferrous and non-ferrous) may be stored in bays or skips. Incidental

contamination and production wastes (unwanted mixed waste materials such as plastics or litter) will be stored in skips awaiting removal from site.

#### Processing – Shredding, Screening, Separating

- 2.1.22 Unprocessed waste wood will be moved by mobile plant (e.g. wheeled loading shovel or telehandler) from the storage bays into the processing area, and fed into the shredder, with the site policy being the oldest waste piles processed first to ensure rotation of stockpiles. The shredding of wood waste will be undertaken in the processing area (shown on drawing ref. 12800\_004 Phase 1 and 2) in the north-eastern portion of the site.
- 2.1.23 Initially, pre-shred operations in Phase 1 will involve a rough shred of the wood wastes and removal of ferrous metals by over band magnet on the shredder. Wood wastes will be sent through the shredder located within the processing area to produce roughly shredded wood waste approximately 300mm size chip, prior to temporary storage in a 'pre-shred' bay, before removal from site for further processing at Kronospan's site in Chirk.
- 2.1.24 Once there are greater throughputs and/or greater storage capacity is required, the Phase 2 operations may include a second shredder, with over-band magnet, to further refine the woodchip and to remove ferrous metals (typically small bits of metal such as door handles, screws etc). A screener plant will also be used to remove wood fines and litter/other incidental contamination and production wastes from the woodchip. An Eddy Current Separator may also be used to remove non-ferrous metals on a conveyor belt using a powerful magnetic field, prior to final output of the woodchip for storage in the concrete bunkers in the northern part of the site. The processing area will have an impermeable site surface and benefit from the installed drainage system.
- 2.1.25 In both scenarios (Phase 1 and 2 operations) a wheeled-loader plant will feed wood waste into the shredder(s) and move processed woodchip over to storage bunkers.

#### Dust

- 2.1.26 Dust emissions to air could arise during the shredding, screening, separation and rehandling of waste materials on site, but also during the movement of stockpiled materials or dust from the site surface, movement of vehicles or windblow action across stockpiles. The processing plant will have dust suppression systems (misting) fitted to control dust emissions at source, or where not possible, a water cannon will be employed on site.
- 2.1.27 Dust is considered in more detail in the Amenity and Accidents Risk Assessment (ARA) report ref. 5448-CAU-XX-XX-RP-V-0303, included within this permit application. Dust management and control measures for site activities are further set out in the Dust & Emissions Management Plan (DEMP) for the site, report ref. 5448-CAU-XX-XX-RP-V-0305.

### Noise & Vibration

- 2.1.28 A Noise Management Plan (NMP) has been produced as part of this permit application in accordance with Environment Agency guidance and is included as document ref. 5448-CAU-XX-XX-RP-V-0306.
- 2.1.29 A planned preventative maintenance (PPM) programme will be in place for all parts of the plant and will include routine maintenance and servicing of parts that could give rise to increases in noise and as part of the routine site checks, noise and vibration emissions will be checked.
- 2.1.30 Noise and vibrations have been considered in the Amenity and Accidents Risk Assessment document ref. 5448-CAU-XX-XX-RP-V-0302, which concludes that noise and vibrations impacts are likely to be of very low impact to sensitive receptors with control measures in place.
- 2.1.31 Furthermore, from the Transport Statement for the planning application (ref. 1674/2/B) it was concluded that the proposed development will result in no material impact on the operation of the highway network and it was concluded that the change in traffic resulting from the proposed development replacing the permitted scheme in the AM & PM peak hours is not material, therefore there is unlikely to be additional significant noise emissions generated by traffic from the proposed development.
- 2.1.32 Also, from the Noise Impact Assessment for the planning application (ref. UK.15174559/02) the assessment concludes that the noise impact of the site operation would be below the Lowest Observed Adverse Effect Level at the nearest residential receptors, and that operational traffic generated by the development would have a negligible noise impact.

### Management System

- 2.1.33 An Environmental Management System (EMS) is a formal system to demonstrate compliance with environmental objectives. It is a technique which complies with BAT allowing operators to address environmental issues in a systematic and demonstrable way and are most effective when they form an inherent part of the overall management and operation of a site.
- 2.1.34 The operator will implement an Integrated Management System (IMS) for the site, based on the structure of the ISO Annex SL framework which encompasses all the elements of an EMS, and a copy of which is maintained in the Site Office at all times. A summary of the IMS is provided in Appendix 4 of the Supporting Document of this application.
- 2.1.35 Incorporated into the IMS for the site will be the following documents as part of this permit application:
- Amenity & Accidents Risk Assessment ref. 5448-CAU-XX-XX-RP-V-0302
  - Fire Prevention Plan ref. 5448-CAU-XX-XX-RP-V-0304

- Dust & Emissions Management Plan ref. 5448-CAU-XX-XX-RP-V-0305
- Noise Management Plan ref. 5448-CAU-XX-XX-RP-V-0306

### Accidents & Incidents

2.1.36 An emergency action plan will form part of the plant operational procedures, ensuring that all foreseeable accidents are mitigated against, and action plans prepared which should be followed by site staff in the event of an accident occurring. The emergency plan will identify the hazards and assess the risks of each scenario and set out control measures to reduce the risk of a potential accident occurring on site.

2.1.37 The emergency action plan will cover the following aspects:

- Transfer of substances (e.g. Filling or emptying of bays and containers);
- Overfilling of bays or containers;
- Emissions from plant or equipment (e.g. Leakage from joints, over pressurisation of hydraulics);
- Failure of containment (e.g. Physical failure or overfilling of bunds or drainage sumps, blocked drains);
- Failure to contain fire waters;
- Combustible wastes heating during storage/fire risk;
- Release of an effluent before adequate checking of its composition;
- Failure of mains services (e.g. Power, mains water);
- Operator error; and,
- Vandalism.

2.1.38 Following an assessment of the risk of the hazards identified the emergency actions plan will identify the techniques and control measures in place necessary to reduce the risks:

- There will be an up-to-date inventory of substances, present or likely to be present, which could have environmental consequences if they escape. This will include apparently innocuous substances that can be environmentally damaging if they escape. The permit will require the regulator to be notified of any significant changes to the inventory.
- Storage arrangements for raw materials, products and wastes will be designed and operated to minimise risks to the environment.
- Automatic process controls will be backed-up by manual supervision, both to minimise the frequency of emergency situations and to maintain control during emergency situations. Instrumentation will include, where appropriate, alarms and emergency stop switches.
- Physical protection in place where appropriate (e.g. barriers to prevent damage to equipment from the movement of vehicles).

- Appropriate secondary containment providing 110% capacity of the stored potentially polluting liquids (e.g. bunds, catchpits, containment).
- Security systems to prevent unauthorised access should be provided where appropriate.
- Formal systems for the logging and recording of all incidents, near-misses, abnormal events, changes to procedures and significant findings of maintenance inspections.
- Procedures for responding to and learning from incidents, near-misses, etc.
- The roles and responsibilities of personnel involved in incident management formally specified.
- Clear guidance available on how each accident scenario might best be managed (e.g. containment or dispersion, to extinguish fires or to let them burn).
- Procedures in place to avoid incidents occurring as a result of poor communications between staff at shift change or during maintenance or other engineering work.
- Safe shutdown procedures in place.
- Communication channels with emergency services and other relevant authorities established, and available for use in the event of an incident. Procedures will include the assessment of harm following an incident and the steps needed to redress this.
- Appropriate control techniques in place to limit the consequences of an accident, such as isolation of drains, provision of oil spillage equipment, alerting of relevant authorities and evacuation procedures.
- Personnel training requirements will be identified, and training provided.
- Spill contingency procedures will be in place to minimise accidental release of raw materials, products and waste materials and then to prevent their entry into water.
- Any potentially contaminated site drainage waters, emergency firewater, chemically contaminated waters and spillages of chemicals will be contained. Sufficient storage will be provided to ensure that this can be achieved. Any emergency firewater collection system will take account of the additional firewater flows and fire-fighting foams.

- Consideration will be given to the possibility of containment or abatement of accidental emissions. Where this may be inadvisable on safety grounds, attention should be focused on reducing the probability of the emission.

## 2.2 Q1b Types of Waste

2.2.1 The following non-hazardous waste types will be accepted for the proposed physical treatment of wood for recovery and temporary storage activities at the site:

**Table 1 – Types of waste accepted and restrictions**

Waste code:	Description:	Restrictions
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>	
<b>02 01</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>	
02 01 03	Plant-tissue waste	Restricted to woody material only.
<b>03</b>	<b>WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD</b>	
<b>03 01</b>	<b>Wastes from wood processing and the production of panels and furniture</b>	
03 01 01	Waste bark and cork	
03 01 05	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04	
<b>03 03</b>	<b>Wastes from pulp, paper and cardboard production and processing</b>	
03 03 01	Waste bark and wood	
<b>15</b>	<b>WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>	
<b>15 01</b>	<b>Packaging (including separately collected municipal packaging waste)</b>	
15 01 03	Wooden packaging	
15 01 06	Mixed packaging	Restricted to mixed wood and metal only.
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>	
<b>16 01</b>	<b>End-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)</b>	
16 01 22	Components not otherwise specified	Restricted to mixed wood and metal only.
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>	



Waste code:	Description:	Restrictions
<b>17 02</b>	<b>Wood, glass and plastic</b>	
17 02 01	Wood	
<b>17 09</b>	<b>Other construction and demolition wastes</b>	
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	Restricted to mixed wood and metal only.
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>	
<b>19 12</b>	<b>Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>	
19 12 07	Wood other than that mentioned in 19 12 06	
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	Restricted to mixed wood and metal only.
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>	
<b>20 01</b>	<b>Separately collection fractions (except 15 01)</b>	
20 01 38	Wood other than that mentioned in 20 01 37	Restricted to mixed wood only.
<b>20 02</b>	<b>Garden and park wastes (including cemetery waste)</b>	
20 02 01	Biodegradable waste	Restricted to woody material only.
<b>20 03</b>	<b>Other municipal wastes</b>	
20 03 07	Bulky waste	Restricted to mixed wood and metal only.

<sup>(1)</sup> waste from contaminated sites must be sampled and analysed and site-specific risk assessment undertaken

## 2.3 Q2 Emissions to Air, Water and Land

### Point source emissions to air

2.3.1 There will be no point source emissions to air as part of the activities at the site.

### Point source emissions to water (other than sewers)

There will be no point source emissions to water as part of the activities at the site. Uncontaminated site surface water run-off will discharge to surface water drain.

### Point source emissions to sewers, effluent treatment plants or other transfer off-site

- 2.3.2 There will be no point source emissions to sewers, effluent treatment plants or other transfers off-site as a result of the proposed operations. The only discharge to sewer will be domestic foul waters from the site offices, toilets and canteen.
- 2.3.3 Firewater may be discharged to sewer as agreed by Yorkshire Water, the sewerage undertaker for the site. However, this will be in an emergency, and be tested prior to discharge, in accordance with the parameters set out by Yorkshire Water. If the operator is not permitted to discharge fire waters to sewer, then they will be pumped and removed from site by tanker for suitable disposal. See Fire Prevention Plan (FPP) ref. 5448-CAU-XX-XX-RP-V-0304.

#### Point source emissions to land

- 2.3.4 There will be no point source emissions to land as part of the activities at the site.

## **2.4 Q3a Technical Standards**

- 2.4.1 The following guidance and reports for the technical standards for this permit application:
- Environment Agency guidance 'Control and monitor emissions for your environmental permit' last updated May 2021;
  - Environment Agency guidance 'Risk assessment for your environmental permit' last updated 31<sup>st</sup> August 2022;
  - Wood Recyclers Association guidance 'Writing Waste Wood Fire Prevention Plans' updated February 2020 (approved by the Environment Agency November 2019);
  - Environment Agency guidance 'Apply for a new bespoke permit' last updated April 2018;
  - Environment Agency guidance 'Non-hazardous and inert waste: appropriate measures for permitted facilities' published July 2021 and last updated 1<sup>st</sup> August 2023;
  - Industrial Emissions Directive 2010/75/EU (IPPC) Best Available Techniques (BAT) Reference Document for Waste Treatment' (2018);
  - Silva Recycling Limited Management System & Waste Acceptance Procedures;
  - Amenity & Accidents Risk Assessment report ref. 5448-CAU-XX-XX-RP-V-0302;
  - Operating Techniques & BAT Assessment Review report ref. 5448-CAU-XX-XX-RP-V-0303;
  - Fire Prevention Plan report ref. 5448-CAU-XX-XX-RP-V-0304;
  - Dust & Emissions Management Plan ref. 5448-CAU-XX-XX-RP-V-0305; and,
  - Noise Management Plan ref. 5448-CAU-XX-XX-RP-V-0306.

## **2.5 Q3b General Requirements**

- 2.5.1 An Amenity & Accidents Risk Assessment is provided as part of this permit variation as report ref. 5448-CAU-XX-XX-RP-V-0302. The risks from odour are considered to be low from the proposed site activities, provided control measures are implemented and so do not require further assessment.
- 2.5.2 A Dust & Emissions Management Plan is provided as report ref. 5448-CAU-XX-XX-RP-V-0305, covering site specific dust control measures to prevent dust emissions impacting nearby sensitive receptors. Provided the control measures are followed, the overall risk of dust from the proposed activities to sensitive receptors is considered low. An Air Quality Assessment was undertaken as part of the planning application for the site (ref. AIR15169915) to assess the impact of potential air pollutants including dust emissions from the proposed activities at the site. The overall impact was concluded to be 'not significant'.
- 2.5.3 A Noise Impact Assessment was undertaken as part of the planning application for the site (ref. UK.15174559/02) and the assessment concluded that the noise impact of the site operation would be below the Lowest Observed Adverse Effect Level at the nearest residential receptors, and that operational traffic generated by the development would have a negligible noise impact.
- 2.5.4 A Noise Management Plan (NMP) has been produced as part of this permit application and is included as document ref. 5448-CAU-XX-XX-RP-V-0306.

## **2.6 Q4a Monitoring Point Source Emissions**

- 2.6.1 There are no specific point source emissions from the proposed waste operations at the site.
- 2.6.2 Emissions monitoring for dust will be undertaken as per the Dust & Emissions Management Plan ref. 5448-CAU-XX-XX-RP-V-0305.
- 2.6.3 Potential emissions arising from the proposed site activities have been assessed in the Amenity & Accidents Risk Assessment ref. 5448-CAU-XX-XX-RP-V-0302 and the overall risk from these is considered low if control measures are implemented as per site procedures. Monitoring of potential fugitive emissions will be undertaken daily as part of daily site inspections and if detected or complaints received, will be dealt with as per procedures in the site's management system and control measures at the site reviewed accordingly.

## **3.0 BEST AVAILABLE TECHNIQUES (BAT) REVIEW**

### **3.1 Overview**

3.1.1 The wood processing facility at Corbriggs will be operated in accordance with Best Available Techniques (BAT), where applicable, for waste treatment.

### **3.2 Review of BAT Conclusions**

3.2.1 The BAT Conclusions for waste treatment (2018) are reviewed within Table 2 below. The activities at the site will include non-hazardous waste treatment as a recovery operation, primarily shredding of wood waste, but may also include screening and separating, and the temporary storage of unprocessed and processed wood wastes.

**Table 3 – BAT Conclusions Review**

BAT Conclusion Number	Description	Applicable to Wood Processing	Reference
<b>Overall Environmental Performance</b>			
1.	<b>In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features (I – XV)</b>	Yes	<ul style="list-style-type: none"> <li>• The operator has developed a management structure and a site-specific Integrated Management System (IMS) structured on the ISO Annex SL framework, which incorporates all elements of an EMS. The IMS will be part of the site’s overall management system and will establish an organisational structure, responsibilities, practices, procedures and resources for achieving, reviewing and maintaining the company’s commitment to environmental protection. A copy of the IMS summary is contained within the Supporting Document of this permit application. The operation of an IMS is an assurance to the regulator, neighbouring businesses, stakeholders, and others alike that the operations at the facility are undertaken in strict compliance with the regulations in force and with the management seeking continual improvements. It requires the company to work in a transparent way, to maintain and improve the confidence of regulators and neighbours, and to have a proactive approach to environmental improvement. The operator will develop documented management procedures and written work instructions which incorporate environmental considerations into the construction and operation of the facility.</li> <li>• An Amenity &amp; Accidents Risk Assessment (ARA) has been carried out for the purpose of this application which assesses the environmental risks and potential emissions from the activities proposed to be covered by the permit (document ref. 5448-CAU-XX-XX-RP-V-0302).</li> <li>• A Dust &amp; Emissions Management Plan has also been produced to cover the proposed activities at the site (document ref. 5448-CAU-XX-XX-RP-V-0305).</li> <li>• A Fire Prevention Plan covering the proposed site activities is also included (document ref. 5448-CAU-XX-XX-RP-V-0304).</li> </ul>

			<ul style="list-style-type: none"> <li>• A Noise Management Plan has been produced to cover any potential noises from the proposed activities and the control measures to be implemented on-site, as document ref. 5448-CAU-XX-XX-RP-V-0306.</li> <li>• All the above risk assessments and plans for the proposed activities at the site include control measures and procedures to prevent environmental pollution and nuisance to sensitive receptors from potential emissions from the site. These will be incorporated into the IMS for the site.</li> </ul>
2.	<b>In order to improve the overall environmental performance of the plant, BAT is to use all of the techniques given below (a – g).</b>	Yes	<ul style="list-style-type: none"> <li>• See Section 2.1.13 for a description of the strict waste acceptance procedures to be adhered to at the site for incoming waste loads.</li> <li>• See Section 2.1.19 for information on the storage of unprocessed and processed wastes. Stockpiles of unprocessed and processed wastes will not be mixed during storage.</li> <li>• See Sections 2.1.5 and 2.1.24 about the sorting and storage of by-product waste streams (wood fines, metals, incidental contamination and production wastes).</li> <li>• The operator will have a technically competent manager who is qualified to ‘Level 4 in Waste Management Operations – Managing’. A copy of the relevant certification is included in Appendix 3 of the Supporting Document ref. 5448-CAU-XX-XX-RP-V-0300. The roles of site staff are clearly defined within the procedures in the Integrated Management System (IMS) and staff will only undertake activities for which they have received suitable training.</li> <li>• All staff undertaking waste acceptance procedures will receive suitable training in the waste acceptance procedures, as well as in waste handling and the relevant health and safety and environmental procedures in place.</li> </ul>
3.	<b>In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of waste water</b>	Yes	<ul style="list-style-type: none"> <li>• See Section 2.1.10 and 2.1.11 about site drainage. Waste-water is not proposed to be produced as part of the storage and processing activities on site, except for surface run-off from rainwater, occasional dust suppression activities and site maintenance/cleaning. It is not envisaged that there will be a need for regular cleaning and washing down of processing equipment. Any site surface run-off will be contained by site drainage installed with</li> </ul>

	<p><b>and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the following features (i. – iii.).</b></p>		<p>interceptor and penstock valve, before discharging to surface water. Water usage for cleaning and washing down can be further minimised by:</p> <ul style="list-style-type: none"> <li>• Vacuuming, scraping or mopping in preference to hosing down;</li> <li>• Re-using wash water (or recycled water) where practicable; and,</li> <li>• Using trigger controls on all hoses, hand lances and washing equipment.</li> </ul> <ul style="list-style-type: none"> <li>• See Fire Prevention Plan report ref. 5448-CAU-XX-XX-RP-V-0304 for further details on the site drainage system and dealing with firewater in the event of a fire at the site.</li> <li>• There will be no waste gas streams at the site.</li> </ul>
<p><b>4.</b></p>	<p><b>In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below (a – d).</b></p>	<p>Yes</p>	<ul style="list-style-type: none"> <li>• The storage of unprocessed wastes will be in designated storage bays on the impermeable site surfacing, with a maximum storage capacity of 1,500m<sup>3</sup>, constructed of 5m high movable modular concrete walls, for the prevention of fire spreading. Stockpiles will be no higher than 4m high to allow for a 1m freeboard above the waste but below the top of the bay wall.</li> <li>• Processed good quality woodchip will kept in a bays in a separate area of the site to the north, on the impermeable site surfacing, ready for removal off-site. These bays will also have a maximum storage capacity of 1,500m<sup>3</sup>, constructed of 5m high concrete walls, for the prevention of fire spreading. Stockpiles will be no higher than 4m high to allow for a 1m freeboard above the waste but below the top of the bay wall.</li> <li>• By-product waste streams of the wood processing and shredding processes will be wood fines, litter, ferrous and non-ferrous metals and any other incidental contamination and production wastes such as fragments of plastic or other unwanted fractions. The site layout plan shows the locations of the dedicated storage bays for unprocessed wastes, processed woodchip and wood fines. The other materials will be separated and stored in individual bays or skips, and incidental contamination and production wastes will be stored in a skip, on the impermeable site surfacing prior to removal from site. Any potentially polluting materials will be stored appropriately to prevent release of emissions to the environment, and where necessary, in the quarantine area.</li> </ul>

			<ul style="list-style-type: none"> <li>• For combustible wastes, the maximum storage times and residence times on site are covered in the Fire Prevention Plan report ref. 5448-CAU-XX-XX-RP-V-0304.</li> </ul>
5.	<b>In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures</b>	Yes	<ul style="list-style-type: none"> <li>• Handling and transfer of waste will be undertaken in accordance with procedures and control measures as set out in the site’s Integrated Management System (IMS), Dust &amp; Emissions Management Plan ref. 5448-CAU-XX-XX-RP-V-0305 and Noise Management Plan ref. 5448-CAU-XX-XX-RP-V-0306, in order to reduce dust, odour, noise and vibration and other emissions and to ensure the site is kept clean and tidy for practicality and safety of site operatives.</li> <li>• The operator will have a technically competent manager who is qualified to ‘Level 4 in Waste Management Operations – Managing’. A copy of the relevant certification is included in Appendix 3 of the Supporting Document ref. 5448-CAU-XX-XX-RP-V-0300. The roles of site staff are clearly defined within the procedures and staff will only undertake activities for which they have received suitable training.</li> <li>• All staff undertaking waste acceptance procedures will receive suitable training in the waste acceptance procedures, as well as in waste handling and the relevant health and safety and environmental procedures in place</li> <li>• All staff will receive training and refresher training on correct handling and transfer of waste around site, as part of training programmes included within the IMS. Drop heights of waste will be minimised to reduce dust and noise emissions and operations will be undertaken during normal site operational hours.</li> <li>• The risks from spillages of potentially polluting substances or waste is assessed in the Amenity &amp; Accidents Risk Assessment report ref. 5448-CAU-XX-XX-RP-V-0302.</li> </ul>
<b>Monitoring</b>			
6.	<b>Monitoring – for relevant emissions to water as identified by the inventory of</b>	Yes	<ul style="list-style-type: none"> <li>• No waste water streams identified as point source emissions to water (other than sewer). Uncontaminated surface water run-off from site surfacing will be directed via interceptor to</li> </ul>



	<b>waste water streams (see BAT 3), BAT is to monitor key process parameters at key locations</b>		<p>nearby surface water course. Domestic foul waters from the site welfare facilities will be sent directly to the sewer.</p> <ul style="list-style-type: none"> <li>Monitoring and reporting of emissions will be undertaken if required by the permit and Trade Effluent Discharge Consent issued by the sewerage provider for discharging firewater. Any firewater generated due to a fire emergency at the site will be contained by site drainage infrastructure, sump, bunding and penstock valve, and tested prior to being discharged to sewer, as agreed with the sewerage undertaker, Yorkshire Water (see Fire Prevention Plan ref. 5448-CAU-XX-XX-RP-V-0304). If required, the firewater will be sampled and sent to a MCERTS accredited laboratory which will carry out testing for a range of parameters (including, but not limited to, pH, electrical conductivity, ammoniacal nitrogen, chloride, chemical oxygen demand, suspended solids and a hazardous substances suite), and produce results accredited to MCERTS standards. If fire waters are not permitted to be discharged to sewer, then they will be pumped and removed off site by tanker for suitable disposal.</li> </ul>
<b>7.</b>	<b>BAT is to monitor emissions to water with at least the frequency given below and in accordance with EN standards.</b>	No	<ul style="list-style-type: none"> <li>See above response to BAT 6.</li> <li>No other point source emissions to water (other than sewer) identified.</li> </ul>
<b>8.</b>	<b>BAT is to monitor channelled emissions to air with at least the frequency given below and in accordance with EN standards.</b>	No	Not applicable to this application – no point source emissions to air identified.
<b>9.</b>	<b>Bat is to monitor diffuse emissions of organic compounds to air from the regeneration of spent solvents, the</b>	No	Not applicable to this application.

	<b>decontamination of equipment containing POPs with solvents, and the physico-chemical treatment of solvents for the recovery of their calorific value, at least once per year using one or a combination of the techniques given below (a – c).</b>		
<b>10.</b>	<b>BAT is to periodically monitor odour emissions.</b>	Yes	<ul style="list-style-type: none"> <li>• Odour is not considered to be a significant risk from the proposed operations at the site, therefore olfactory monitoring is not proposed over and above the monitoring during daily site inspections. This is covered in the Amenity &amp; Accidents Risk Assessment (ARA) report ref. 5448-CAU-XX-XX-RP-V-0302. Odour risk from the storage of fines as a by-product of the processing activities is also addressed in the ARA report, with low risk to receptors if control measures implemented (short residence times to minimise odour generation).</li> </ul>
<b>11.</b>	<b>BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.</b>	No	Not applicable to this application.
<b>Emissions to Air</b>			
<b>12.</b>	<b>In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to set up, implement and</b>	Yes	<ul style="list-style-type: none"> <li>• See response to BAT 10.</li> </ul>

	<b>regularly review an odour management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements (a – d)</b>		
<b>13.</b>	<b>In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to use one or a combination of the techniques given below (a – c).</b>	Yes	<ul style="list-style-type: none"> <li>• See response to BAT 10.</li> </ul>
<b>14.</b>	<b>In order to prevent or, where that is not practicable, to reduce emissions to air, in particular of dust, organic compounds and odour. BAT is to use an appropriate combination of the techniques given (a – h).</b>		<ul style="list-style-type: none"> <li>• See response to BAT 10.</li> <li>• The risks of emissions such as odour and dust from the proposed operations have been assessed in the Amenity and Accidents Risk Assessment report ref. 5448-CAU-XX-XX-RP-V-0302.</li> <li>• A Dust &amp; Emissions Management Plan has been produced as part of this permit application, as document ref. 5448-CAU-XX-XX-RP-V-0305. This document contains control measures which will be implemented at the site to minimise emissions of dust.</li> </ul>
<b>15.</b>	<b>BAT is to use flaring only for safety reasons or for non-routine operation conditions (e.g. start-ups, shut downs) by using techniques (a – b).</b>	No	Not applicable to this application.
<b>16.</b>	<b>In order to reduce emissions to air from flares when flaring is unavoidable, BAT is</b>	No	Not applicable to this application.

	<b>to use the techniques detailed (a – b).</b>		
<b>Noise and Vibrations</b>			
<b>17.</b>	<b>In order to prevent, or where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan as part of the environmental management system.</b>	Yes	<ul style="list-style-type: none"> <li>• Noise will be generated by delivery vehicles, the shredders, screener plant, Eddy Current Separator and the movement of mobile plant round the site. A Noise Impact Assessment has been produced as part of the planning application, as document ref. UK.15174559/02, and it was concluded that the predicted impact to sensitive receptors from noise is negligible.</li> <li>• A Noise Management Plan has been produced to cover any potential noises from the proposed activities and the control measures to be implemented on-site, as document ref. 5448-CAU-XX-XX-RP-V-0306.</li> <li>• A planned preventative maintenance (PPM) programme will be in place for all parts of the plant and will include routine maintenance and servicing of parts that could give rise to increases in noise and vibrations and as part of the routine site checks, noise and vibration emissions will be checked.</li> <li>• Noise and vibrations have also been considered in the Amenity and Accidents Risk Assessment document ref. 5448-CAU-XX-XX-RP-V-0302, which concludes that noise and vibration impacts are likely to be of very low impact to sensitive receptors with control measures in place.</li> </ul>
<b>18.</b>	<b>In order to prevent or where that is not practicable, to reduce noise and vibration emissions, BAT is to use of or a combination of the techniques given (a – e).</b>	Yes	<ul style="list-style-type: none"> <li>• See response to BAT 17.</li> </ul>
<b>Emissions to Water</b>			

19.	In order to optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that it not practicable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques given (a – i).	Yes	<ul style="list-style-type: none"> <li>• See responses to BAT 3 and BAT 6.</li> <li>• The site will benefit from an impermeable surface, that will be inspected daily for cracks or damage and made-good as soon as practicable. The site will also be surrounded by bunding and surface water drainage system, sump and interceptor, with penstock valve to isolate any run-off that becomes contaminated with any potentially polluting substance, including firewater generated during a fire emergency. This will ensure the surrounding surface water and ground water environment are protected from accidental release of pollution from the site.</li> <li>• See Fire Prevention Plan report ref. 5448-CAU-XX-XX-RP-V-0304 for further details on the site drainage system, containment measures and dealing with firewater in the event of a fire at the site.</li> </ul>
20.	In order to reduce emissions to water, BAT is to treat waste water using an appropriate combination of techniques (a – r).	No	Not applicable to this application. Waste water will not be treated as a result of the proposed operations.
<b>Emissions from Accidents and Incidents</b>			
21.	In order to prevent or limit the environmental consequences of accidents and incidents, BAT is to use all for the techniques given below, as part of the accident management plan (a – c).	Yes	<ul style="list-style-type: none"> <li>• See Section 2.1.36 ‘Accidents &amp; Incidents’.</li> <li>• An Amenity and Accidents Risk Assessment document ref. 5448-CAU-XX-XX-RP-V-0302 has been produced as part of this permit application, which considers the potential risks from accidents and incidents at the site, such as spills and leaks, fire, flooding etc. from the proposed operations.</li> <li>• The company Management System will include written procedures for handling, investigating, communicating and reporting environmental complaints and implementation of appropriate actions.</li> </ul>
<b>Material Efficiency</b>			

22.	In order to use materials efficiently, BAT is to substitute materials with waste.	No	Not applicable to this application.
<b>Energy Efficiency</b>			
23.	In order to use energy efficiently, BAT is to use both of the techniques given below: a) Energy Efficiency plan b) Energy balance record	Yes	<ul style="list-style-type: none"> <li>• Housekeeping measures including maintenance and operational procedures are in place for all areas of the site where the breakdown of machinery could lead to an impact upon the environment or compromise the operator’s ability to undertake normal site activities.</li> <li>• These measures will be reviewed every year to determine if additional energy savings could be made and will include: -                             <ul style="list-style-type: none"> <li>• Switching off equipment when not in use;</li> <li>• Careful operation and maintenance of plant &amp; equipment; and,</li> <li>• Regular cleaning of plant &amp; equipment.</li> </ul> </li> <li>• See response to BAT 11.</li> </ul>
<b>Re-Use of Packaging</b>			
24.	In order to reduce the quantity of waste sent for disposal, BAT is to maximum the reuse of packaging, as part of the residues management plan.		<ul style="list-style-type: none"> <li>• Any packaging e.g. pallets etc. will be returned to the supplier for efficient recycling and re-use where appropriate. The operator will (where applicable) re-use clean packaging and/or recycle at a suitable facility to reduce the quantity of waste sent for disposal.</li> </ul>
<b>General BAT conclusions for the mechanical treatment of waste</b>			
25.	In order to reduce emissions to air of dust, and of	Yes	<ul style="list-style-type: none"> <li>• The shredders, screener plant and Eddy Current Separator will be fitted with dust suppression (misting systems), to minimise dust emissions to air. The wood wastes to be processed are</li> </ul>

	particulate-bound metals, PCDD/F and dioxin-like PCBs, BAT is to apply BAT 14d and to use one or a combination of the techniques given below.		non-hazardous and unlikely to contain any hazardous components, due to strict waste acceptance procedures to be adhered to on site.
<b>BAT conclusions for the mechanical treatment in shredders of metal waste</b>			
26.	In order to improve the overall environmental performance, and to prevent emissions due to accidents and incidents, BAT is to use BAT 14g and all of the techniques given (a – c).	No	Not applicable to this application.
27.	In order to prevent deflagrations and to reduce emissions when deflagrations occur, BAT is to use technique a. and one or both of the techniques b. and c. given below.	No	Not applicable to this application.
28.	In order to use energy efficiently, BAT is to keep the shredder feed stable.	No	Not applicable to this application.
<b>BAT conclusions for the treatment of WEEE containing VFCs and/or VHCs</b>			
29. to 30.	BAT conclusions 29-30	No	Not applicable to this application.
<b>BAT conclusions for the mechanical treatment of waste with calorific value</b>			
31.	BAT conclusion 31	No	Not applicable to this application.

<b>BAT conclusions for the mechanical treatment of WEEE containing mercury</b>			
32.	BAT conclusion 32	No	Not applicable to this application.
<b>General BAT conclusions for the biological treatment of waste</b>			
33. to 35.	BAT conclusions 33-35	No	Not applicable to this application.
<b>BAT conclusions for the aerobic treatment of waste</b>			
36. to 37.	BAT conclusions 36-37	No	Not applicable to this application.
<b>BAT conclusions for the anaerobic treatment of waste</b>			
38.	BAT conclusion 38	No	Not applicable to this application.
<b>BAT conclusions for the mechanical biological treatment (MBT) of waste</b>			
39.	BAT conclusion 39	No	Not applicable to this application.
<b>BAT conclusions for the physico-chemical treatment of solid and/or pasty waste</b>			
40.	In order to improve the overall environmental performance, BAT is to monitor the waste input as part of the waste pre-acceptance and acceptance procedures (see BAT 2).	Yes	<ul style="list-style-type: none"> <li>• Solid waste (non-hazardous wood waste) is to be accepted at the site and strict waste acceptance protocols will be followed prior to acceptance of waste loads onto site to ensure the waste types conform with those listed in the permit (Table 1 in Section 2.2).</li> <li>• See response to BAT 2.</li> </ul>
41.	In order to reduce emissions of dust, organic compounds and NH <sub>3</sub> to air, BAT is to apply BAT 14d and to use one or a combination of the techniques given (a- d).	Yes	<ul style="list-style-type: none"> <li>• See response to BAT 8 and BAT 10 for control of dust emissions on-site.</li> </ul>
<b>BAT conclusions for the re-refining of waste oil</b>			
42. to 44.	BAT conclusions 42-44	No	Not applicable to this application.
<b>BAT conclusions for the physico-chemical treatment of waste with calorific value</b>			
45.	BAT conclusion 45	No	Not applicable to this application.
<b>BAT conclusions for the regeneration of spent solvents</b>			
46. to 49.	BAT conclusions 46-49	No	Not applicable to this application.



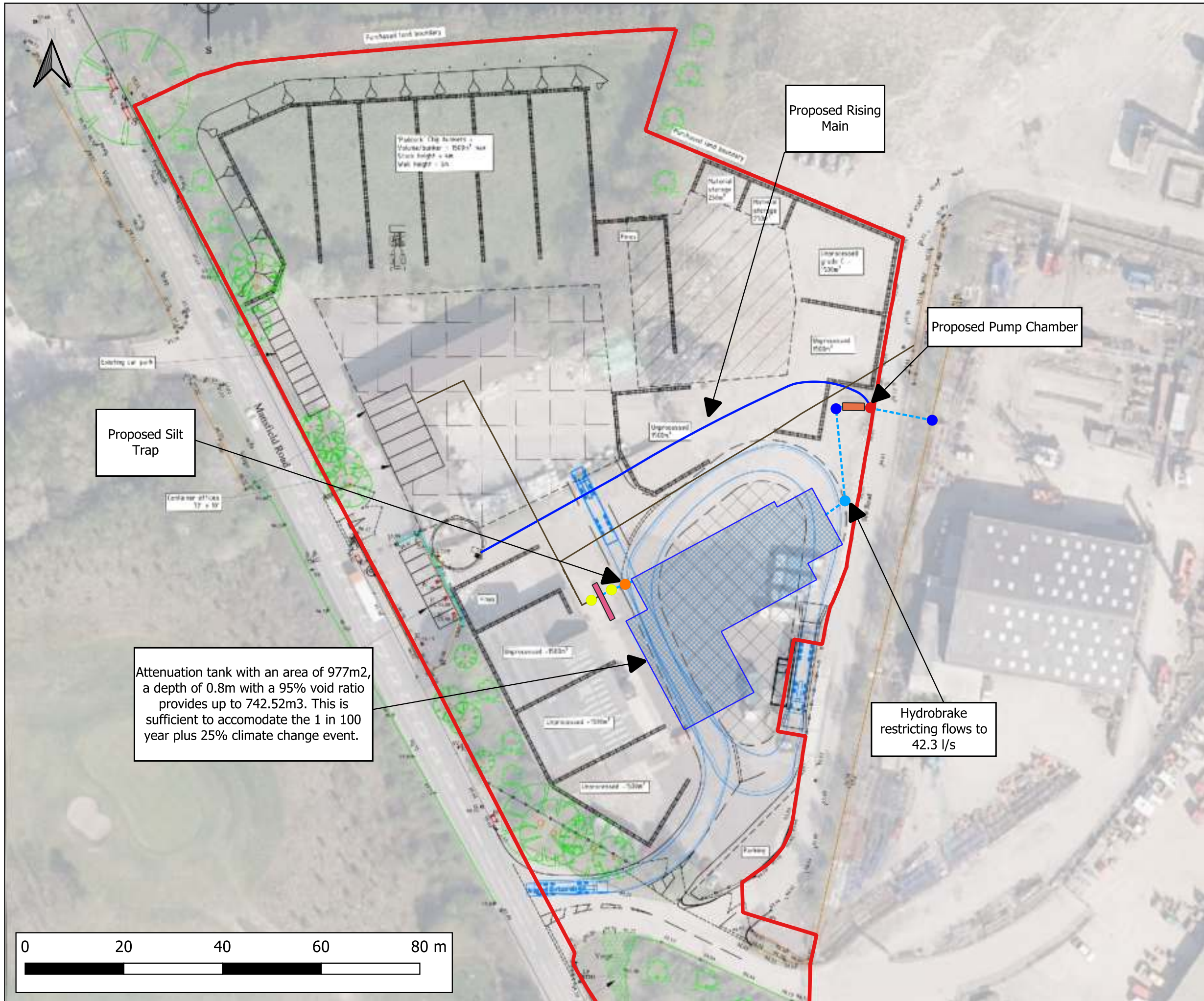
<b>BAT conclusions for the water washing of excavated contaminated soil</b>			
<b>50.</b>	<b>BAT conclusion 50</b>	No	Not applicable to this application.
<b>BAT conclusions for the decontamination of equipment containing PCBs</b>			
<b>51.</b>	<b>BAT conclusion 51</b>	No	Not applicable to this application.
<b>BAT conclusions for the treatment of water-based liquid waste</b>			
<b>52. to 53.</b>	<b>BAT conclusions 52-53</b>	No	Not applicable to this application.

## 4.0 REFERENCES

- Integrated Pollution Prevention and Control (IPPC), 2018 - 'Best Available Techniques (BAT) Reference Document for the Waste Treatment', Industrial Emissions Directive 2010/75/EU.
- Environment Agency and DEFRA – 'Risk assessments for your environmental permit', from GOV.UK website: <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>. (last updated 31<sup>st</sup> August 2022).

## DRAWINGS

14866	Concept Drainage Plan
12008_004 Phase 1	Site Layout Plan
12008_004 Phase 2	Site Layout Plan



Notes:  
 1) This sketch has not been subject to formal checks or approvals. Its validity and use must therefore be limited to discussion and information purposes only.  
 2) Unless otherwise noted the risks associated with this proposal are not considered to be extra ordinary and within the remit of an experienced and competent contractor.  
 3) All dimensions in millimetres and all levels in metres above ordnance datum unless shown otherwise.  
 4) This drawing is an ammendment of the 'Phase 2 Site Layout Plan' provided by 'Caulmert Ltd'. This drawing provides a concept only and is not intended for detailed design.

**LEGEND**

- Site Boundary
- Proposed Attenuation Tank
- Proposed Interceptor
- Existing Separator
- Existing Drainage Grate
- Proposed Surface Water Drain
- Proposed Rising Main
- Existing Foul Drain
- Proposed Silt Trap
- Proposed Pump Chamber
- Proposed Diverter Valve
- Proposed Flow Control Chamber
- Existing Surface Water Inspection Chamber

CLIENT:  
 Caulmert Ltd



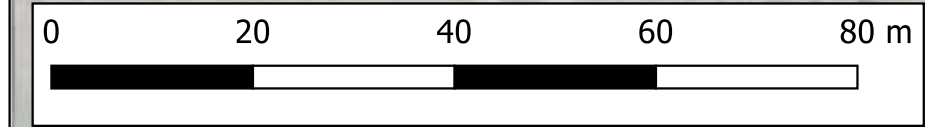
SCHEME:  
 Mansfield Road, Corbriggs

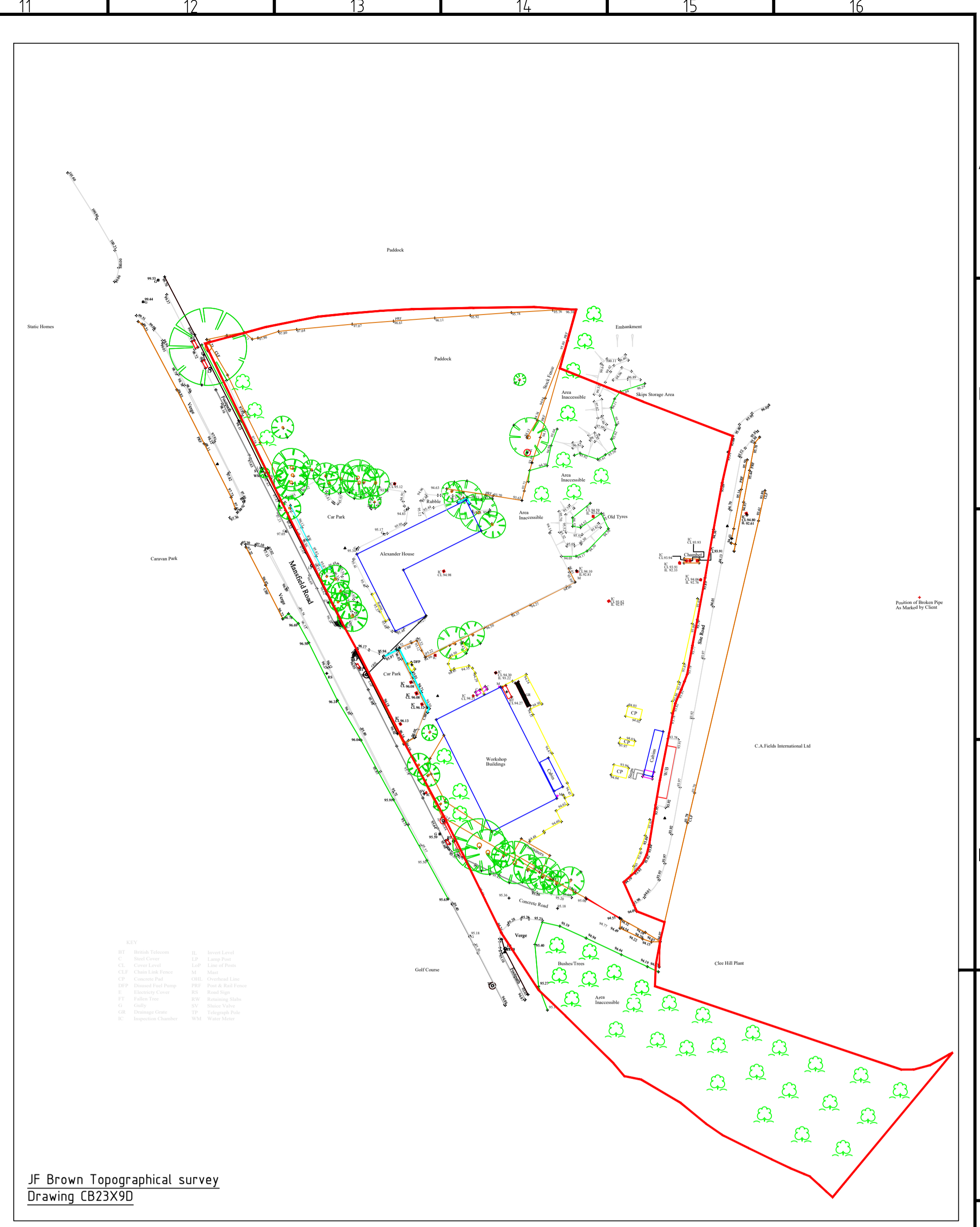
PLOT TITLE:  
 Concept Drainage Sketch

PLOT STATUS: CONCEPT      DATE: 24-10-2022

DRAWN: RM    CHECKED: AW    APPROVED: NJ    PLOT SCALE AT A3: 1:750

PLOT NAME: 14866\_Concept\_Drainage\_Sketch      REVISION: -





**Legend**

- Perimeter fence - Linear: 557m  
Area : 16,450m<sup>2</sup>
- Purchased land boundary
- Quarantine area & overnight parking for HGV & mobile plant
- Processing plant
- Overnight parking for HGV & mobile plant

## PHASE 1

Index	Modification	Date	Name	Size	State
D	Stock pile layout	17.10.2022	A. Hilditch		1:200
C	Boundary update	10.10.2022	A. Hilditch		1:100
B	Boundary update	06.10.2022	A. Hilditch		ISO
A	Electrical box	03.10.2022	A. Hilditch		

Status	Date	Name	Size	State
Project leader	31.05.2022	J. Arkley	A1	1:200
Drawn	31.05.2022	A. Hilditch	origin	ISO
Checked	30.09.2022	C. Emery		

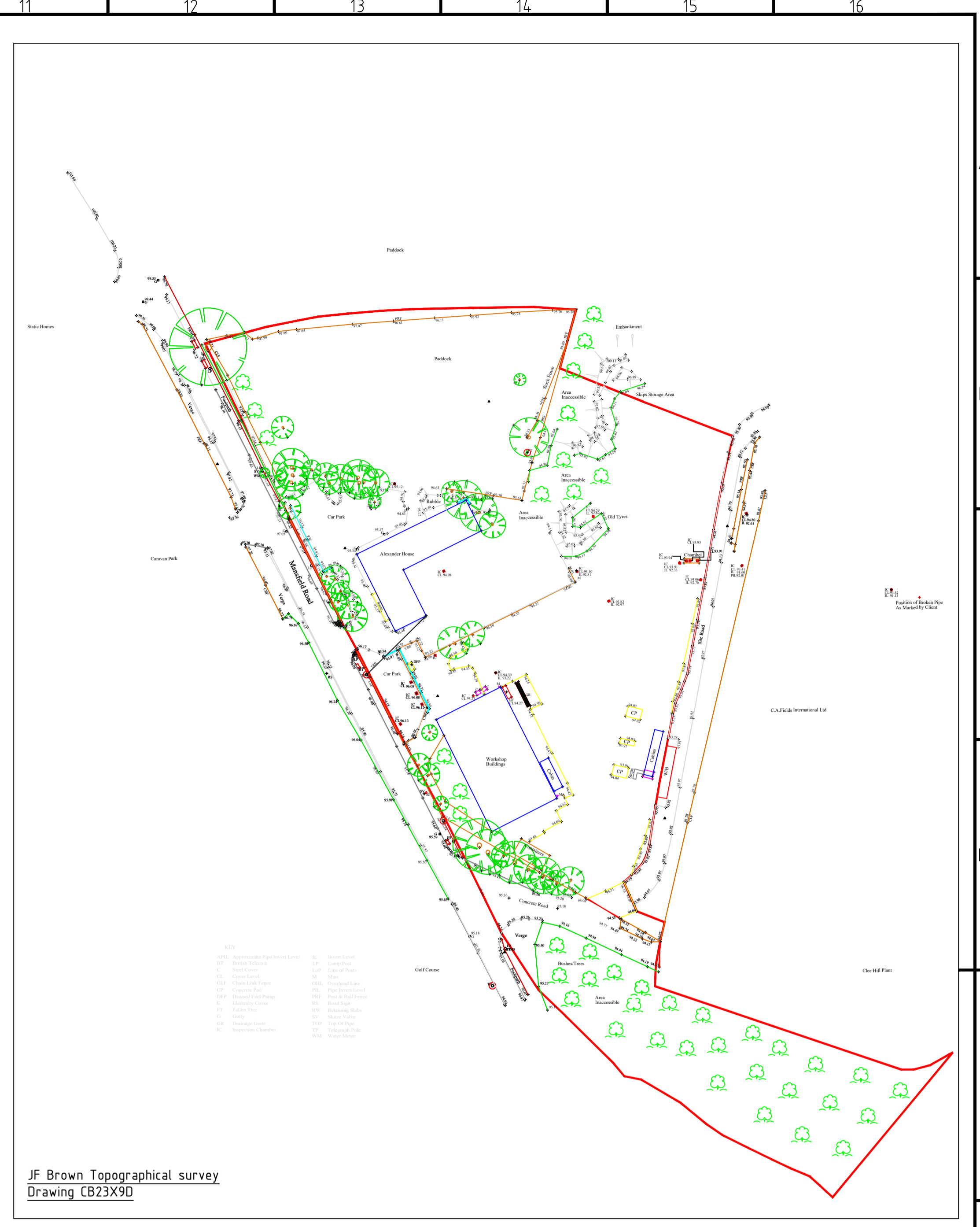
**KRONOSPAN STATUS**  
Date: 13.10.2022

STATUS	DATE	BY
DESIGNED	17.10.2022	A. Hilditch
CHECKED	30.09.2022	C. Emery
APPROVED		

**G.A. Stock piles**  
Recycling Centre, Corbriggs

Project number: 12800\_004

Index: D, Sheet/Number: 1/2



**Legend**

- Perimeter fence - Linear: 557m  
Area : 16,450m²
- Purchased land boundary
- Quarantine area & overnight parking for HGV & mobile plant
- Processing plant
- Overnight parking for HGV & mobile plant

**KRONOSPAN STATUS**  
Date: 17.10.2022

STATUS	MANU/ISSUED
KRONOSPAN	YYYY-MM-DD
YYYY-MM-DD	YYYY-MM-DD
DISTRIBUTION	DATE APPROVAL
YYYY-MM-DD	YYYY-MM-DD
CERTIFIED	YYYY-MM-DD

## PHASE 2

E	Stock pile layout	17.10.2022	A. Hilditch	
D	Purchase land boundary updated	10.10.2022	A. Hilditch	
C	Position of purchase land boundary updated	07.10.2022	M. Welch	
B	Paddock concrete wall amendment	06.10.2022	A. Hilditch	
A	Paddock concrete wall amendment	03.10.2022	A. Hilditch	
Index	Modification	Date	Name	

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Sub Category: Division

Project leader	31.05.2022	J. Arkley	A1	
Drawn	31.05.2022	A. Hilditch	origin	
Checked	30.09.2022	C. Emery		
Project number		Project name		
Description <b>G.A. Stock piles Recycling Centre, Corbriggs</b>				
Drawing number	<b>12800_004</b>			
Index		Sheet/Number		
E		1/2		

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