

Caulmert Limited

Engineering, Environmental & Planning
Consultancy Services

Knottingley Waste to Resource Facility

FCC Recycling (UK) Limited

Environmental Permit Variation Application

Fire Prevention Plan

Prepared by:

Caulmert Limited

Office: Strelley Hall, Main Street, Strelley, Nottingham, NG8 6PE

Tel: 01773 749 132

Email: andystocks@caulmert.com

Web: www.caulmert.com

Document Reference: 5827-CAU-XX-XX-RP-V-0312.A0.C2

December 2025



APPROVAL RECORD

Site: Knottingley Waste to Resource Facility

Client: FCC Recycling (UK) Limited

Project Title: Environmental Permit Variation Application

Document Title: Fire Prevention Plan

Document Ref: 5827-CAU-XX-XX-RP-V-0312.A0.C2

Report Status: **Final**

Project Manager: Andy Stocks

Caulmert Limited: Strelley Hall, Main Street, Strelley, Nottingham, NG8 6PE

Author	Jennifer Chukwuma Senior Environmental Consultant	Date	19/06/2025
Reviewer	Andy Stocks Director of Environmental Permitting	Date	08/07/2025
Approved	Andy Stocks Director of Environmental Permitting	Date	08/07/2025

Revision Log			
Revision	Description of Change	Approved	Effective Date
C1	Initial Release of Document	AS	14/08/2025
C2	Resubmission of Document	AS	29/12/2025

DISCLAIMER

This report has been prepared by Caulmert Limited with all reasonable skill, care and diligence in accordance with the instruction of the above named client and within the terms and conditions of the Contract with the Client.

The report is for the sole use of the above named Client and Caulmert Limited shall not be held responsible for any use of the report or its content for any purpose other than that for which it was prepared and provided to the Client.

Caulmert Limited accepts no responsibility of whatever nature to any third parties who may have been made aware of or have acted in the knowledge of the report or its contents.

No part of this document may be copied or reproduced without the prior written approval of Caulmert Limited.

Fire Prevention Plan**TABLE OF CONTENTS**

1.0	INTRODUCTION	1
1.1	Overview	1
1.2	Fire Prevention Plan.....	1
1.3	Fire and Emergency Information Box	2
1.4	Staff Training.....	2
1.5	Reviewing the Fire Prevention Plan.....	3
2.0	SITE LOCATION & SURROUNDINGS	4
2.1	Site Location.....	4
2.2	Sensitive Receptors.....	5
2.3	Meteorological Setting	6
3.0	SITE ACTIVITIES	8
3.1	Overview	8
3.2	Combustible Wastes	8
3.3	Storage Arrangements.....	8
3.4	Waste Electrical & Electronic Equipment (WEEE).....	9
3.5	Persistent Organic Pollutants	9
3.6	Hazardous Wastes	9
3.7	Gas Cylinders, Fuels & Lubricants	9
4.0	MANAGING COMMON CAUSES OF FIRE	10
4.1	Arson.....	10
4.2	Plant and Equipment	10
4.3	Re-fuelling of Plant and Equipment.....	11
4.4	Electrical Faults including Damaged or Exposed Electrical Cables	11
4.5	Smoking On-Site Policy	11
4.6	Hot Works Safe-Working Practices.....	12
4.7	Industrial Heaters	12
4.8	Hot Exhausts and Engine Parts	12
4.9	Ignition Sources	12
4.10	Batteries.....	12
4.11	Batteries in End-of-Life Vehicles	13
4.12	Leaks and Spillages.....	13
4.13	Build-Up of Loose Combustible Waste	14
4.14	Reaction Between Incompatible Wastes/Materials.....	14
4.15	Waste Acceptance and Deposited Hot Loads.....	15
4.16	Hot and Dry Weather.....	15
5.0	PREVENTING SELF-COMBUSTION.....	17
5.1	Overview	17
5.2	Managing Storage Times	17

5.3	Monitoring and Control of Temperature.....	18
5.4	Waste Bale Storage.....	19
5.5	Waste ELV bales.....	19
6.0	MANAGING WASTE PILES – STORING MATERIALS IN THEIR LARGEST FORM.....	20
6.1	Maximum Pile Sizes	20
6.2	Storing Waste Materials in Their Largest Form	20
7.0	WHERE MAXIMUM PILE SIZES DO NOT APPLY.....	21
7.1	Whole ELVs	21
7.2	Compost Production	21
7.3	Waste Stored in Containers.....	21
8.0	PREVENTING FIRE SPREADING.....	22
8.1	Separation Distances	22
8.2	Fire Walls and Bays	22
9.0	QUARANTINE AREA.....	24
9.1	Quarantine Area	24
10.0	DETECTING AND SUPPRESSING FIRES.....	25
10.1	Detecting and Suppressing Fires.....	25
11.0	FIRE-FIGHTING	31
11.1	Fire-Fighting Techniques.....	31
12.0	WATER SUPPLIES	32
12.1	Water Supply Requirements for Worst-Case Scenario.....	32
12.2	Summary of Available Water Supplies.....	33
13.0	MANAGING FIRE WATER	35
13.1	Containment	35
13.2	Groundwater Vulnerability	35
14.0	DURING A FIRE – ACTION PLAN	36
14.1	Immediate Fire Incident Response	36
14.2	Additional Actions During a Fire	36
14.3	Site Access and Water Supplies	37
14.4	Role of Site Manager/Fire Marshall.....	37
14.5	Out of Hours Fire Response	37
14.6	Engagement with Neighbours and Receptors	38

15.0 AFTER A FIRE..... 39

 15.1 Site Clean-Up 39

16.0 REFERENCES 40

DRAWINGS

5827-CAU-XX-XX-DR-V-1800	Sensitive Receptor Plan
5827-CAU-XX-XX-DR-V-1804	Permit Boundary Plan
5827-CAU-XX-XX-DR-V-1806	Fire Prevention Plan Waste Processing 03 Building

FIGURES

Figure 1:	Site Location in red (map source: Google Earth 2024)
Figure 2:	Normanton weather station wind statistics – average wind direction & strength 2013-2025.
Figure 3:	Water cannons: Risk zone dimensions within the building.
Figure 4:	Water cannons – early warning heat detection scope
Figure 5:	Water cannons: pump station location
Figure 6:	Water Figure cannons: scope of targeted suppression
Figure 7:	Water cannons: suppression system pipe run plans
Figure 8:	Water Cannons: proposed pump station pad dimension.

TABLES

Table 1:	Summary of Sensitive Receptors (particularly to the proposed RDF preparation activity) within 1km site radius of the site boundary
Table 2:	Maximum Storage Times of Waste Materials

APPENDICES

Appendix 1	Nature and Heritage Conservation Screen
------------	---

1.0 INTRODUCTION

1.1 Overview

- 1.1.1 FCC Recycling (UK) Limited ('the Operator' and wholly owned subsidiary of FCC Environment (UK) Limited) have appointed Caulmert Limited to prepare a bespoke environmental permit variation application for permit ref. EPR/JP3547JL to allow a number of additional activities at the Knottingley Waste to Resource Facility on Weeland Road, Knottingley, West Yorkshire, at postcode WF11 8DZ (hereafter referred to as 'the Site').
- 1.1.2 FCC Recycling (UK) Limited currently operates the Knottingley Waste to Resource Facility which undertakes the storage, transfer, treatment and recovery of predominately industrial wastes. The Site is located in Knottingley occupying a site with a history of chemical processing, in particular coal tar and related products from the mid-Victorian era onwards. The Site is within a larger area previously occupied by coal tar processing activities (to the East and West) now a mix of industrial and low-grade agricultural land. The Bank Dole Cut and Lock (part of Aire and Calder Navigation canal) and the River Aire lies to the North, and the A645 to the South. Approximately 300m to the West, over the canal, lies an Industrial area including a glassworks beyond which are domestic properties.
- 1.1.3 It is proposed to add new activities to the permit for the Site which involves Refuse Derived Fuel (RDF) preparation, waste processing, leachate and aqueous wastes treatment, physico-chemical treatment of aqueous and inorganic wastes (inc. solids and sludge), metals and inorganic salts recovery (inc. precipitation reactions), drying and temporary storage of hazardous wastes.
- 1.1.4 The proposed RDF preparation activity involves the importation, storage and processing of combustible wastes within the Waste Processing 03 building, including any incidental combustible packaging waste generated by other site activities which will be directed to, stored and processed within the Waste Processing 03 building. Therefore, in accordance with Environment Agency (EA) guidance, this Fire Prevention Plan (FPP) has been prepared to cover only the Waste Processing 03 building where combustible waste will be stored and processed at the Site.

1.2 Fire Prevention Plan

- 1.2.1 This Fire Prevention Plan forms parts of the site's management system and sets out the fire prevention measures and procedures in place for the Waste Processing 03 building. During an incident, the Fire Prevention Plan will be made available to the Fire & Rescue Service.
- 1.2.2 This Fire Prevention Plan (FPP) has been compiled in accordance with:
- Environment Agency (EA) guidance 'Fire prevention plans: environmental permits' (last updated January 2021).

- Waste Industry Safety & Health Forum (WISH) 'Reducing Fire Risk at Waste Management Site' Version 3 (dated March 2020).

1.2.3 This FPP has been prepared in order to identify the potential fire risks associated with the temporary storage and processing of combustible non-hazardous wastes within concrete storage bays of the Waste Processing 03 building on site. Appropriate methods of fire control and a suppression system will be employed with emphasis on fire prevention, detection, suppression, containment and potential fire mitigation techniques. This FPP provides guidance for the prevention and management of potential waste fires in the Waste Processing 03 building and to minimise the impact of a fire on the overall site and environment.

1.2.4 The fire prevention measures in this FPP have been written to meet the 3 objectives detailed in the EA Guidance:

- Minimise the likelihood of a fire happening;
- Aim for a fire to be extinguished within 4 hours;
- Minimise the spread of a fire within the site and to neighbouring sites.

1.3 Fire and Emergency Information Box

1.3.1 A 'Fire and Emergency Information Box' will be placed at the site entrance/main weighbridge building which will contain the following key information for FCC staff and the Fire & Rescue Service:

- Copy of the Fire Prevention Plan (this document);
- FCC Emergency Management Plan;
- Emergency Site Plan;
- The Waste Processing 03 layout drawings showing the locations of water supplies and fire extinguishers;
- Information relating to the RDF preparation operation;
- Information relating to the mobile plant and vehicles for the RDF operation;
- Contact details for key staff/site management.

1.4 Staff Training

1.4.1 All staff and contractors involved in the operation of the Waste Processing 03 building will undergo thorough site inductions and training to understand the contents of the Fire Prevention Plan so they are aware of what they must do to prevent a fire happening and during a fire if one breaks out.

1.4.2 There will be regular exercises to test how well the Fire Prevention Plan works and ensure that relevant site staff know what to do. The exercises will cover different scenarios to ensure all elements of the plan work and are up to date. This will be done at a minimum 6 monthly interval. The exercise when conducted on site will incorporate all emergency procedures e.g. fire drills and the emergency management plan.

- 1.4.3 Fire Marshall training will be provided to the appropriate staff to include safe use and deployment of fire extinguishers on small fires and procedures to call for assistance from the Fire & Rescue Service.
- 1.4.4 The documented management systems will include training requirements for all relevant staff which cover awareness of the Fire Prevention Plan for the activity and their work activities.
- 1.4.5 Training will also cover awareness of all potential effects from the RDF preparation under normal and abnormal circumstances with respect to fire, the awareness of the need to report deviation from the Fire Prevention Plan, and prevention of accidents and actions to be taken when accidents occur. The potential risks posed by the work of contractors should also be assessed and instructions provided to contractors about fire prevention while working on site, including the use of work permits. Where industry standards or codes of practice for training exist, they should be complied with.
- 1.4.6 Records of fire drills and fire training will be made as per the site's Environmental Management System training schedules and records. A record will also be made of any comments including suitability of the Fire Prevention Plan and actions required to improve the Fire Prevention Plan to suit the operations of the site.

1.5 Reviewing the Fire Prevention Plan

- 1.5.1 This FPP will be kept under regular review and will be treated as a working document. It will be updated when there are changes such as (but not limited to): new mobile plant & equipment, new waste streams added to the permit, an increase in waste annual throughput, following a fire incident, changes in operations and changes in management systems or procedures.

2.0 SITE LOCATION & SURROUNDINGS

2.1 Site Location

2.1.1 The Site is located in Knottingley, West Yorkshire. It is centred on National Grid Reference SE 51279 23861 and postcode WF11 8DZ. The main site entrance is accessed from Weeland Road on the southern boundary.

2.1.2 The site is within a semi-rural and residential location. The residential areas of Knottingley are primarily situated southwest of the site. The closest residential areas to the site are along Weeland Road, The Croft, Springfields Avenue, and Broomhill Avenue. Fernley Green Industrial Estate encompasses the area immediately west of the site boundary and extends northwest. Willow Garth Nature Reserve extends immediately northeast. Approximately 1 km of open countryside abuts the northern and southern boundaries of the site. To the north, the site is bordered by the Bank Dole Cut and Lock, a section of the Aire and Calder Navigation Canal and Lock, as well as the River Aire. To the south, it is adjacent to the A645 road.

2.1.3 The site location is shown below in Figure 1 outlined in red:



Figure 1: Site Location in red (map source: Google Earth 2024)

2.2 Sensitive Receptors

- 2.2.1 A sensitive receptor search was conducted of the surrounding area within a 1km radius of the site boundary using Defra's Magic Maps website¹ and the sensitive receptors identified are listed below in Table 1 and also shown on the Sensitive Receptor Plan drawing ref. 5827-CAU-XX-XX-DR-V-1800. However, the Table 1 referred herein have been revised to show only sensitive receptors likely to be affected by the proposed RDF preparation activity.
- 2.2.2 The closest human receptors to the proposed Waste processing 03 building (for RDF preparation) are users of the A645 Weeland Road; this road abuts the southern boundary of the site, and provides access to the site. There are no hospitals located within 1km of the site, however De Lacey High School and Little Acorns Nursery are both located over 900m southwest of the site.
- 2.2.3 The nearest residential receptors to the site are houses in the residential area of 148 Weeland Road, located 290m SE of the site, as well as Low Green, situated 384m west of the site. The majority of the area located west of the site within the 1km radius is residential. These areas include Fernley Green Close (481m WNW), Springfields Avenue (485m WSW), Marsh End (501m WNW), Broomhill (559m SW), Lamb Inn Road (581m W), and The Croft (873m WNW). Knottingley cemetery is located 822m southwest of the site boundary, and Knottingley RUFC is located 453m west-northwest of the site boundary.
- 2.2.4 Fernley Green Industrial Estate is located 187m west of the site, comprised of business including Delta MOT and Service Centre Ltd, Beepers Ltd, Allied Glass Group Ltd, Hirst Boatbuilders Ltd, A1 Building Supplies Ltd, and Gillian and Baines Ltd. These are, however, industrial, and commercial receptors and less sensitive to emissions such as noise, vibration, and odour. However, it should be noted that the Brick Box Ltd also operates from Fernley Green Industrial Estate and provides children's party services (located 364m NW from site boundary).
- 2.2.5 The site is not located within a Source Protection Zone (SPZ), with the closest, a Zone I, located 1.63km northwest of the site. The site is located on a Secondary B Aquifer within the bedrock below the site (Roxby Formation - mudstone and siltstone) and a Secondary A Aquifer within the superficial geology, which consists of a combination of Alluvium (clay, silt, sand, and gravel) and Brighton Sand Formation (sand).
- 2.2.6 While some areas of the Knottingley Waste to Resource Site fall within high-flood risk zones according to the GOV.UK Flood Risk Maps website², the site layout has been designed to avoid these areas, including, where necessary, relocating some of the project elements of the proposed waste activities from flood-risk zones to areas identified as low risk. The Waste Processing 03 building does not sit within a flood risk zone.

¹ DEFRA Magic Maps 2022: <https://magic.defra.gov.uk/MagicMap.aspx>

² [Map – Flood map for planning – GOV.UK](#)

- 2.2.7 A search of the surrounding area using the DEFRA Magic Maps website has established there are no National Nature Reserves (NNRs) within 1km of the site: the closest is Humberhead Peatlands NNR, over 24km southeast of the site. According to the EA Conservation Screen Report (Appendix 1) there are 2 Local Wildlife Sites (LWS), up to 2 protected species and 2 protected habitats within 2km of the site.
- 2.2.8 There are no Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Local Nature Reserves (LNRs), National Nature Reserves (NNRs), Ramsar sites or Areas of Outstanding Natural Beauty (AONBs) within 2km of the site. The closest SSSI is located over 7km to the northwest of the site. The closest AONB is The Nidderdale AONB located over 50km to north-northwest of the site.
- 2.2.9 The sensitive receptors identified within 1km of the site boundary are presented in Table 1 below:

Table 1: Summary of Sensitive Receptors (particularly to the proposed RDF preparation activity) within 1km site radius of the site boundary

Receptor	Type	Distance/Direction
Secondary A Aquifer (Superficial Deposits)	Groundwater	Below Site
Secondary B Aquifer (Bedrock)	Groundwater	Below Site
Users of A645 Weeland Road	Commercial / Industrial	<10m S
Fernley Green Industrial Estate	Commercial / Industrial	187m W
Industrial Units	Commercial / Industrial	231m SW
Caddick Construction Ltd	Commercial / Industrial	320m ESE
Low Green	Residential	384m W
Knottingley RUFC	Commercial / Recreational	453m WNW
Fernley Green Close	Residential	481m WNW
Springfields Avenue	Residential	485m WSW
Marsh End	Residential	501m WNW
Broomhill	Residential	559m SW
Lamb Inn Road	Residential	581m W
Knottingley Cemetery	Residential	822m SW
The Croft	Residential	873m WNW
Little Acorns Nursery	Commercial	900m SW
De Lacey High School	Commercial	1000m SW
148 Weeland Road	Residential	290m SE

2.3 Meteorological Setting

- 2.3.1 Fugitive emissions from a fire such as smoke, dust/ash, odour, and noise from the site are likely to be affected by local weather conditions, in particular by wind direction. Wind statistics observed from Normanton weather station, approximately 12km to the west-southwest and is the closest weather station actively recording wind statistics, are considered to be representative of the typical conditions at the site (Figure 2 below).

2.3.2 A review of the wind statistics recorded daily between April 2013 and April 2025 on the Windfinder.com³ website indicates that the most dominant wind direction is from the west-southwest towards the east-northeast. With reference to Table 1 above, predominant annual wind conditions are likely to blow towards the Willow Garth Nature Reserve and the River Aire to the northeast.

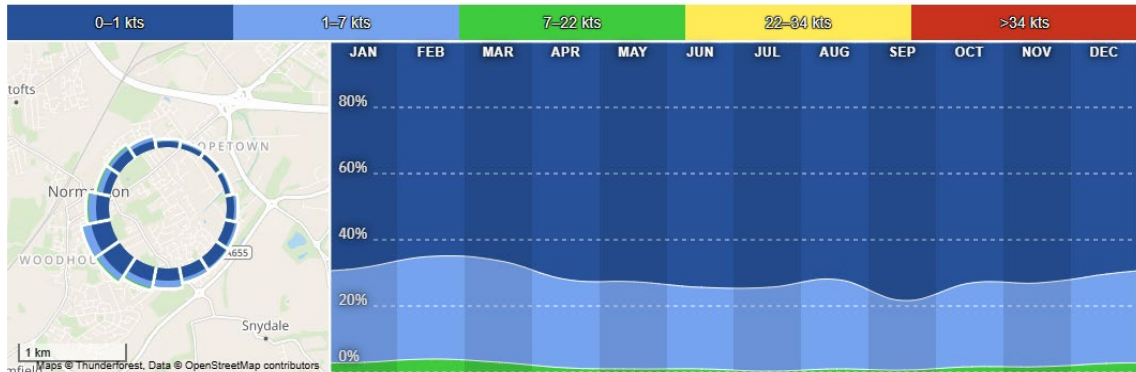


Figure 2: Normanton weather station wind statistics – average wind direction & strength 2013 - 2025.

³ <https://www.windfinder.com/windstatistics/normanton>

3.0 SITE ACTIVITIES

3.1 Overview

- 3.1.1 It is proposed to add new activities to the permit for the site which involves Refuse Derived Fuel (RDF) preparation, packaged waste processing, leachate and aqueous wastes treatment, physico-chemical treatment of aqueous and inorganic wastes (inc. solids and sludge), metals and inorganic salts recovery (inc. precipitation reactions) and temporary storage of hazardous wastes.
- 3.1.2 In addition to combustible waste delivered directly to the Waste Processing 03 building for processing into RDF, any incidental combustible packaging waste arising from other site activities will also be directed to, stored and processed within the Waste Processing 03 building.

3.2 Combustible Wastes

- 3.2.1 The Environment Agency (EA) requires a Fire Prevention Plan (FPP) for sites where operators accept potentially combustible wastes. This FPP covers combustible wastes to be accepted and stored within the Waste Processing 03 building as part of the waste pre-acceptance and waste acceptance activities and these wastes are non-hazardous.
- 3.2.2 The type of combustible wastes to be accepted into the proposed RDF activity within the Waste Processing 03 building will mostly be mixed industrial and commercial wastes, including packaging wastes for the purpose of RDF preparation prior to recovery or transfer off-site.
- 3.2.3 The EA Fire Prevention guidance does not apply to the storage of hazardous wastes (excluding WEEE, but including hazardous waste batteries), dangerous substances stored under the Control of Major Accident Hazards (COMAH) Regulations, liquids or healthcare wastes.

3.3 Storage Arrangements

- 3.3.1 The proposed layout drawing for the Waste Processing 03 building is shown in attached FPP Waste Processing 03 Building (ref. 5827-CAU-XX-XX-DR-V-1806).
- 3.3.2 The proposed Waste Processing 03 building will have three operational waste bays for the storage of all waste to reduce the risks associated with fire. Each bay will have the following dimensions:
- Total Bay dimension – 10m wide x 10m long x 4m high push walls
 - Effective bay waste capacity – approx. 300m³
 - Push walls – 4m high – reinforced concrete.
- 3.3.3 Waste will be stored no higher than 3m high, providing a 1m freeboard above each waste pile, with the 3m level marked out on the bay wall.

3.3.4 The typical volumes to be accepted at the site may fluctuate depending on the season and quantities of waste received but will remain within the permitted limits.

3.3.5 There will be one 40-yard (approx. 31m³) skip located within the Waste Processing 03 building for non-conforming items/general litter which will only be used for non-hazardous incidental/litter waste and not a specific storage area for incoming waste, therefore it will likely be empty most of the time. The skip will be placed on impermeable concrete flooring and will be at least 6m away from other combustible materials and able to be moved by mobile plant if required. A fire extinguisher will be situated adjacent to the skip as contingency in case of fire in it.

3.4 Waste Electrical & Electronic Equipment (WEEE)

3.4.1 It is not proposed to accept Waste Electrical & Electronic Equipment (WEEE) into the Waste Processing 03 building and so this is not considered further in this FPP.

3.5 Persistent Organic Pollutants

3.5.1 There are no proposals to accept waste containing Persistent Organic Pollutants (POPs).

3.6 Hazardous Wastes

3.6.1 Hazardous wastes are not covered by the EA Fire Prevention Plan requirements. It is not proposed to accept any hazardous wastes into the Waste Processing 03 building and so this is not considered further in this FPP.

3.7 Gas Cylinders, Fuels & Lubricants

3.7.1 It is not proposed to accept gas cylinders into the Waste Processing 03 building, however if these are encountered as non-conforming waste items within a waste load, they will be pulled out and moved to a lockable cage for safe storage prior to removal off-site.

3.7.2 Fuel oil will be stored in the existing bunded fuel tank situated on impermeable concrete pavement close to the reception area (see Permit Boundary Plan 5827-CAU-XX-XX-DR-V-1804 for details).

3.7.3 Refuelling will only occur in the designated refuelling area, on impermeable surfacing by trained staff and spill kits will be readily available and replenished once used. When not in use, the fuel tank will be locked, with 24/7 CCTV surveillance.

4.0 MANAGING COMMON CAUSES OF FIRE

4.1 Arson

- 4.1.1 Security measures are in place to prevent unauthorised access to the site, including the Waste Processing 03 building which is restricted to staff-only access. The site boundary is surrounded by 2m high palisade (or similar) metal security fencing, and the site entrance/exit gates are lockable. The gates will be closed and locked outside of operational hours, with no unauthorised access.
- 4.1.2 The integrity of the security fencing and gates are inspected daily and at the end of each working day. Any defective locks or damaged fencing or gates will be repaired as soon as practically possible. The site is operational 24/7, waste will be stored 24/7 and vehicles may be loading 24/7 where required.
- 4.1.3 The site operates an existing CCTV system across the facility 24/7, 365 days a year, which will be extended to cover the Waste Processing 03 building. This will include external and internal cameras (i.e., within and outside the buildings). The CCTV is connected to a monitoring system which alerts Site Management to a site incident, including fire, during out of hours. During periods when staff are on-site, the CCTV will relay to the main office (this will be accompanied by a remote access available on mobile devices). In other periods when the site is not manned, the CCTV will be routed to an off-site monitoring facility managed by a third-party.
- 4.1.4 Inside the Waste Processing 03 building, an Addressable 1Zone Fire Alarm Systems Panel with connection to Third Party /ARC (Alarm Receiving Centre through Dualcom, or any such transmitting System) will be provided along with appropriate number of Flashing Sounder Beacons, with One Flashing Sounder Beacon on the front facade of the proposed building visible from a distance.
- 4.1.5 The exact location of the CCTV cameras will be confirmed upon completion of the building infrastructure, however the Operator confirms there will be adequate cameras to monitor all the activities within and outside the Waste Processing 03 building.
- 4.1.6 There will also be thermal Imaging cameras and a water cannon fire suppression system for the bays and internal vehicle movement area within the Waste Processing 03 building. There will also be a deluge watermist system for the shredder/hopper area.
- 4.1.7 Associated cannons water storage tank and pumphouse, including a small water storage tank and pumphouse for the deluge watermist system will be provided. Tanks and pumphouses will be installed on concrete plinth bases if the installation areas are not already concreted.

4.2 Plant and Equipment

- 4.2.1 The following equipment are to be used within the RDF preparation activity:
- CAT 950 loading shovel or similar within the building;

- Forklift truck to deliver waste from reception to Waste Processing 03 building and other areas of the site;
- Shredder – electric powered (2nos. shredder locations are proposed in the proposed building - one to be used at the start of operation, with the option of a second shredder that may be added in the future).

4.2.2 All plant and mobile equipment will undergo regular inspection, staff will be trained to identify any leaks or damage and report any faults to site management immediately so remedial actions can be scheduled. At the beginning of every plant operator's shift, the plant or vehicle will be inspected prior to workers starting their shift and they will be trained to report any defects to site management.

4.2.3 All mobile plant will be fitted with a fire extinguisher, and any plant that are not being used will be safely parked at least 6m away from any combustible materials. Out of hours mobile plant will be parked within the building for security, ensuring they are at least 6m away from any combustible materials and undergo a minimum 30-minute cool-down period after prolonged use which is overseen by trained site operatives.

4.3 Re-fuelling of Plant and Equipment

4.3.1 All refuelling of mobile plant/equipment used for the RDF preparation operations will be undertaken on impermeable concrete pavement by trained staff using a diesel tank and pump, which is stored in the middle of the Site with secondary containment, away from combustible materials. Spill kits will be stationed at spill-prone areas within the Waste Processing 03 building, and only trained site staff will undertake refuelling duties to minimise the risk of spillages.

4.4 Electrical Faults including Damaged or Exposed Electrical Cables

4.4.1 All electricals in the building will be regularly inspected and cables which provide power for general plant, roller shutter doors and lighting will be inspected to ensure there are no broken or exposed wires. Any defects will be reported immediately to site management, and remedial actions will be scheduled.

4.4.2 Any electrical works that are required will be carried out by a fully certified electrician, certified by NICEIC and are inspected 3 yearly. Portable appliances are tested annually.

4.5 Smoking On-Site Policy

4.5.1 To prevent and reduce the risk of fires as a result of discarded smoking materials, the site will operate a strict '**no smoking**' policy, and signs will be displayed around the site.

4.5.2 As part of the site induction, staff, visitors and contractors will be advised and made aware of the '**no smoking policy**' enforced on site and be directed to a suitable designated smoking area.

4.6 Hot Works Safe-Working Practices

- 4.6.1 Any hot works such as welding or cutting undertaken by staff or contractors are done with a suitable risk assessment and safe working procedure in place. Hot works undertaken by contractors are done under a Permit to Work and a fire watch is set for a minimum of 30 minutes after work has been completed with a final check after 120 minutes.
- 4.6.2 Due to the nature of the RDF preparation activity, no hot works such as welding and or cutting is anticipated to be carried out as routine within the designated building.

4.7 Industrial Heaters

- 4.7.1 Industrial heaters are kept away from combustible materials, must not be covered and are switched off during non-operational hours. They are regularly maintained and inspected.
- 4.7.2 Industrial heaters are not anticipated to be utilised in the Waste Processing 03 building.

4.8 Hot Exhausts and Engine Parts

- 4.8.1 Mobile plant exhausts and engine surfaces can become hot and dust settling on these surfaces can cause a fire risk. As part of the site operations, 30 minutes before the end of shift or site closure all mobile plant will undergo a 'cooling period' where they are moved to the designated plant parking area at least 6m away from combustible materials and allowed to cool down.
- 4.8.2 A visual check will be carried out at regular intervals during the working day by site operatives to identify any signs of a fire caused by dust settling on hot exhausts and engine parts. At the end of the working day, a record will be made of the plant with details of visual inspections made. Where necessary, any build-up of dust and debris will be wiped down. All records will be made in FCC's EcoOnline database.

4.9 Ignition Sources

- 4.9.1 Naked flames, such as those from welding works (e.g. building maintenance or other) or generators, will be kept at least 6m away from any combustible or flammable wastes.
- 4.9.2 No industrial heaters, incinerators, or furnaces are to be used in the RDF preparation activity.
- 4.9.3 The site operates a '**no smoking**' policy throughout the site, and so no naked flames will arise from this.

4.10 Batteries

- 4.10.1 Following confirmation of wastes containing batteries (e.g., lead and Ni-Cd batteries) onto Site, these will be manually separated, placed in a secure battery box provided on site or re-packaged for recovery or transfer off-site, whichever is deemed best practice by the Operator.

However, it is very unlikely that batteries will be found within the waste materials allocated for RDF preparation having undergone waste segregation and checks prior to delivery.

4.10.2 If batteries are found within waste component parts/packaging, to prevent the risk of fire caused by incorrect disposal or damage of batteries, the batteries will be stored in a weather-proof battery box under cover. If batteries are damaged, they will be isolated and stored away from the building and away from other combustible materials. The damaged batteries will be stored in a weatherproof container filled with sand or similar inert material until they can be removed from Site.

4.11 Batteries in End-of-Life Vehicles

4.11.1 No batteries from ELVs will be accepted for the RDF preparation operation and are not expected to be in the overall proposed incoming waste types.

4.12 Leaks and Spillages

4.12.1 As part of the environmental management system (EMS), in the event of a potentially polluting leakage or polluting spillage taking place, immediate remedial actions will be carried out. These will be undertaken by trained site staff, wearing personal protective clothing and using suitable spill kits to isolate the spill and clean it up. Any hazardous spillages will be contained and the used spill kit materials (e.g., booms, spill pads, granules) disposed of as hazardous waste. Spill kits will be replenished as appropriate after an incident.

4.12.2 All vehicles used on site, including those for the RDF preparation operation, shall undergo regular maintenance and daily checks to ensure they are in good working order to prevent any fuel or lubricant leaks from site vehicles.

4.12.1 The RDF preparation operational areas will have an impermeable concrete surfacing with sealed drainage to ensure that the potential for leaks and spillages of potentially hazardous substances to the surrounding environment is minimised, and which will be maintained in good working order, free of damage, cracks or holes, as per the management system for the site.

4.12.2 External areas of the Waste Processing 03 building, including the roof will be connected to the site-wide drainage system where water will flow through sealed drainage, including from all hardstanding areas, and directed to a series of sealed interceptors. This provides opportunity to isolate any external firewater or spillage and allows for this to be collected and tankered off-site in the event of an incident.

4.12.3 Separately, the interior of the Waste Processing 03 building will be designed to retain approx. 100m³ of water from the cannons, aided by the sleeping policeman located at the entrances to hold this water (i.e., fire water) in the event of a fire, with the concrete sidewalls of the building acting as a barrier to prevent water from escaping into the surrounding environment. Contained firewater can then be pumped out and after analysis, either treated on-site or tankered off-site for further treatment.

- 4.12.4 All refuelling of mobile plant/equipment used for the RDF preparation operations will be undertaken on impermeable concrete pavement by trained staff using a diesel tank and pump, which is stored in a secure location with secondary containment away from combustible materials. Spill kits will be stationed all spill-prone areas within the Waste Processing 03 building, and only trained site staff will undertake refuelling duties to minimise the risk of spillages.
- 4.12.5 Fuels and oils/lubricants stored on site for plant refuelling and maintenance will be within containers that have secondary containment, and stored within the lockable area/shed, situated on the impermeable site surfacing with sealed drainage.
- 4.12.6 As part of daily site checks, staff will confirm that the site is clear of any leaks or spillages, and if any is identified during this check, remedial actions will be carried out and recorded in FCC's EcoOnline database. Site vehicles and plant are subject to regular inspection and maintenance.

4.13 Build-Up of Loose Combustible Waste

- 4.13.1 Good housekeeping, cleaning and maintenance of the site and mobile plant and equipment will prevent the build-up of loose combustible wastes. Visual daily site checks will be completed to monitor any dust, debris or waste accumulation, plant exhausts or hot surfaces and will be cleaned immediately. A daily site inspection by trained site staff will check for any build-up or accumulation of dust or debris and remedial actions carried out as appropriate and recorded on FCC's EcoOnline database.

4.14 Reaction Between Incompatible Wastes/Materials

- 4.14.1 No hazardous, reactive or volatile wastes will be accepted within the Waste Processing 03 building for processing. Only non-hazardous wastes, as per the new waste list under this permit variation application will be accepted.
- 4.14.2 The site will operate according to the waste pre-acceptance and acceptance procedures, waste receipt and control procedures, and waste consolidation operational procedures, as detailed in the site's environmental management system (EMS). The waste acceptance and storage procedures at the site will ensure that all wastes are inspected to identify any non-conforming wastes.
- 4.14.3 In the event that a non-conforming waste is brought into the Waste Processing 03 building, the designated Quarantine Area shown on FPP Waste Processing 03 Building (ref. 5827-CAU-XX-XX-DR-V-1806) will be utilised to ensure that such waste is segregated away, and a Fire Watch (Section 5.3.3 below) will be carried out regularly and at the end of each working day. The non-conforming waste will be removed from site as soon as practicable.
- 4.14.4 As part of daily site checks, trained site staff will ensure that the RDF waste storage bays are inspected for any signs of smoking, smouldering or heat prior to the work closure each working

day. These will also be continuously monitored by the water cannons system for any hot spots within the waste pile.

4.15 Waste Acceptance and Deposited Hot Loads

4.15.1 No hot loads will be accepted for the RDF preparation operation and are not expected to be in the overall proposed incoming waste types. However, six fire extinguishers will be stationed in the areas listed below within the Waste Processing 03 building which will be utilised should a hot load of non-hazardous waste be found:

- By the pedestrian access door located south of the Waste Processing 03 building, adjacent to the Quarantine Area;
- By the pedestrian access door located east of the Waste Processing 03 building;
- Close to the skip on the situated west of the proposed building;
- Within the Shredder platform area;
- Around the Roller Shutter door located north of the proposed building (still within the shredder platform area);
- In the control room 3 area.

4.15.2 Site staff are trained to watch for and identify any potential fires e.g. smoke/steam coming from incoming wastes and daily visual checks will be regularly carried out on waste loads, with any identified as burning or smouldering being segregated and moved to the Site's Quarantine Area by mobile plant. These wastes will then be dealt with, either by spreading them out to cool the waste or utilising the on-site fire extinguishers and/or water as required to extinguish any fire. Any firewater or leachate produced will be contained on the impermeable surfacing of the Site's Quarantine Area with sealed drainage.

4.15.3 Should any hot loads be unloaded within the Waste Processing 03 building and moved to the Quarantine Area located inside the same building, this waste will be inspected as part of daily site checks and recorded in FCC EcoOnline database, to ensure that the waste is cooled, no longer smoking/smouldering and is safe to move.

4.16 Hot and Dry Weather

4.16.1 The wastes for the RDF preparation activity will be stored within any of the 300m³-capacity storage bays inside the proposed building, and therefore sheltered from direct sunlight and heat or wind. This will prevent or reduce the potential for the drying and external heating of stored wastes by the weather.

4.16.2 As a precaution, to prevent and check for any external heating of waste during hot and dry weather, all stored combustible wastes will be subject to regular inspections.

- 4.16.3 All wastes will be stored for the minimum storage time possible, and waste operations will be performed so that all incoming waste brought into the Waste Processing 03 building is processed, separated and loaded for transfer off-site, in the shortest time possible (i.e., typically within 7 days).
- 4.16.4 It is considered that the wastes to be accepted will not be significantly at risk from external heating by hot weather within the building, due to the shelter from the sun the building provides.
- 4.16.5 The water cannon system covering the bays will be continuously monitoring waste stockpiles within the building and will be activated to cool down hotspots and extinguish any waste materials showing any signs of smoking, smouldering or being actively on fire.

5.0 PREVENTING SELF-COMBUSTION

5.1 Overview

5.1.1 To minimise the risk of self-combustion, waste storage times, pile volumes, heights and temperatures are managed appropriately.

5.1.2 Self-combustion happens when a material which can self-heat generates heat at a rate faster than it can be lost to the environment. The temperature continues to rise until the auto-ignition temperature is reached and the material then self-combusts. Prevention and ultimately negating the initial fire risk is therefore given the highest priority in terms of the control of a fire. The Operator will employ a range of methods for fire prevention, and in addition to these, site staff will carry out a daily fire watch as part of the daily site inspections.

5.2 Managing Storage Times

5.2.1 To prevent self-combustion, maximum storage times of all waste materials in the proposed building will be minimised. All combustible wastes are stored for less than 3 months. Typically, within 7 days all wastes are handled and transferred on a 'first-in first-out' basis. See Table 2 for typical storage times of each waste material:

Table 2: Maximum Storage Times of Waste Materials

Waste type	How is it stored? E.g. piles, containers, bays, skips, racks, bales	Form		Max. storage time (days)	Location	Max. volume of waste pile (m ³)	Maximum size of waste pile		
		Processed; Unprocessed; shredded; baled	>150mm; 30-150mm; <30mm				Length (m)	Width (m)	Height (m)
Mixed industrial, and commercial wastes, including packaging	Stockpiles within reinforced concrete bays x4	Processed, Unprocessed, and shredded	>150mm 30-150mm <30mm	7 days	Inside the Waste Processing 03 building.	Approx max. 300 m ³ /bay	10m	10m	3m

5.2.2 As per the site's Integrated Management system (IMS) and waste acceptance procedures, all loads brought onto the site shall have the following information recorded at the weighbridge:

- Date and time of delivery.
- Name and address of waste producer.
- Description of waste types and quantity.
- Waste carrier registration number
- How the waste is contained.
- Carriers name and address.
- Driver's name, signature, and vehicle registration number (Vehicle size/type)
- Signature or initial of person(s) accepting/inspecting the waste.
- Additional handling details (e.g. notes made by the driver after inspecting the load).
- SIC code of the premises which produced the wastes (if relevant).

- Waste hierarchy declaration.
 - Information on previous treatment of the waste e.g. manual or mechanical.
- 5.2.3 The above procedure will similarly be followed for any outgoing loads of combustible wastes. This monitoring of waste will allow the operator to track all material flow through the site to ensure that storage times are not exceeded.
- 5.2.4 All waste materials will be processed on a 'first-in, first-out' principle and should it be required, mobile plant can be used to rotate stock in waste storage bays where applicable. Typically, within waste bays whole waste loads will be moved in and out as one load in one go, so this generally removes the requirement for waste rotation etc., to prevent self-heating.
- 5.2.5 Extra measures to prevent self-combustion include:
- Concrete bays acting as fire-proof walls;
 - Thermographic/Thermal Imaging Cameras automatically scanning the waste as part of the water cannon suppression system.

5.3 Monitoring and Control of Temperature

- 5.3.1 Heat is controlled within waste piles to prevent self-combustion. This will be monitored by the proposed automatic water cannon systems in the proposed building, which will continuously scan the waste piles for hotspots using infrared technology and activate the water cannons in the event of a fire/hot spot being detected by the sensors within the building. This is proven to be a quicker method of fire detection and suppression than conventional methods at waste sites, with the water cannons delivering a more targeted water supply to the fire affected area than a sprinkler/deluge system. This increases the effectiveness of dealing with deep seated fires and hotspots at the early stages of a fire, whilst reducing overall water usage and generation of firewater. This in turn minimises the risk of a fire growing and spreading and the associated collateral damage from fire and smoke.
- 5.3.2 The Waste Processing 03 building will have two fire suppression systems capable of extinguishing fire within 4 hours. The water cannon system will cover the waste storage bays and internal parts of the Waste Processing 03 building, as outlined above, while a separate deluge watermist fire system for the shredder/hopper area will be provided as an extra precaution .
- 5.3.3 Waste piles containing combustible wastes (inc. packaging, wood, cardboard, plastics etc.) will be blended and stored in 3m high piles within 4m high concrete bays and regularly inspected by trained site staff for signs of self-heating such as smoking, smouldering or indications of fire or hotspots. The largest waste piles will be up to 300m³/bay.
- 5.3.4 Waste piles will be monitored using the proposed thermographic/thermal imaging cameras linked to the water cannon fire suppression system that will be installed within the proposed building and cover the waste storage bays.

5.3.5 If temperatures within piles are detected to be increasing, the cannons will be activated. Mobile plant are also available and can be used to turn waste piles or spread them out to allow cooling, for example in the Quarantine Area.

5.3.6 All waste materials will be processed on a 'first-in, first-out' principle and wastes typically only spend up to 7 days within the waste storage bays before being transferred off-site. Therefore, it is unlikely self-heating of wastes will occur.

5.4 Waste Bale Storage

5.4.1 There is no waste bale storage proposed for the Site as part of the waste transfer activity.

5.5 Waste ELV bales

5.5.1 There is no ELV bale storage proposed for the site.

6.0 MANAGING WASTE PILES – STORING MATERIALS IN THEIR LARGEST FORM

6.1 Maximum Pile Sizes

- 6.1.1 Pile sizes of combustible wastes are managed to help prevent self-combustion and to limit the scale of a fire if one breaks out. In accordance with the EA Fire Prevention Plan guidance, wastes will be stored in stockpiles to not exceed 4 metres height, and not larger than 20m length or width (whichever is the largest) in the Waste Processing 03 building to allow access for fire-fighting operations.
- 6.1.2 Within the proposed building storage bays, waste piles will not exceed 4m high or 10m long or wide. The pile sizes will be typically 300m³/bay within the reinforced concrete bays, typically consisting of mixed industrial and commercial wastes, including waste packaging.
- 6.1.3 Non-hazardous combustible wastes such as dry recyclables and packaging waste are to be stored within the concrete bays of the proposed building which will have 4m high push walls. The stockpiled wastes will be stored no higher than 3m allowing a 1m freeboard between the top of the waste pile and the top of the concrete bay walls to prevent fire spreading between bays. There will be a painted line or other marker indicating the 3m level on the bays.
- 6.1.4 Operations will be carried out so that there is a rapid turnover of stock, typically within 7 days, which will drastically reduce the risk of 'older' material from self-heating and will practically eliminate the potential for thermal build up and self-combustion. The stored wastes will be within the proposed building which will protect the wastes from excessive heating from the sun or build-up of rainwater encouraging biodegradation and heating of materials such as cardboard.

6.2 Storing Waste Materials in Their Largest Form

- 6.2.1 Pile sizes are minimised, and wastes are stored in their largest form where possible. Shredding of non-hazardous waste materials (e.g., mixed industrial, and commercial wastes, packaging wastes, etc.) for RDF preparation will be undertaken within the proposed building prior to energy recovery on-site or for off-site recovery. The non-hazardous wastes may be blended with other compatible non-hazardous materials to ensure the material is more suitable for further processing or disposal. These will be bulked-up and stored in 3m high stockpiles within the 4m high reinforced concrete bays inside the building.

7.0 WHERE MAXIMUM PILE SIZES DO NOT APPLY

7.1 Whole ELVs

7.1.1 Not relevant – whole ELVs will not be accepted at the site for RDF preparation.

7.2 Compost Production

7.2.1 No composting activities are to be carried out at the site.

7.3 Waste Stored in Containers

7.3.1 The EA's Fire Prevention Plan (FPP) Guidance stipulates that if you store waste in containers that can be moved, then maximum pile sizes do not apply.

7.3.2 The majority of the combustible wastes accepted at the site will be stored in stockpiles within the concrete bays on impermeable concrete pavement in the Waste Processing 03 building.

7.3.3 There will be one 40-yard (approx. 31m³) skip stored in the proposed building for non-conforming items/general litter which will only be used for non-hazardous incidental/litter waste and not a specific storage area for incoming waste, therefore it will likely be empty most of the time. The skip will be placed on impermeable concrete surfacing and will be at least 6m away from other combustible materials, able to be moved by a mobile plant if required. A fire extinguisher will be situated adjacent to the skip as contingency in case of a fire within it.

8.0 PREVENTING FIRE SPREADING

8.1 Separation Distances

8.1.1 In accordance with the EA's fire prevention plan guidance, separation distances are not required where concrete fire walls and bays are used to store wastes and can be used to prevent the risk of a fire spreading on Site.

8.2 Fire Walls and Bays

8.2.1 Fire walls are of a design and construction to resist fire and have a fire resistance period of 120 minutes to allow waste to be isolated and help to enable a fire to be extinguished within 4 hours. Concrete storage bay walls between stored waste piles negate the need to have a 6m separation distance due to their fire-resistance properties.

8.2.2 Where combustible wastes are stored within bays the following measures will be in place:

- Frequent stock rotation and wastes moved and stored on a first-in first-out basis;
- Temperature monitoring and regular inspections;
- A freeboard space of 1m will be maintained at the top and sides of the waste stockpiles at all times within the bay, with a line marking this level in the bays;
- Brands (burning wood) or lighted materials will be prevented from moving outside the bay walls and igniting other wastes;
- A Quarantine Area inside the Waste Processing 03 building will be used where necessary to isolate burning wastes or reduce pile sizes and store wastes not burning;
- Mobile plant is available to allow wastes to be removed from bays quickly and effectively to isolate it during an incident. Mobile plant can also move the skip containing non-conforming non-hazardous/general litter;
- There will be a water cannon fire suppression system with thermal imaging camera detection for the bays, and a deluge watermist system for the shredder/hopper area.

8.2.3 Where concrete bays are used to store combustible wastes then they will be constructed of fire-resistant bay walls in accordance with the factors outlined in Section 11.2 of the EA's FPP guidance, which includes a fire resistance period of at least 120 minutes (for both radiative heat and flaming).

8.2.4 The bay wall will be constructed from reinforced concrete, where concrete has a major inherent benefit with regards to its fire-resistant properties and its material performance in a fire. It is non-combustible and has a slow rate of heat transfer, making it a highly effective barrier to the spread of fire.

- 8.2.5 The locations of non-hazardous combustible waste storage areas are shown on the attached FPP Waste Processing 03 Building - 5827-CAU-XX-XX-DR-V-1806.
- 8.2.6 Daily site checks will be undertaken by trained site staff to ensure that all stockpiles are being inspected and managed correctly in line with this Fire Prevention Plan.

9.0 QUARANTINE AREA

9.1 Quarantine Area

- 9.1.1 A Quarantine Area will be located within the Waste Processing 03 building (to the south side) on a concrete slab with sealed drainage and be available at all times to be used in the event of a fire, to either hold burning wastes or to hold unburnt wastes to isolate and prevent them catching fire.
- 9.1.2 It being on impermeable concrete surfacing and sealed drainage system gives the opportunity to collect any potentially polluting liquids/firewater generated from the area and prevent it from leaving the building.
- 9.1.3 The location of the Quarantine Area is shown on the attached layout plan referred to in Section 8.2.5 above.
- 9.1.4 Wastes will be transported to the Quarantine Area with the use of the listed mobile plant (see Section 4.2.1 above) by site operatives who are trained in moving burning wastes, or segregating wastes from a burning pile safely.
- 9.1.5 The size of the Quarantine Area will be large enough to hold up to at least 50% of the volume of the largest combustible waste pile (half of largest waste pile 300m³/bay, which is 150m³) and maintain a separation distance of 6 metres from other wastes, buildings, and other infrastructure within the Waste Processing 03 building.
- 9.1.6 Where smouldering waste has been identified, the water cannon system will be activated and will deploy water to the waste. Only if required and if it is safe to do so, the quarantine area should be used to temporarily store smouldering waste or hot loads delivered to site.

10.0 DETECTING AND SUPPRESSING FIRES

10.1 Detecting and Suppressing Fires

- 10.1.1 Site staff will be trained in the potential signs of waste showing signs of self-heating or combustion and will raise the alarm to other site staff and site management immediately.
- 10.1.2 As part of routine daily site checks, the waste storage bays and/or skip will be checked daily for signs of smoking, smouldering, steam, heat or flames. Also, an automatic fire cannon suppression system and associated thermographic/thermal imaging cameras and alarm system will be installed in the Waste Processing 03 building, to continuously scan the waste piles for hotspots and minimise the risk of a fire which could result in a long-term closure of the RDF preparation activity or overall site operations.
- 10.1.3 If a fire or signs of a fire are detected early by site staff before the water cannons, then they will use the available mobile plant to ensure waste piles are rotated and spread out or a fire extinguisher to extinguish the fire. However, it is highly unlikely that the cannons will not activate automatically before external signs of heating are detected by site staff.
- 10.1.4 The site office is a portacabin style temporary building, which also houses the canteen and welfare facilities. These will be supplied with fire extinguishers. Site operatives will carry out a daily site checks to ensure that the site is being managed correctly and that all fire detection, suppression equipment and fire alarms are calibrated and working.

Automated Fire Detection and Water Cannon System

- 10.1.5 The proposed building will be fitted with an automatic fire detection and suppression system using water cannons targeted at waste bays. This system is designed to use substantially less water to douse a fire within a waste stockpile than conventional fire-fighting and is proven to be very effective in quickly detecting and tackling a fire, preventing fires spreading and generating much smaller volumes of firewater left on site after a fire. This therefore protects both the environment and human health from the effects of a fire on site, reduces clean-up costs and damage to site infrastructure, and also reduces the wider impacts on the local community from smoke and general disruption.
- 10.1.6 The water cannons will be supplied by a pumphouse located next to the cannons tanks (i.e., clean fire water storage tanks) which will be about 20 metres from the Waste Processing 03 building for immediate access to water, the location of which is shown FPP Waste Processing 03 Building (ref. 5827-CAU-XX-XX-DR-V-1806).
- 10.1.7 It is considered that most incidents of fire on waste sites are small and containable, and the use of water cannons targeting the waste bays will reduce the potential for a fire to become out of control and into a large fire within the building. This will help fire to be extinguished within 4 hours as per the EA's fire prevention guidance.
- 10.1.8 The following figures 3 to 8 indicate the cannon fire systems layout.

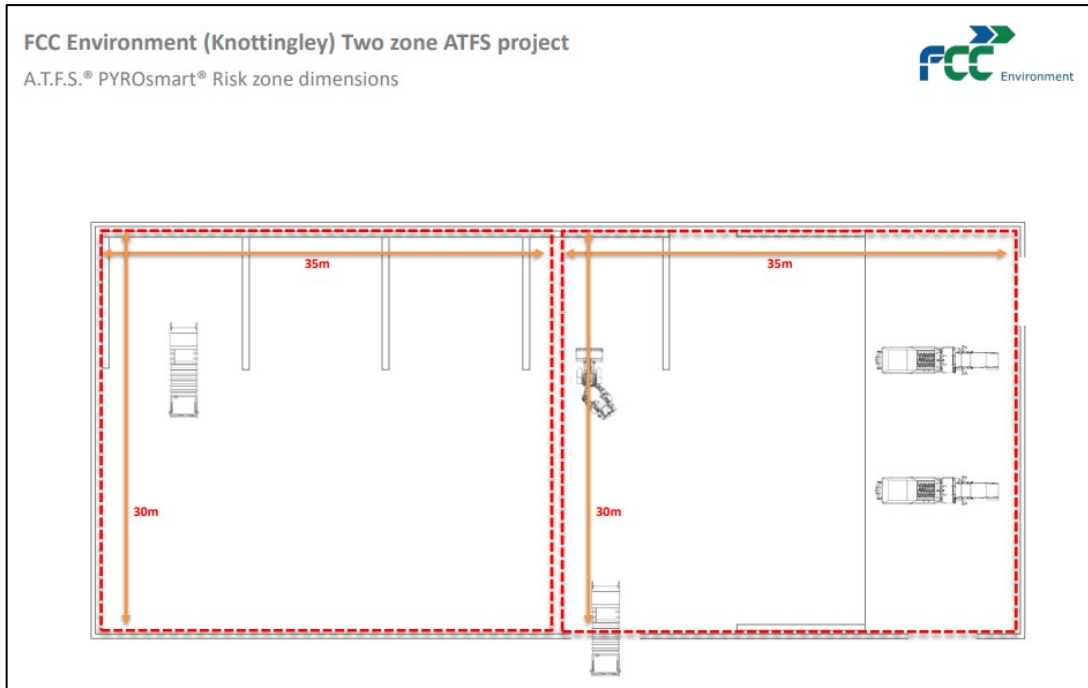


Figure 3: Water cannons: Risk zone dimensions within the building.

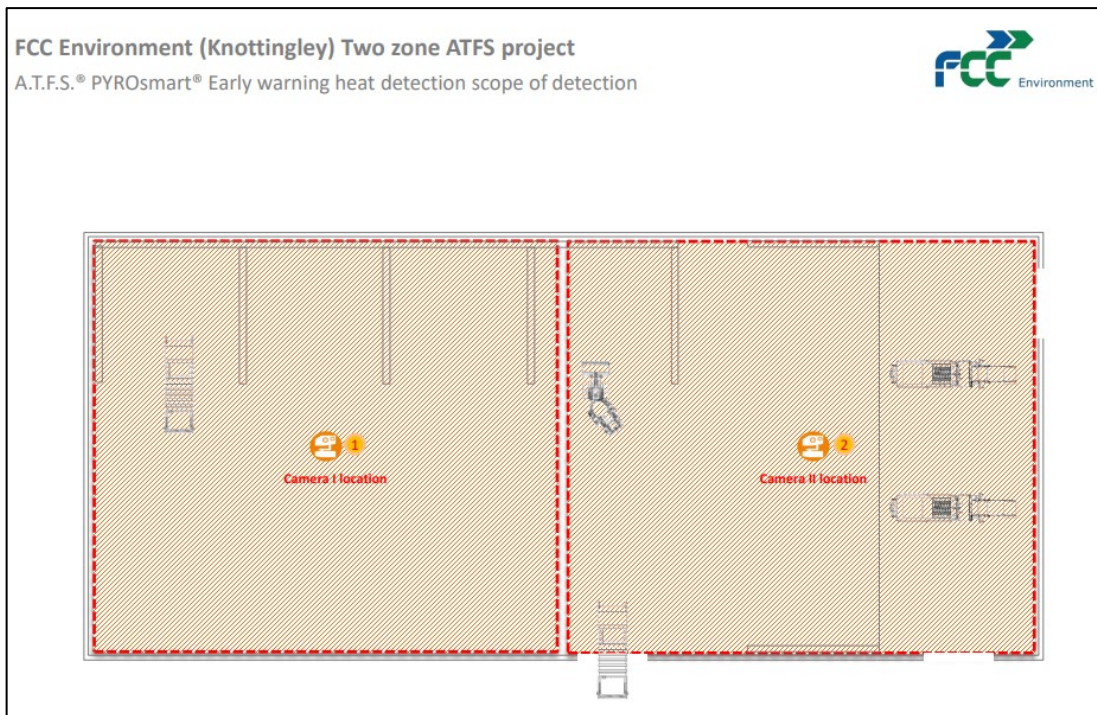


Figure 4: Water cannons – early warning heat detection scope

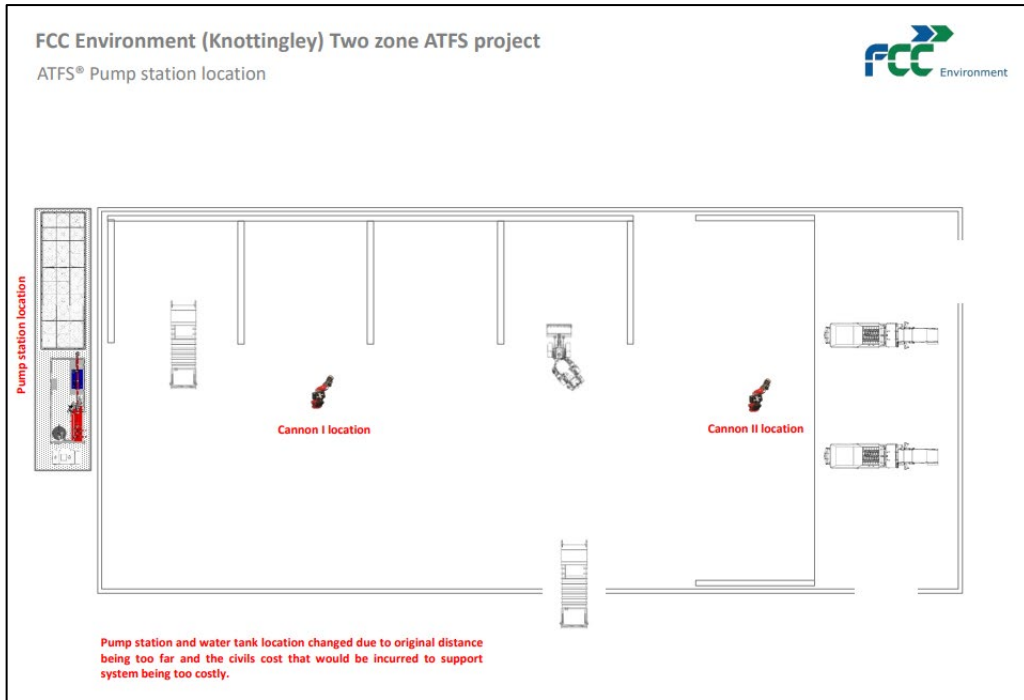


Figure 5: Water cannons: pump station location

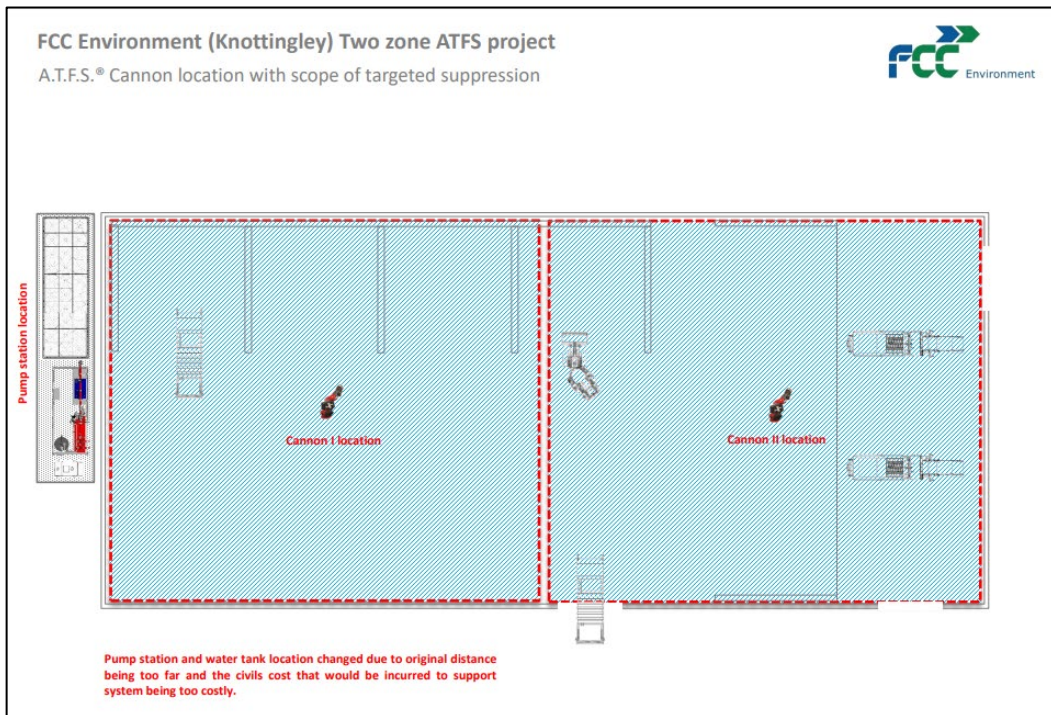


Figure 6: Water Figure cannons: scope of targeted suppression

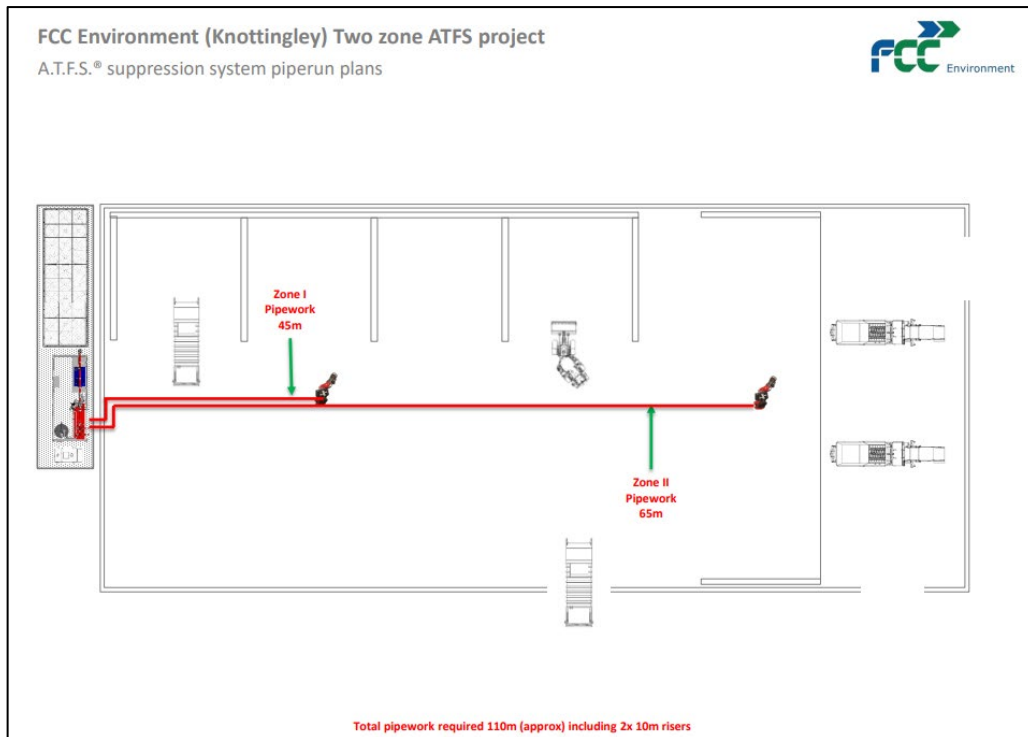


Figure 7: Water cannons: suppression system pipe run plans.

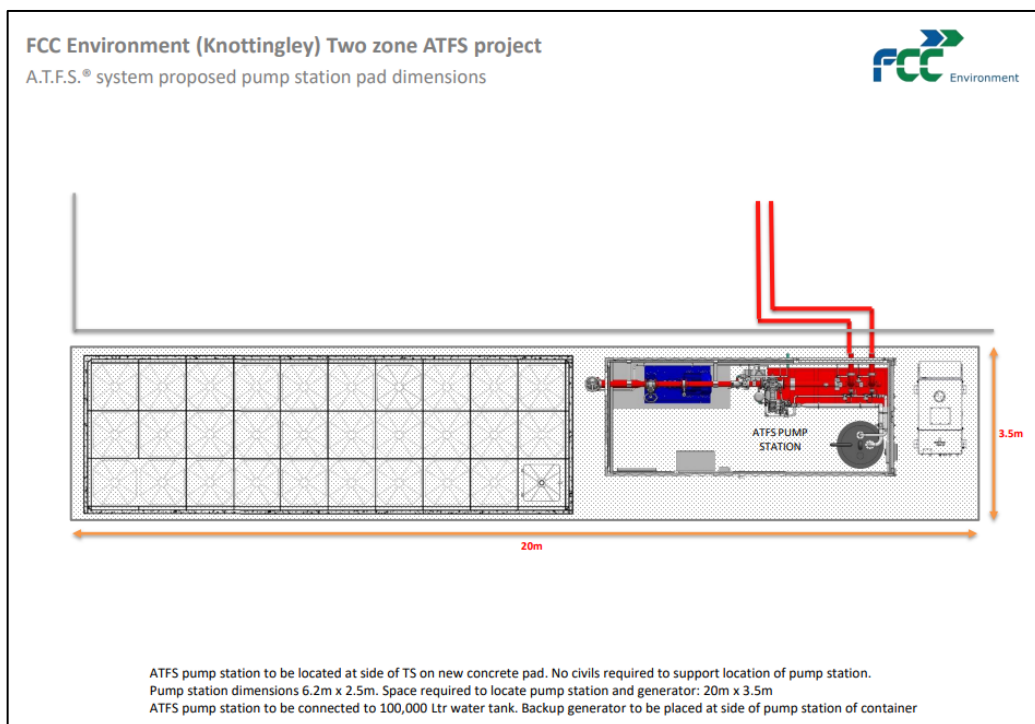


Figure 8: Water Cannons: proposed pump station pad dimension.

Manual Fire Suppression

- 10.1.9 The waste stockpiles will be stored within fire-proof concrete bays, with 1m freeboard above the waste to prevent fires spreading between bays.
- 10.1.10 If the water cannons are not activated automatically in the event of a fire within the Waste Processing 03 building, trained site staff can manually activate the cannons to douse a fire. This is the safer alternative to actively fighting a fire using fire extinguishers within the building. However, if deemed safe to do so and absolutely required, in addition to dousing fires using the automated water cannons, fire extinguishers are provided in the proposed building and can be used to target small fires.
- 10.1.11 Relevant staff will be trained in fire safety awareness and how to use fire-fighting equipment. Six fire extinguisher locations are proposed within the Waste Processing 03 building (see Section 4.15.4 above for where the fire extinguishers will be positioned).
- 10.1.12 A check (discharged/full, service date etc.) of fire extinguishers will be undertaken weekly and logged in FCC's EcoOnline database. All fire extinguishers are subject to annual testing by an approved accredited supplier. All fire extinguishers conform to British Standards EN 3. Mobile plant for the proposed building will be provided with fire extinguishers, kept in the vehicle cab at all times in case of a fire emergency.
- 10.1.13 Smouldering/self-heating wastes can be pulled out of a large stockpile by mobile plant operated by trained site staff, if safe to do so, and transferred into the Quarantine Area, to prevent the fire spreading or engulfing an entire waste pile.
- 10.1.14 Manual fire suppression is unlikely to be undertaken out of hours, with Site Management instead notified of a fire at the Site out of hours by the automatic fire alarm system and the automated water cannons system being triggered.

Fire Alarm

- 10.1.15 The proposed building will have an automatic fire alarm system (as mentioned in Section 4.1.4 above) that will be triggered (or sounded) in the event of a fire to alert the relevant staff of a fire emergency during the day and out of hours, and to muster at the designated fire assembly point if during operational hours. If required, on-site firefighting can be undertaken by trained site staff for smaller fires not doused by the cannons using fire extinguishers on-site.
- 10.1.16 The fire alarm will be regularly checked by site management and the checks recorded in the FCC's EcoOnline database. Any fault will be reported immediately for repairs or replacement.
- 10.1.17 The fire alarm will be tested weekly, and this will be recorded in FCC's EcoOnline database.
- 10.1.18 Fire assembly points will be kept clear, visible and correctly labelled at all times.

CCTV System

10.1.19 The site operates an existing 24/7 CCTV system across the site which will be extended to the Waste Processing 03 building, with cameras monitoring activities 24 hours a day, 365 days a year. The CCTV is connected to a monitoring system which alerts Site Management to a site incident during 'out of hours.'

10.1.20 Site Management will inform the closest Fire & Rescue Service of the Fire Information box which holds a copy of the Fire Prevention Plan. On arrival, the Site Manager/Deputy will engage with the Fire & Rescue Service in any way and provide instructions to assist with the fire.

11.0 FIRE-FIGHTING

11.1 Fire-Fighting Techniques

11.1.1 The Waste Processing 03 building will be designed and operated in a manner to allow for active firefighting. Appropriate resources will be available to fight a fire including:

- Automated water cannon system with hot spot detection and fire alarm;
- Immediate water supply for water cannons from the building's fire water storage tank(s);
- Mobile plant to move waste – CAT 950 loader or similar;
- Trained site staff able to operate the mobile plant in an emergency fire scenario;
- Impermeable concrete pad/plinth or base/reinforced concrete/surfacing where applicable. Roller shutter doors within the proposed building. The interior of the building will be designed to retain approx. 100m³ of water from the cannons, aided by the sleeping policeman located at the entrances to hold this water (i.e., fire water) in the event of a fire, with the concrete side walls of the building acting as a barrier to prevent water from escaping into the surrounding environment. While the external part and roof of the proposed building will be connected to the site-wide drainage system, where water can flow to a series of sealed interceptors and be prevented from leaving site;
- Suitable finances in place to prepare site in the event of a fire.

11.1.2 Firefighting techniques will include some or all of the following:

- Trained site staff using fire extinguishers on site to tackle small fires.
- Separating unburned material from the fire using mobile plant.
- Separating burning material from the fire to douse it and extinguish the fire.
- Ability to activate water cannon system manually if required (likely only in exceptional circumstances).
- Site staff ensuring Fire & Rescue Service have been alerted to the fire on-site.

11.1.3 These actions will be taken under the supervision of Site Management and from the **Castleford Fire Service**, being the nearest Fire Service to the Knottingley Waste to Resource Facility and it is located at **Beancroft Rd, Castleford WF10 5EH**, 3.6 miles away from Knottingley. The Fire Prevention plan will be made available to the West Yorkshire Fire & Rescue Service. Safe access will be achieved by maintaining routes for fire engines and access points around the site perimeter.

12.0 WATER SUPPLIES

12.1 Water Supply Requirements for Worst-Case Scenario

12.1.1 In accordance with the Environment Agency's 'Fire prevention plans: environmental permits' guidance (updated 11th January 2021), there must be enough water available for fire-fighting to take place and to manage a reasonable worst-case scenario, typically the largest waste pile catching fire.

12.1.2 This is a considerable volume of water to be supplied given the level and tonnages of the RDF preparation activity and subsequently required to be isolated on-site after a fire, with significant risks to the environment and tankering costs to the Operator. In the interests of environmental protection and rapid fire detection and suppression, the Operator proposes using alternative measures for the fire-fighting and water supplies earmarked for the RDF preparation activity, which is the preferred alternative.

12.1.3 It is proposed that the Waste Processing 03 building will be fitted with an automatic fire detection and suppression system using water cannons targeted at waste storage bays that would quickly detect hot spots within stockpiles. This will require much less water to tackle a fire on-site due to rapid fire detection, and subsequent fire extinguishing. The system will use a total of 2 water cannons inside the building and the water will be sourced from a clean water tank using a pumphouse next to the building. The following specifications are proposed:

- Associated 100m³ (10m x 3.15m x 3.15m) GRP rectangular or Circular Water Tank installed near the proposed building as shown in the FPP Waste Processing 03 Building - 5827-CAU-XX-XX-DR-V-1806 drawing;
- Pump House Station with the pumping configuration of One electric Duty pump rated at 1500 L/min and a permanently wired-in back-up diesel generator;
- A Pumphouse steel container 6m x 2.4m x 2.4m, to accommodate the above pump will be installed near the proposed building;
- All interconnecting pipework to the Cannon and Cannons Water Tank and Valve house and Heat tracing of the external surface mounted infill line piping (if any) from Valve House to Cannons Pumphouse/Tank;
- Targeted Cannon/Remote joystick and monitor box;
- Appropriate associated Pipework for the System;
- Wetting Agent (as required);
- Concrete Pad for the Tank and Pump House Station (if required). Pad size 20m Length X3.5m Width.

- 12.1.4 The above water tank for supplying the cannons provides 100,000 litres and if one water cannon was triggered to tackle a hot spot within one bay of the largest stockpile of waste on site, a 300m³ pile, then based on a cannon turret flow rate of 1,500 litres per minute, the tank could provide up to 1 hour and 7 minutes (67 minutes) of continuous targeted fire-fighting, which, during this time, a fire would have been doused, prevented from spreading to adjacent bays and the Fire & Rescue Service would have been alerted and likely arrived at site. However, it is unlikely a water cannon would need to discharge the entire 100,000 litres from the water storage tank, as a fire in a waste storage bay would typically be doused in approximately under 10-15 minutes and then the water cannon would cease discharging.
- 12.1.5 It is also anticipated that the local Fire & Rescue Service upon attendance at site will provide 1 to 3 fire engines containing 1,800 litres each, and they will also utilise on site fire hydrant(s) if required (three 4-inch main hydrants with 20 litres/sec flow rate are situated on-site). See Permit Boundary Plan ref. 5827-CAU-XX-XX-DR-V-1804 for location of the hydrants.
- 12.1.6 It is considered that the above will provide quick fire detection, rapid fire suppression and sufficient water supply to tackle a fire quickly on site. As per the EA guidance, the rapid detection and immediate response will be applied so that the waste pile will not be fully involved in a fire and therefore large volumes of water will not be required.
- 12.1.7 In the event of a fire breaking out, the building's interior has the potential capacity to safely retain approx. 100m³ of water from the cannons, aided by the sleeping policeman located at the entrances to hold this water (i.e., fire water) in the event of a fire and the concrete side walls of the building acting as a barrier to prevent water from escaping. The building's exterior is connected to the site-wide sealed drainage system which will direct the flow of any fire water generated outside the building into a series of sealed interceptors, thereby preventing firewater leaving site uncontrolled. Any firewater will then be pumped out and either treated on-site or tankered off-site for further treatment prior to disposal.

12.2 Summary of Available Water Supplies

- 12.2.1 The summary of available water supplies for the proposed building is provided in Table 3 below:

Table 3 - Fire water supplies available for the Waste Processing 03 building.

Description	Capacity & Flow	Location
Water Cannons supplied by 100m ³ (100,000 litre) fire water storage tank and pumphouse	Flow will be 1,500 litres per minute. This would provide 90,000 litres in 1 hour (or 100,500 litres in 1 hour 7 mins). Cannons will direct water immediately to the hotspot/area of fire and use	The water cannons will be installed to target the waste storage bays within the Waste Processing 03 building, for targeted fire detection and suppression. Two clean fire water storage tanks for supplying the cannons will be situated

	less water due to quick fire suppression.	external to the proposed building, one will be next to the north-eastern wall of the building and the other one northwest, close to the western edge of the installation boundary, as per attached Fire Prevention Plan Waste Processing 03 Building drawing (ref. 5827-CAU-XX-XX-DR-V-1806).
Fire and Rescue Fire Engines	Fire tenders containing 1,800 litres of water, typical approx. flow rate of 18.9 litres per second (1,134 litres per minute). Will connect to Fire Hydrant for unlimited supply of water.	Fire & Rescue Service engines/vehicles situated on site and at the site perimeter/entrance to tackle fire.

- 12.2.2 It is anticipated that most small fires can be doused by the automated fire detection and suppression system using the water cannons targeted at the waste storage bays within the building.
- 12.2.3 If further assistance is required, the local Fire & Rescue Service will be alerted, once fire tenders arrive on site, assuming 1 to 3 engines attend site, this would provide between 1,800 to 5,400 litres of water, before connecting to the nearby fire hydrant. However, when the Fire & Rescue Service arrive at site, it is likely the fire will have already been successfully doused and they will only be required to check this is the case and ensure structural integrity of the building.
- 12.2.4 Any firewater generated outside the Waste Processing 03 building, if this occurs, will be contained by the site's existing sealed drainage system to prevent uncontrolled release of firewaters to surface water receptors/sewer.
- 12.2.5 It is very unlikely that more than one stockpile would be on fire at once, and very unlikely fire would spread due to the fireproof concrete waste storage bay walls and floors within the Waste Processing 03 building, limits of stockpile sizes and other fire prevention measures in place, such as the ability to pull smouldering wastes into the designated Quarantine Area.

13.0 MANAGING FIRE WATER

13.1 Containment

- 13.1.1 The Waste Processing 03 building must be able to contain the run-off from fire water to prevent pollution of the environment in the event of a fire.
- 13.1.2 All spent fire waters will be contained within the proposed building which will be designed to retain approx. 100m³ from the cannons, aided by impermeable concrete surfacing, the sleeping policeman located at the entrances to hold this water in the event of a fire and the concrete side walls of the building acting as a barrier to prevent water from escaping the building laterally. The external areas of the building will be connected to the site-wide sealed drainage system directing water to a series of sealed interceptors. This provides opportunity to isolate and prevent firewater run-off or spillage from entering the surrounding environment.
- 13.1.3 All areas of concrete surfacing, including reinforced concrete storage bays, concrete pad, and concrete plinth/base will be visually inspected daily, to ensure continuing integrity and fitness for purpose. Staff on site are trained to make visual observations and report any signs of wear & tear, and damage to the Site Manager. The inspection and any necessary maintenance and repairs of areas identified to be damaged or cracked will be recorded.

13.2 Groundwater Vulnerability

- 13.2.1 Below the site where the Waste Processing 03 building will be situated is the Roxby Formation (composed of mudstone and siltstone bedrock), designated as a Secondary B Aquifer. The superficial geology of the site consists of a combination of Alluvium (clay, silt, sand, and gravel) and Brighton Sand Formation (sand), classified as a Secondary A Aquifer. The site is not located on a groundwater vulnerable zone or Source Protection Zone (SPZ); the closest SPZ is a Zone I, located 1.63km northwest of the site boundary.
- 13.2.2 While some areas of the Knottingley Waste to Resource Site fall within high-flood risk zones, the site layout has been designed to avoid these areas, including, where necessary, relocating some of the project elements of the proposed waste activities from flood-risk zones to areas identified as low risk. The Waste Processing 03 building is unaffected by flooding.
- 13.2.3 The external base of the proposed building is made of impermeable concrete surfacing, with hardstanding areas where applicable, connected to the site-wide drainage system that will prevent infiltration of any spent firewater into the ground below or run-off into the surrounding environment. Fire water from inside the building will be contained in the building's sealed drainage system and interceptor prior to tankering off-site for further treatment.

14.0 DURING A FIRE – ACTION PLAN

14.1 Immediate Fire Incident Response

- The automated water cannon fire suppression system in the building will detect any fires within the wastes piles (i.e., storage waste bays) and will immediately activate, dousing the corresponding area with water and triggering the fire alarm, alerting all people on site to a fire.
- Upon discovering a fire, if the fire alarm does not activate automatically, the Site Manager/Fire Marshall shall manually activate it and also alert site users by shouting “FIRE, FIRE, FIRE.”
- The Site Manager/Fire Marshall/trained staff, upon discovering the fire but without endangering themselves or others, will decide whether or not the fire can be controlled using the on-site fire-fighting equipment (water cannons and where required, fire extinguishers).
- If the fire is deemed significant and/or out of control and may affect site safety, the Site Manager/Fire Marshall/trained staff will alert the Fire & Rescue Service. When practicably possible, the regulatory bodies (Environment Agency) will also be contacted.
- All personnel, staff and visitors will evacuate from the building and outside areas in accordance with the ‘Site Evacuation Plan’ to the emergency assembly point. It is the responsibility of the Site Manager/Fire Marshal to ensure that all company personnel, visitors and sub-contractors are accounted for, and to give that information to the Fire & Rescue Service on their arrival.
- No member of the public, visitors or customers will be allowed to enter the site during the incident.

14.2 Additional Actions During a Fire

- 14.2.1 Where safe to do so and deemed necessary, trained staff will operate mobile plant to segregate any waste stockpiles not impacted by the fire to reduce the likelihood of fire spread.
- 14.2.2 Burning wastes can also be isolated by cooling and/or dousing with water or fire extinguishers using the Quarantine Area inside the Waste Processing 03 building as required.
- 14.2.3 Small fires can be extinguished by trained on-site members of staff with the use of appropriate hand-held fire extinguishers. Fire extinguishers will be stationed in the places listed in **Section 4.15.1** above for easy access and usage.
- 14.2.4 The skip containing non-conforming non-hazardous items/general litter will already be separated at an appropriate distance so that the potential for spread of fire is minimised. In the event of a fire being in the skip, a mobile plant will be deployed to isolate the affected

materials, provided that it is safe to do so and isolate the skip in the Quarantine Area. The skip can be doused to extinguish the fire.

14.2.5 Staff will only tackle the fire with use of the fire extinguishers if it is safe to do so. In the unlikely event of a fire which has been unsuccessfully extinguished by the available water cannon suppression system or fire extinguishers, staff are to await the Fire & Rescue Service who would then take the appropriate action.

14.3 Site Access and Water Supplies

14.3.1 Site access for Fire & Rescue Service and vehicles will be via the site main entrance from Weeland Road on the southern boundary and access will be unobstructed at all times for the Fire & Rescue Service.

14.3.2 The main access route (i.e., vehicle entrance and exit) to the Waste Processing 03 building, waste storage bays and Quarantine Area in the event of a fire are shown on the Permit Boundary Plan (ref. 5827-CAU-XX-XX-DR-V-1804).

14.4 Role of Site Manager/Fire Marshall

14.4.1 The Site Manager/Fire Marshall will:

- Appraise the Fire & Rescue Service with the details of the fire including the location and composition of the waste/materials involved.
- Assist with the Fire & Rescue Service in any way safely to provide clear access routes to the fire, ensuring the site drainage system is isolated and providing mobile plant if necessary to ensure that the fire is extinguished.
- Control vehicle movements and prevent further access to the site by directing waste vehicles to alternative local third-party or FCC facilities.
- Ensuring that at no time should personnel safety be compromised.

14.4.2 Should the Fire & Rescue Service take control of the fire incident, water supplies are available as detailed in Section 12 'Water Supplies' of this Fire Prevention Plan, including a 100m³ (100,000 litre) water storage tank and hydrant on-site. Penstock valves are to be closed, where necessary, in the site drainage system by trained site staff to isolate fire waters on-site.

14.5 Out of Hours Fire Response

14.5.1 A 'Fire and Emergency Information Box' will be located at the site entrance/main weighbridge building which will contain the following key information for FCC staff and the Fire & Rescue Service:

- Copy of the Fire Prevention Plan (this document);
- FCC Emergency Management Plan;

- Emergency Site Plan;
- The Waste Processing 03 layout drawings showing the locations of water supplies and fire extinguishers;
- Information relating to the RDF preparation operation;
- Information relating to the mobile plant and vehicles for the RDF operation;
- Contact details for key staff/site management.

14.5.2 Out of hours, the site gates will be closed and locked, with no unauthorised access. The site has 24/7 CCTV surveillance that can trigger the alarm to an incident (fire, vandalism etc.) during 'out of hours'.

14.5.3 In the event of an 'out of hours' fire when the Operator is not present on site, the CCTV surveillance company will contact the nearest Fire Service who will be granted entry by the security guard, or force entry to site (and the Waste Processing 03 building) if required.

14.6 Engagement with Neighbours and Receptors

14.6.1 During any firefighting or subsequent clean-up operation, the site will be closed and any incoming wastes will be diverted to an alternative waste processing site.

14.6.2 Neighbouring residential and commercial properties will be notified immediately of a fire at the site, where this is proportionate to the scale and relevant to the specific receptors that may be affected. Site Management (or their nominated persons) will visit the nearest neighbours and advise of a fire emergency at the site and advise of actions required to be taken i.e. closing windows and staying away from the site perimeter.

14.6.3 Contact with other properties located further afield will be undertaken under the direction of the Fire & Rescue Service attending site.

14.6.4 Management will contact their customers and clients and advise them to re-direct their waste vehicles to an alternative facility until the site is operational.

15.0 AFTER A FIRE

15.1 Site Clean-Up

- 15.1.1 Any firewater(s)/contaminated waters will be tankered off-site to a suitable treatment facility for disposal.
- 15.1.2 After any fire or hot waste load event, the waste after extinguishing will be loaded and transferred to an appropriate facility offsite. Under no circumstances will this waste be mixed and/or placed within any of the other waste streams on site.
- 15.1.3 If the Quarantine Area was used during the fire to contain hot loads/burning wastes, then it will undergo deep cleaning using the available pressure washing facilities and brushes, where the surface water will be treated on-site. The skip in the proposed building and any remaining waste affected by fire will be removed and taken to an appropriate disposal facility off site.
- 15.1.4 All the building's infrastructure, mobile plant and equipment will be checked to ensure they are functioning correctly and have had no fire damage. The Site Manager will carry out a thorough inspection of the Waste Processing 03 building to ensure it is in a satisfactory condition before operation can resume and the site is reopened.
- 15.1.5 Following a fire which required the presence of the Fire & Rescue Services, in addition to above, management will liaise with the regulatory authorities and Fire & Rescue Services to produce a plan to allow normal operations at the site.
- 15.1.6 After a significant fire incident and damage, technically competent manager and/or engineers will assess the degree of damaged caused by a fire, and the residual fire damaged waste, emissions or equipment.
- 15.1.7 Site Management will make a record of the incident and the procedures carried out to manage the fire. As assessment will be carried out to determine whether further mitigation measures could have prevented the fire, with an update to the FPP and EMS as required.

16.0 REFERENCES

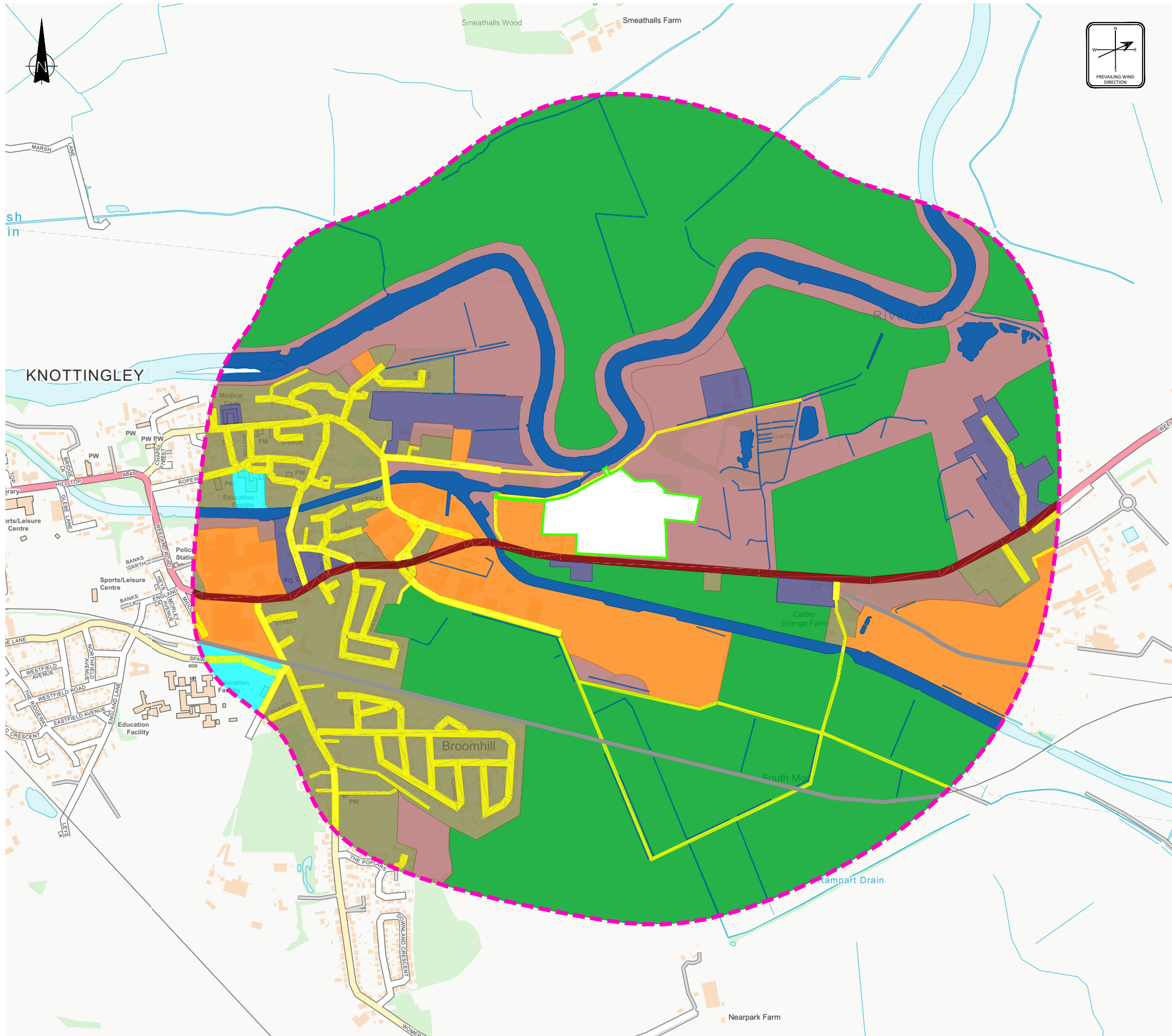
1. Environment Agency – ‘Fire Prevention Plans: Environmental Permits’, published July 2016, last updated January 2021.

DRAWINGS

5827-CAU-XX-XX-DR-V-1800 Sensitive Receptor Plan

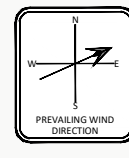
5827-CAU-XX-XX-DR-V-1804 Permit Boundary Plan

5827-CAU-XX-XX-DR-V-1806 Fire Prevention Plan Waste Processing 03 Building



LEGEND

- PERMIT BOUNDARY
- 100m OFFSET
- SURFACE WATER
- WOODLAND / SCRUBLAND
- COMMERCIAL / LEISURE
- EDUCATIONAL FACILITY
- INDUSTRIAL
- RESIDENTIAL
- MAJOR ROAD
- MINOR ROAD
- RAIL



P03	LEGEND UPDATED	EJD	JC	JC	06.08.25
P02	PERMIT BOUNDARY UPDATED	EJD	JC	JC	09.07.25
P01	ISSUED FOR INFORMATION	EJD	ER	ER	16.04.24
REV	MODIFICATIONS	BY	RE	AP	DATE
PURPOSE OF ISSUE				STATUS	
FOR INFORMATION				S2	

CLIENT:



PROJECT:

KNOTTINGLEY WASTE TO RESOURCE FACILITY

TITLE:

SENSITIVE RECEPTOR PLAN

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	ER	ER
DATE	SCALE @ A3	JOB REF:	REVISION
16.04.2024	1:10000	5827	P03

DRAWING NUMBER

5827-CAU-XX-XX-DR-V-1800



Registered Office: Intec, Parc Menai, Bangor, Gwynedd, LL57 4FG Company Registered No: 06716319

© COPYRIGHT CAULMERT LIMITED - NOT TO BE COPIED OR REPRODUCED IN ANY WAY OR FORM WITHOUT PRIOR WRITTEN CONSENT FROM CAULMERT LIMITED



NOTES

1. DO NOT SCALE FROM THIS DRAWING, WORK FROM FIGURED DIMENSIONS ONLY. ALL DIMENSIONS ARE IN METRES AND ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM UNLESS NOTED OTHERWISE.

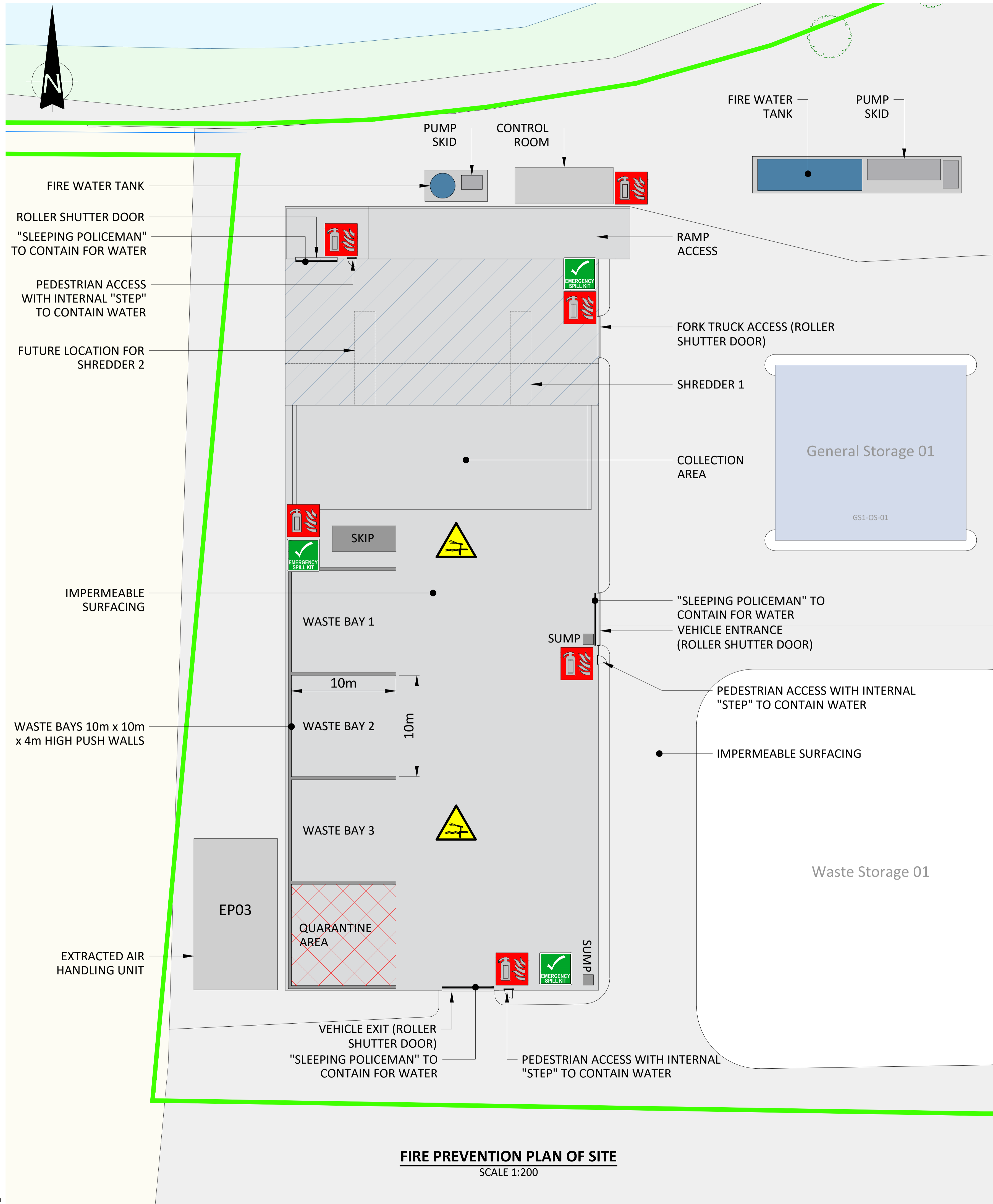
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.

LEGEND

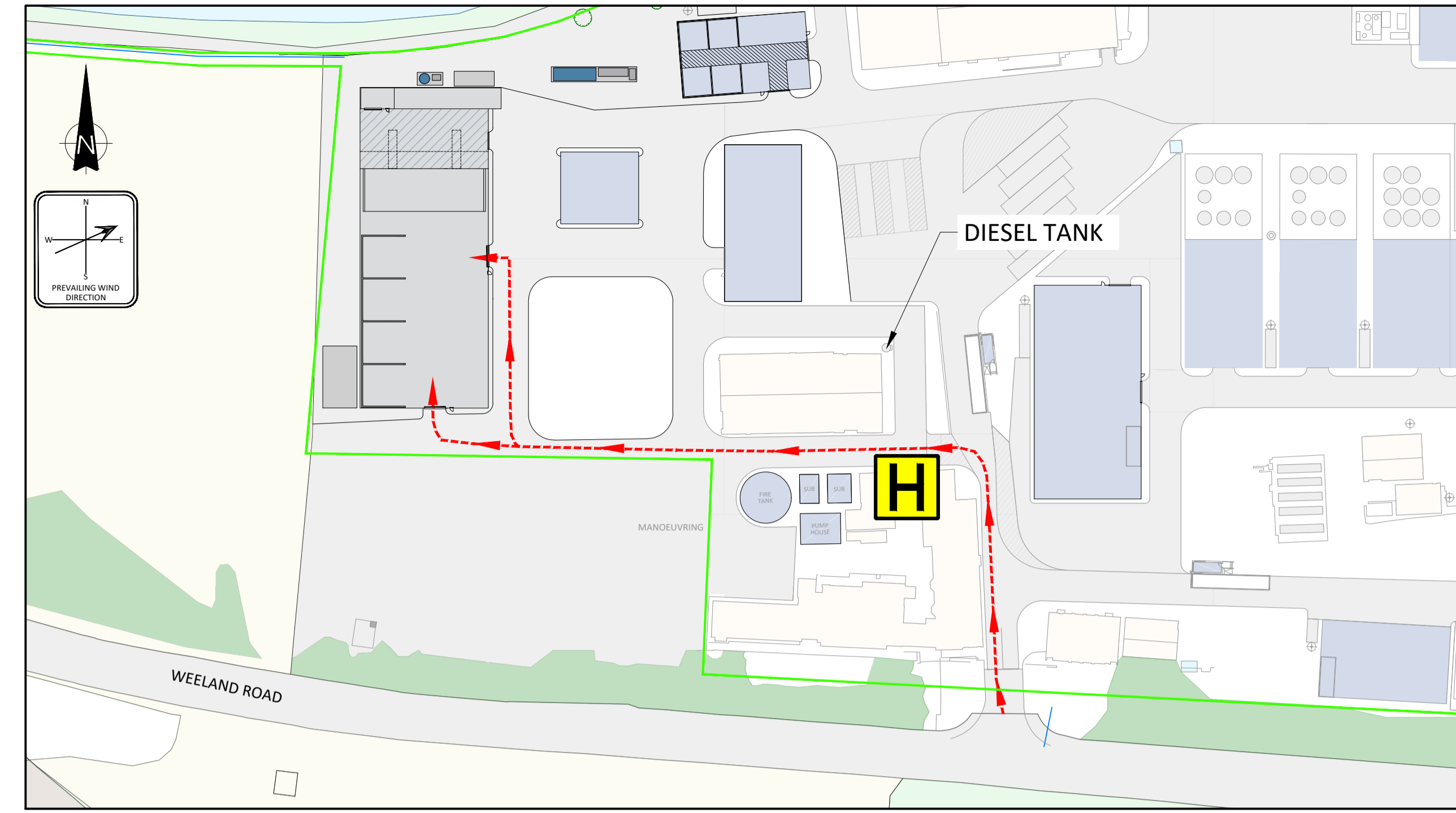
- OWNERSHIP BOUNDARY
- PERMIT BOUNDARY
- H HYDRANT

	CLIENT:					PURPOSE OF ISSUE	FOR INFORMATION		STATUS	S2				
	DESIGNED BY			EJD		DRAWN BY	EJD		REVIEWED BY	JC	AUTHORISED BY	AS		
	PROJECT:			KNOTTINGLEY WASTE TO RESOURCE FACILITY			DATE	10.07.2025	SCALE @ A1	1:750	JOB REF:	5827	REVISION	P03
	DRAWING NUMBER			5827-CAU-XX-XX-DR-V-1804										
TITLE:			PERMIT BOUNDARY PLAN											
PD3	LEGEND AMENDED	EJD	JC	AS	06.08.25									
PD2	HYDRANTS ADDED TO DRAWING	EJD	JC	AS	28.07.25									
PD1	ISSUED FOR INFORMATION	EJD	JC	AS	10.07.25									
REV	MODIFICATIONS	BY	RE	AP	DATE									

© COPYRIGHT CAULMERT LIMITED - NOT TO BE COPIED OR REPRODUCED IN ANY WAY OR FORM WITHOUT PRIOR WRITTEN CONSENT FROM CAULMERT LIMITED



FIRE PREVENTION PLAN OF SITE
SCALE 1:200



PLAN SHOWING EMERGENCY VEHICLE ACCESS ROUTE AND NEAREST HYDRANT
SCALE 1:1000

- NOTES**
- DO NOT SCALE FROM THIS DRAWING, WORK FROM FIGURED DIMENSIONS ONLY. ALL DIMENSIONS ARE IN METRES AND ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM UNLESS NOTED OTHERWISE.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS AND SPECIFICATIONS.

- LEGEND**
- FIRE EXTINGUISHER
 - SPILL KIT
 - HYDRANT
 - WATER CANNON
 - WASTE BAYS 10m x 10m x 4m HIGH PUSH WALLS
 - EMERGENCY VEHICLES ACCESS ROUTE
 - PERMIT BOUNDARY

PO2	DRAWING UPDATED TO CLIENT CHANGES	EJD	JC	AS	06.08.25
PO1	ISSUED FOR INFORMATION	EJD	JC	AS	05.08.25
REV	MODIFICATIONS	BY	RE	AP	DATE
PURPOSE OF ISSUE					STATUS
FOR INFORMATION					S2

CLIENT:

PROJECT:
KNOTTINGLEY WASTE TO RESOURCE FACILITY

TITLE:
FIRE PREVENTION PLAN
WASTE PROCESSING BUILDING 03

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	JC	AS
DATE	SCALE @ A1	JOB REF:	REVISION
01.08.2025	AS NOTED	5827	P02

DRAWING NUMBER
5827-CAU-XX-XX-DR-V-1806

engineering environmental planning

© COPYRIGHT CAULMERT LIMITED - NOT TO BE COPIED OR REPRODUCED IN ANY WAY OR FORM WITHOUT PRIOR WRITTEN CONSENT FROM CAULMERT LIMITED

Registered Office: IN Tec, Parc Menai, Bangor, Gwynedd, LL57 4FG Company Registered No: 06716319

WWW.CAULMERT.COM

APPENDIX 1

Nature and Heritage Conservation Screen.



Registered Office: InTec, Parc Menai, Bangor, Gwynedd, LL57 4FG

Tel: 01248 672666

Email: contact@caulmert.com

Web: www.caulmert.com

Nature and Heritage Conservation

Screening Report: Bespoke installation

Reference	EPR/JP3547JL/P001
NGR	SE 51142 23864
Buffer (m)	120
Date report produced	24/05/2024
Number of maps enclosed	3

This nature and heritage conservation report

The nature and heritage conservation sites, protected species and habitats, and other features identified in the table below **must be considered in your application**.

In the further information column, there are links which give more information about the site or feature type and indicate where you are able to self-serve to get the most accurate site boundaries or feature locations.

Most designated site boundaries are available on [Magic map](#). Using Magic map allows you to zoom in and see the site boundary or feature location in detail, Magic map also allows you to measure the distance from these sites and features to your proposed boundary. [Help videos](#) are available on Magic map to guide you through.

Where information is not publicly available, or is only available to those with GIS access, we have provided a map at the end of this report.

Sites and Features within screening distance

Local Wildlife Sites (LWS)
(see map below)

Willowgarths

Park Baulk Quarry, Knottingley

Screening distance (km)

2

[Appropriate Local Record Centre \(LRC\)](#)
[Appropriate Wildlife Trust](#)

Protected Species within screening distance

Screening distance (km) Further Information

European Eel migratory route
River Lamprey migratory route

up to 2

[Natural England](#)

(see map below)

Environment Agency. Dial 03708 506 506 for your local Fisheries and Biodiversity team

Protected Habitats within screening distance

Screening distance (km) Further Information

Reedbeds

up to 2

[Natural England](#)

(see map below)

Where protected species are present, a licence may be required from [Natural England](#) to handle the species or undertake the proposed works.

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service.

The following nature and heritage conservation sites, protected species and habitats, and other features have been checked for, where they are relevant for the permit type requested, but have not been found within screening distance of your site unless included in the list above.

Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

Please note we have screened this application for features for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

The nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application, which could result in the return of an application or requesting further information

Local Wildlife Sites

Legend

 Local Wildlife Sites




1: 10,000



Protected Species




Legend

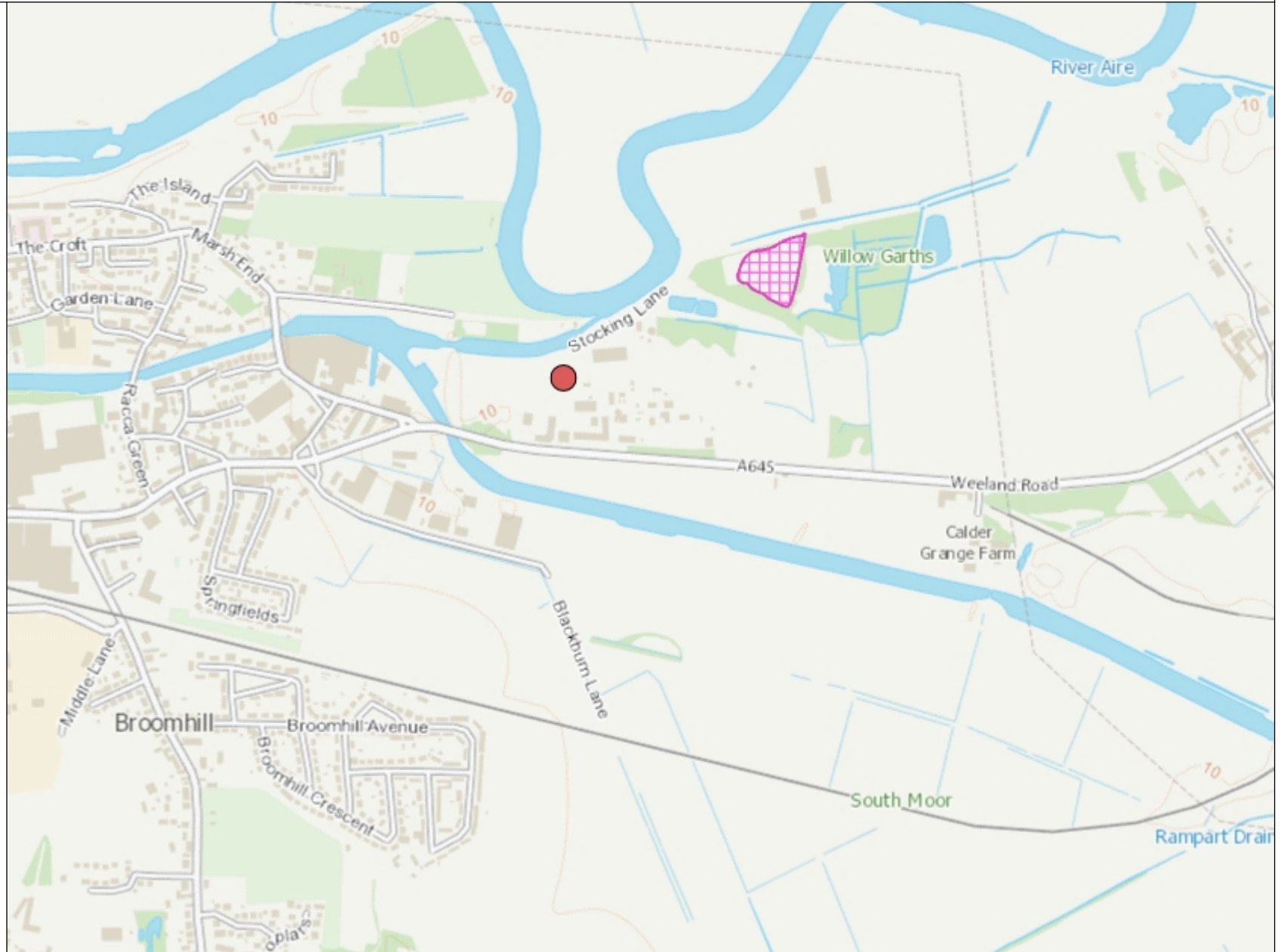
-  Fish migratory routes screened for Environmental Permits



Protected Habitats

Legend

-  Protected Habitats screened for En Permits



WWW.CAULMERT.COM



Registered Office: InTec, Parc Menai, Bangor, Gwynedd, LL57 4FG

Tel: 01248 672666

Email: contact@caulmert.com

Web: www.caulmert.com