

# Caulmert Limited

Engineering, Environmental & Planning  
Consultancy Services

## Riverside Waste Transfer Station

Williams Environmental Limited

## Bespoke Environmental Permit Application

## Fire Prevention Plan

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**Fire Prevention Plan****TABLE OF CONTENTS**

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
1.1	Overview .....	1
1.2	The Site .....	1
1.3	Fire Prevention Plan.....	1
1.4	Using the Fire Prevention Plan .....	2
1.5	Fire Information Box .....	2
<b>2.0</b>	<b>SITE LOCATION &amp; SURROUNDINGS .....</b>	<b>3</b>
2.1	Site Location.....	3
2.2	Sensitive Receptors.....	3
2.3	Designated Sites of Ecological Importance & Other Habitats .....	4
2.5	Meteorological Conditions .....	6
<b>3.0</b>	<b>SITE ACTIVITIES .....</b>	<b>7</b>
3.1	Proposed Operations .....	7
3.2	Fire Prevention Guidance .....	7
3.3	Storage Arrangements .....	8
3.4	Waste Electrical & Electronic Equipment (WEEE).....	8
3.5	Hazardous Wastes .....	9
3.6	Gas Cylinders, Fuels & Lubricants .....	9
<b>4.0</b>	<b>MANAGING COMMON CAUSES OF FIRE .....</b>	<b>11</b>
4.1	Arson.....	11
4.2	Plant and Equipment .....	11
4.3	Re-fuelling of Plant and Equipment.....	12
4.4	Electrical faults including damaged or exposed electrical cables.....	12
4.5	Discard smoking materials.....	12
4.6	Hot works.....	12
4.7	Industrial heaters.....	12
4.8	Hot Exhausts .....	12
4.9	Ignition Sources .....	13
4.10	Batteries.....	13
4.11	Leaks and Spillages.....	13
4.12	Build-up of loose combustible waste.....	14
4.13	Reaction between wastes.....	14
4.14	Waste Acceptance and deposited hot loads .....	15
4.15	Hot and dry weather .....	16
4.16	Fire Watch.....	16
<b>5.0</b>	<b>PREVENTING SELF-COMBUSTION.....</b>	<b>17</b>
5.1	Overview .....	17
5.2	Fire Prevention Procedures .....	17

5.3	Action Plan .....	18
5.4	Managing Storage times .....	18
5.5	Monitoring and Control temperature.....	19
5.6	Waste Bale Storage.....	19
5.7	Waste ELV bales.....	19
<b>6.0</b>	<b>MANAGING WASTE PILES – STORING MATERIALS IN THEIR LARGEST FORM.....</b>	<b>20</b>
6.1	Maximum Pile Sizes .....	20
<b>7.0</b>	<b>WHERE MAXIMUM PILE SIZES DO NOT APPLY.....</b>	<b>21</b>
7.1	Whole ELVs .....	21
7.2	Compost Production .....	21
7.3	Waste stored in containers.....	21
<b>8.0</b>	<b>PREVENTION FIRE SPREADING.....</b>	<b>22</b>
8.1	Separation distances.....	22
<b>9.0</b>	<b>QUARANTINE AREA.....</b>	<b>23</b>
9.1	Overview .....	23
<b>10.0</b>	<b>DETECTING FIRE .....</b>	<b>24</b>
10.1	Fire Alarm System .....	24
<b>11.0</b>	<b>FIRE SUPPRESSION &amp; FIRE-FIGHTING .....</b>	<b>25</b>
11.1	Inside Buildings .....	25
11.2	Fire-Fighting .....	25
11.3	Fire Extinguishers.....	25
<b>12.0</b>	<b>WATER SUPPLIES .....</b>	<b>27</b>
12.1	Overview .....	27
12.2	Water Supply Requirements for Worst-Case Scenario.....	27
12.3	Summary of Available Water Supplies.....	28
12.4	Fire & Rescue Service Response .....	29
12.5	Fire Hydrants.....	29
12.6	Fire Response.....	29
12.7	Out of hours .....	30
<b>13.0</b>	<b>MANAGING FIRE WATER .....</b>	<b>31</b>
13.1	Containment .....	31
13.2	Site Drainage System .....	32
13.3	Assessing risks to groundwater from fire water .....	32
<b>14.0</b>	<b>FIRE FIGHTING TECHNIQUES.....</b>	<b>33</b>

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14.1	Overview .....	33
14.2	Immediate response .....	33
14.3	Out of hours response .....	34
14.4	Staff Training.....	35
<b>15.0</b>	<b>DURING AND AFTER A FIRE .....</b>	<b>36</b>
15.1	During a Fire.....	36
15.2	After a Fire .....	37
<b>16.0</b>	<b>REFERENCES .....</b>	<b>39</b>

## DRAWINGS

<b>5195-CAU-XX-XX-DR-V-1800</b>	Site Layout Plan
<b>5195-CAU-XX-XX-DR-V-1801</b>	Sensitive Receptor Plan
<b>5195-CAU-XX-XX-DR-V-1803</b>	Fire Hydrant Location

## APPENDICES

<b>Appendix 1</b>	Site Inspection Form
<b>Appendix 2</b>	Essex & Suffolk Water – Hydrant Testing Correspondence

## 1.0 INTRODUCTION

### 1.1 Overview

1.1.1 Williams Environmental Limited (hereafter referred to as 'the operator') have appointed Caulmert Limited to prepare a Bespoke Environmental Permit application for a new Hazardous Waste Transfer Station located on the Riverside Industrial Estate off Oliver Road, West Thurrock, Grays, at postcode RM20 3EF. The proposed waste operation involves the storage of combustible wastes and so in accordance with Environment Agency (EA) guidance, a Fire Prevention Plan (FPP) has been prepared.

### 1.2 The Site

1.2.1 The operator currently operates a facility identical to that proposed at Unit 3 Charles Street Industrial Estate in Silvertown, London, under Environmental Permit ref. EPR/WP3336SA, however the land on which it is situated is subject to a compulsory land purchase order and so the operator has to relocate the facility before November 2023.

1.2.2 The current facility has operated for over 20 years in Silvertown and the operator has reported that they have a very good permit compliance record with no history of complaints.

1.2.3 The land on which the applicant proposes to relocate will eventually form part of a wider development comprising a large 'state of the art' tanker washing facility, not linked to the permitted activity, but this affects its final location and footprint within the site.

1.2.4 The area of land subject to this application has recently received planning consent for this proposed development, however a further Planning Application is to be submitted in the new year for the wider development that (subject to approval) will result in the relocation of the transfer station within the site that will require a further Permit Application.

1.2.5 It is envisaged that the waste transfer station will remain on the area of land proposed by this application for a period of 18-24 months before relocation to its final position.

### 1.3 Fire Prevention Plan

1.3.1 This FPP has been prepared in order to identify the potential fire risks associated with the temporary storage of combustible non-hazardous wastes at the site in containers/skips. Appropriate methods of fire control are employed at the site which emphasise upon fire prevention, detection, suppression, containment and potential mitigation techniques.

1.3.2 This Fire Prevention Plan (FPP) has been compiled in accordance with the Environment Agency (EA) guidance 'Fire prevention plans: environmental permits' (updated January 2021). This FPP provides guidance for the prevention and management of potential waste fires at the site and to minimise the impact of a fire on the environment.

1.3.3 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.

#### **1.4 Using the Fire Prevention Plan**

- 1.4.1 This FPP forms parts of the site's management system and sets out the fire prevention measures and procedures in place at site. During an incident the FPP will be made available to the Fire and Rescue Service (FRS). See Section 1.3.
- 1.4.2 All staff and contractors on site will undergo thorough site inductions and training to understand the contents of the FPP so they are aware of what they must do to prevent a fire happening and during a fire if one breaks out on site.
- 1.4.3 Training of staff and contractors is covered in Section 13.4 of this FPP.
- 1.4.4 The FPP will be regularly tested every 6 months which will be incorporated as part of the Fire Drills carried out on site by the Site Manager/Deputy. A record will be made of the FPP test and fire drill with any comments including suitability of the FPP and actions required to improve the FPP to suit the operations of the site.
- 1.4.5 This FPP will 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, changes in operations and management systems.

#### **1.5 Fire Information Box**

- 1.5.1 A 'Fire Information Box' will be placed at the site entrance which will include key information for the Fire and Rescue Service should they attend a fire on site during out of hours. The Fire Information Box will contain information including:
- Copy of the Fire Prevention Plan.
  - Site Layout Plan drawings.
  - Contact information for Site Management.

## 2.0 SITE LOCATION & SURROUNDINGS

### 2.1 Site Location

2.1.1 The site is located approximately 32km to the east of the centre of London, in the town of Grays. It is centred on National Grid Reference TQ 5818 7673. The site is in a heavily industrial area, with other industrial units and warehouses surrounding the site to the north, east and west. The River Thames is located south of the site. The site location is shown below in Figure 1:



Figure 1 – Site Location (source: Google Earth 2022)

### 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 website<sup>1</sup> and the sensitive receptors identified are listed below in Table 1 and also shown on the Sensitive Receptor Plan drawing ref. 5570-CAU-XX-XX-DR-V-1801. The distance to each receptor is measured from the proposed site boundary.

2.2.2 In addition, as part of the Pre-Application Advice stage, the Environment Agency (EA) conducted a Nature and Heritage Conservation Screening Report and identified one Site of Special Scientific Interest (SSSI), one Marine Conservation Zone (MCZ), five Local Wildlife Sites (LWSs) within 2km of the site. One RAMSAR site was identified within 10km of the site. Three

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



protected species and one protected habitat were identified within 500m of the site boundary. The relevant sites within 1km are listed in Table 1 below.

- 2.2.3 The closest human receptors to the site are workers and customers of the surrounding industrial units located 80m west (Viridor Collections Unit) and 100m north. There are a large number of industrial buildings surrounding the site to the north, east and west. These are, however, industrial and commercial receptors and less sensitive to emissions such as noise, vibration and odour.
- 2.2.4 West Thurrock Primary School is located 805m northeast of the site. There are no other schools and no hospitals within 1km of the site.
- 2.2.5 The nearest residential receptors to the site are houses off Schofield Road 760m north of the site boundary. Other residential areas are houses located within residential areas north of the site. Houses located off London Street (900m north) and houses located off Flint Street (925m northeast). A number of public parks or gardens are located within the residential areas, located 765m north-northeast, 815m north and 935m north-northeast.
- 2.2.6 The site is not located within a Source Protection Zone, with the closest, a Zone III, located 1.5km northeast of the site. The site is located on a Principal Aquifer within the bedrock below the site (Lewer Nodular Chalk Formation). The superficial deposits at the site are Alluvium deposits of clay, silt, sand and peat, classified as a Secondary Undifferentiated Aquifer (variable characteristics).
- 2.2.7 The site is within a Flood Zone 3 according to the GOV.UK Flood Risk Maps website, which indicates that the site has a high risk of flooding. The site is within an area benefiting from flood defences.

### **2.3 Designated Sites of Ecological Importance & Other Habitats**

- 2.3.1 A search of the surrounding area using the DEFRA Magic Maps website has identified one SSSI within 1km of the site: West Thurrock Lagoon and Marshes SSSI located 80m east of the site boundary at its closest point. According to the EA Conservation Screen Report there are three Local Wildlife Sites (LWSs) located within 1km of the site, the closest of which is shown to be located <10m to the south and west of the site (West Thurrock Brownfields LWS). The other two LWSs are located 150m northeast of the site boundary (West Thurrock Lagoon LWS) and 275m to the north of the site (West Thurrock Reedbed).
- 2.3.2 The West Thurrock Lagoon and Marshes is a designated SSSI due to the importance of the site for wintering waders and wildfowl on the Inner Thames Estuary. The combination of extensive intertidal mudflats together with a large and secure high tide roost, attracts waders in nationally important numbers, with significant populations of other bird species.<sup>2</sup>

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<sup>2</sup> <https://designatedsites.naturalengland.org.uk/PDFsForWeb/Citation/1006132.pdf>

- 2.3.3 There are no Ancient Woodlands within 1km of the site, with the closest, Watts Wood, located over 2.4km northwest of the site. There are no world heritage sites or scheduled monuments within 1km of the site boundary.
- 2.4 There are no Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Local Nature Reserves (LNR), National Nature Reserves (NNRs), Ramsar sites or Areas of Outstanding Natural Beauty (AONBs) within 2km of the site. The closest Ramsar site, Thames Estuary and Marshes, is located 9.4km east of the site (as shown in the EA screening report).
- 2.4.1 The sensitive receptors identified within 1000m of the site boundary are presented in Table 1 below:

**Table 1 – Summary of Sensitive Receptors within 1km of the site boundary**

Receptor	Type	Distance/Direction
Groundwater within bedrock – Principal Aquifer	Groundwater	Below site
West Thurrock Brownfields LWS	Local Wildlife Site	<10m S & W
Channel Tunnel rail link (underground)	Railway	10m N
Users of Oliver Road/Oliver Close	Public Road	60m N
Car Park (Viridor collections unit)	Industrial	80m W
West Thurrock Lagoon & Marshes	SSSI	80m E
Industrial Units	Industrial/Commercial	100m N
Industrial buildings (Polybitumens)	Industrial/Commercial	115m WSW
West Thurrock Lagoon LWS	Local Wildlife Site	150m NE
West Thurrock Reedbed LWS	Local Wildlife Site	275m N
Oil Storage Depot	Industrial	295m W
Amazon Warehouse	Industrial/Commercial	365m N
Industrial Chemicals Group Warehouses	Industrial	400m E
Industrial Units	Industrial	450m NW
Daily Mail Printing Factory	Industrial/Commercial	430m NE
A1090 Oliver Road	Public Road	510m N
Thurrock Trade Park	Industrial/Commercial	515m N
Royal Mail/Parcel Force Warehouse	Industrial/Commercial	575m NNE
Industrial Units off Oliver Close	Industrial/Commercial	630m NW
River Thames	Surface Water	640m S
Railway Line	Commercial	700m N
Industrial Units off London Road	Industrial/Commercial	720m N
Houses off Schofield Road	Residential	760m N
Public Park/Garden	Recreational	765m NNE
Co-op Warehouse	Industrial	770m NE
West Thurrock Primary School	Educational	805m NE

Receptor	Type	Distance/Direction
Public Park/garden	Recreational	815m N
Seabrook Warehousing (SWL)	Industrial	850m NNW
Queen Elizabeth II Bridge	Public Road	875m W
Residential Houses off London Road	Residential	900m N
Residential houses off Flint Street	Residential	925m NE
Public Park or Garden	Recreational	935m NNE

**2.5 Meteorological Conditions**

- 2.5.1 Fire, smoke and vapours from a fire incident are likely to be affected by local weather conditions, in particular by wind direction and strength.
- 2.5.2 Wind statistics observed from Erith Kent weather station, the closest weather station actively recording wind statistics, are considered to be representative of the typical conditions at the site (Figure 2 below). Erith Kent weather station is located over 8.8km to the west of the site.
- 2.5.3 A review of the data recorded daily between February 2012 and June 2022 on the Windfinder.com<sup>3</sup> website indicates that the most dominant wind direction is from the west-northwest to the east-southeast.



**Figure 2 – Erith Kent wind statistics – average wind direction & strength 2012-2022**

<sup>3</sup> [https://www.windfinder.com/windstatistics/erith\\_kent](https://www.windfinder.com/windstatistics/erith_kent)

## 3.0 SITE ACTIVITIES

### 3.1 Proposed Operations

3.1.1 The operator, Williams Environmental Limited, proposes to accept up to 25,000 tonnes per annum (tpa) of hazardous and non-hazardous wastes at the new Riverside Waste Transfer Station site ('the site'). The total storage capacity of the site at any one time will be up to a maximum of 820 tonnes.

3.1.2 This application involves a Waste Installation application for a Hazardous Waste Transfer Station for the following listed activities:

- Section 5.3 A (1)(a)(iv) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving repackaging.
- Section 5.3 A (1)(a)(ii) Disposal or recovery of hazardous waste involving physico-chemical treatment of hazardous waste (not exceeding 10 tonnes per day but associated with the above activity).
- Section 5.6 Part A (1)(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Section 5.1, 5.2 and 5.3.

3.1.3 This application also involves the following Waste Activity:

- Non-hazardous Household, Commercial and Industrial Waste Transfer activity

3.1.4 The installation will involve the temporary storage of hazardous and non-hazardous waste, prior to bulking and repackaging for subsequent transfer off-site for further treatment or disposal. The majority of wastes will pass through the transfer station requiring just a short inspection and without the need for any bulking or decanting. In addition, activities at the site will include the scraping and emptying out of residues from containers, and a drum crushing operation. Emptied containers and crushed drums from hazardous waste will be sent off site for further treatment. Containers and drums that had non-hazardous waste in will be sent straight for recycling at the appropriate facility.

### 3.2 Fire Prevention Guidance

3.2.1 This FPP covers combustible wastes to be accepted and stored at the site that are non-hazardous, and stored in the northern portion of the site, and the WEEE wastes that are stored in the southern portion of the site.

3.2.2 The Environment Agency requires a Fire Prevention Plan where operators accept potentially combustible wastes. The following combustible wastes (excluding hazardous wastes but including WEEE) covered by this Fire Prevention Plan, in accordance with the guidance are as follows:

- Packaging wastes/general wastes – may include paper or cardboard, plastics and other mixed combustible wastes.
- Scrap metals
- WEEE – including fridges, computers, IT communications hardware etc.
- Rubber – including tyres
- Wood – including whole or broken pallets

3.2.3 The Environment Agency 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. It also does not apply to non-waste materials such as gas cylinders, aerosols and combustible liquids, however these have still been considered in this FPP as they may cause or increase the impact of a fire on site.

### **3.3 Storage Arrangements**

3.3.1 The proposed site layout of the Riverside Waste Transfer Station is shown in attached drawing ref. 5195-CAU-XX-XX-DR-V-1800. The typical volumes to be accepted at the site are shown on this drawing and may fluctuate depending on the season and quantities of waste received but will remain within the permitted limits.

### **3.4 Waste Electrical & Electronic Equipment (WEEE)**

3.4.1 Waste Electrical & Electronic Equipment (WEEE) including IT communications wastes, will be accepted onto site (including any batteries within this equipment) and stored in designated concrete storage bays under the canopy roof. This waste is considered within the FPP.

#### Persistent Organic Pollutants

3.4.2 Persistent organic pollutants (POPs) can be present in waste, typically WEEE waste, and can have significant effects on human health and the environment. They are subject to the POPs regulations 2019 – UK SI.2019 No.1099, implementing Regulation (EU) 2019/1021. These regulations specify the appropriate treatment for the recovery and disposal of POPs.

3.4.3 The operator will identify if any wastes on site contain POPs. If a waste type is likely to contain POPs, then the operator must assume that it does unless there is evidence to prove otherwise, for example, through analysis.

3.4.4 Any waste containing POPs will be segregated from other wastes and stored separately. The location of waste containing POPs will be marked on the site plan. If there is a fire, the operator will tell the Fire and Rescue Service (FRS) that there are wastes containing POPs on site. If there is a fire involving POPs containing waste then any residue from the fire may contain POPs and so will be segregated and treated following the POPs regulations. This could include firefighting water.

### 3.5 Hazardous Wastes

3.5.1 Hazardous wastes (except WEEE) are not covered by the EA Fire Prevention Plan guidance, however a range of wastes to be accepted at the site are listed below and the full EWC waste code list is included in Appendix 5 of the Supporting Document of this permit application.

3.5.2 Hazardous wastes awaiting repackaging/bulking or awaiting transfer off-site will be stored in designated concrete storage bays within individual containers (i.e. IBCs, drums etc,) or within designated skips or RORO containers.

3.5.3 Hazardous wastes to be accepted, bulked and temporarily stored on site include, but are not limited to the following:

- Oxidising agents containing acids
- Oxidising agents
- Organic peroxides
- Water reactive wastes
- Solvent vials
- Oily rags
- Flammable solids, adhesives and resins
- Flammable solvents, paints and resins
- Oil/water wastes
- Toxic solids/liquids, lab wastes and agrochemicals
- IT communication and household WEEE
- Waste batteries (including lithium batteries, car batteries, household waste batteries)
- Fridges and fluorescent tubes, and lamps
- Acids
- Alkali waste, caustic waste, ammonia and cyanides
- Bleach and oxidising liquids
- Asbestos (bagged and cement bound)
- Miscellaneous gas cannisters including Aerosols, Butane, Propane and other hazardous and non-hazardous gases (including flammable gases)
- Acetylene gas cannisters

### 3.6 Gas Cylinders, Fuels & Lubricants

3.6.1 Miscellaneous gas cannisters containing Aerosols, Acetylene, Butane, Propane and other hazardous and non-hazardous gases (including flammable gases) will be stored on site in a designated area within waste safes, drums and lockable metal cages, as per the site plan ref. 5195-CAU-XX-XX-DR-V-1800.

3.6.2 Fuels and oils/lubricants stored on site for plant (forklifts) refuelling and maintenance will be within containers that have secondary containment, and stored within a lockable shed, situated on the impermeable site surfacing, as per the site layout plan ref. 5195-CAU-XX-XX-DR-V-1800. Refuelling will only occur in designated areas with impermeable surfacing and spill

kits available, with the fuel pump operated by trained staff. When not in use the fuel store will be locked, with CCTV surveillance for added security.

## 4.0 MANAGING COMMON CAUSES OF FIRE

### 4.1 Arson

4.1.1 Security measures are in place to prevent the unauthorised access to the site. The site boundary is surrounded by 2m high palisade (or similar) security fencing, and the site entrance/exit gates on the northern perimeter are lockable. The gates will be closed and locked outside of operational hours, with no unauthorised access out of hours.

4.1.2 The integrity of the security fencing and gates are inspected daily and at the end of the working day using a 'Site Inspection Form' (Appendix 1). Any defective locks or damaged fencing or gates will be repaired as soon as practically possible. The site is manned during the following operational times:

Monday to Friday	06:00 – 21:00
Saturday	06:00 – 16:00 (limited operations as required)
Sunday	Closed
Bank Holidays	09:00 – 13:00 (limited operations as required)

4.1.3 The site will operate a CCTV system across the facility, 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.

4.1.4 It is proposed once the site is fully completed, it will be patrolled by security guards 24 hours a day, 7 days a week and be fitted with electric gates.

### 4.2 Plant and Equipment

4.2.1 The following equipment are to be used on site:

- 2 x diesel fuelled forklifts
- 1 x electrically powered 205 litre drum crusher
- Air extraction system with activated carbon filter in building

4.2.2 All plant and mobile equipment will undergo regular inspection, staff will be trained to identify and leaks or damages and report any faults to site management immediately so remedial actions can be scheduled. As part of daily site inspections, the 'Site Inspection Form (Appendix 1) will be completed. At the beginning of every plant operator's shift, the plant or vehicle will be inspected prior to workers starting their shift in order to carry out checks on plant and mobile equipment and to report any defects to site management.

4.2.3 All mobile plant (forklifts) will be fitted with a fire extinguisher and any plant that are not being used or parked for end-of-shift will be safely parked away from any combustible materials. The forklifts will be parked in the fuel shed, away from combustible materials when not in use, as shown on the attached Site Layout Plan drawing ref. 5195-CAU-XX-XX-DR-V-1800.



### **4.3 Re-fuelling of Plant and Equipment**

4.3.1 All refuelling of onsite plant will be undertaken on impermeable surfacing by a diesel tank and pump, which is stored on site in the fuel store shed when not in use, away from combustible materials, and within the area covered by impermeable surfacing. The surface where re-fuelling is undertaken comprises of impermeable concrete flooring to ensure that the potential for leaks and spillages of hazardous substances to the surrounding environment is minimised. Spill kits are available around site, and only trained site staff will undertake refuelling duties.

### **4.4 Electrical faults including damaged or exposed electrical cables**

4.4.1 All electrics on site will be regularly inspected and cables which provide power for general plant and machinery (e.g. drum crusher, air extraction system in building) 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.

### **4.5 Discard smoking materials**

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 smoking area off-site.

### **4.6 Hot works**

4.6.1 Due to the nature of the operations on site, no hot works such as welding and or cutting is anticipated to be carried out within the boundary of the site.

### **4.7 Industrial heaters**

4.7.1 Not applicable to site - industrial heaters will not be utilised on site.

### **4.8 Hot Exhausts**

4.8.1 Mobile plant exhausts and engine surfaces (forklifts) can become hot and dust settling on these surfaces can cause a fire risk. As part of the site operations, 30 minutes before site closure all mobile plant under-go a 'cooling period' where they are moved outside to the plant parking area 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 and 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 the 'Site Inspection Form' checklist (Appendix 1).

4.8.3 It is not anticipated that dust will be generated by the proposed site activities.

#### **4.9 Ignition Sources**

4.9.1 Naked flames, such as those from welding works 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 utilised on site.

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**

##### ***Batteries in ELVs***

4.10.1 Parts of End-of-Life Vehicles (ELVs) may be accepted onto site and will typically consist of potentially brake parts, plastics and wheels, and these will be stored on pallets and where required in containers, on the impermeable concrete surfacing within the fully bunded area. Car batteries will be accepted onto site and stored separately in sealed containers such as battery boxes, under cover within a designated concrete storage bay.

##### ***Battery Storage***

4.10.2 Batteries to be accepted at site will include a range of household batteries, car batteries, lithium batteries and other batteries. Batteries will be inspected upon receipt to check they are in good condition and are undamaged and dry, otherwise they will be rejected from site.

4.10.3 The batteries then will be bulked up and stored in appropriate sealed containers, such as battery boxes for car batteries, 60 litre kegs for lithium batteries and other batteries in drums or plastic containers, to ensure they are kept dry and secure. Batteries will be stored in a designated separate bay on site, apart from other wastes.

4.10.4 All operatives employed to repack batteries will receive specific training related to their role in the battery repackaging operation to ensure safe working practices with batteries and correct storage.

#### **4.11 Leaks and Spillages**

4.11.1 As part of the EMS, in the event of a potentially polluting leakage or polluting spillage taking place, immediate remedial actions will be carried out. These will include 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 (booms, spill pads, granules) disposed of as hazardous waste.

- 4.11.2 All vehicles used on site 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.
- 4.11.3 The entire site is surfaced in impermeable concrete, 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.
- 4.11.4 All refuelling of onsite plant (forklifts) will be undertaken on impermeable surfacing by a trained site operative using the fuel pump, which is stored in the fuel shed on site when not in use, away from combustible materials, and within the area covered by impermeable surfacing. Spill kits will be available around site, and only trained site staff will undertake refuelling duties.
- 4.11.5 Fuels and oils/lubricants stored on site for plant fuelling and maintenance will be within containers that have secondary containment, and stored within the lockable fuel store shed, situated on the impermeable site surfacing.
- 4.11.6 Any containers or skips used to store hazardous substances shall be:
- Clearly labelled detailing the contents (unless contents are clearly identifiable);
  - Inspected and maintained in accordance with maintenance schedules and procedures, shall be fully documented and recorded; and,
  - In the event of damage or deterioration to a container, this shall be repaired or replaced immediately.
- 4.11.7 A 'Site Inspection Form' checklist (Appendix 1) will confirm that the site is clear of any leaks or spillages, and if any are identified during this check, remedial actions will be carried out and recorded.

#### **4.12 Build-up of loose combustible waste**

- 4.12.1 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 'Site Inspection Form' checklist (Appendix 1) will ensure that any build-up or accumulation has been inspected and remedial actions carried out as appropriately. Due to the nature of the proposed operations, it is unlikely any dust or other loose debris will accumulate on site surfaces. All wastes will be containerised in sealed containers, IBCs, drums, bags etc. or contained in enclosed skips/RORO bins.

#### **4.13 Reaction between wastes**

- 4.13.1 The site will operate according to the waste acceptance, waste receipt and control, and waste consolidation operational procedures detailed in their 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 and that incompatible or volatile wastes will not be stored together. Wastes will be containerised, with only a limited selection of hazardous wastes, such as fridges, that will be accepted loose on site. Non-hazardous wastes may be stored in loose form i.e. pallets but will not be reactive.

- 4.13.2 Waste consolidation and compatibility testing will only be undertaken by technical staff on hazardous wastes – this will not be necessary for non-hazardous combustible wastes. Good housekeeping and supervision of activities will be undertaken on site to ensure incompatible wastes or combustible wastes with reactive wastes do not mix and accidental spillages are cleaned up immediately.
- 4.13.3 If appropriate, compatibility testing shall be undertaken prior to the transfer and bulking of hazardous wastes, however this will not be necessary for the non-hazardous waste streams.
- 4.13.4 In the event that that a non-conforming waste is brought to site, the use of the site quarantine area in the reception bays of the site will ensure that any non-conforming wastes are segregated, and a Fire Watch (detailed in Section 3.16) will be carried out regularly and at the end of the working day. A 'Site Inspection Form' checklist (Appendix 1) will ensure that waste storage areas are inspected for any signs of smoking, smouldering or heat prior to the site closing for that working day.

#### **4.14 Waste Acceptance and deposited hot loads**

- 4.14.1 It is unlikely hot loads of waste will be brought to and deposited at the site. Waste acceptance procedures detailed in the site's EMS are in place to prevent incoming hot loads being accepted onto site. Staff are trained to be vigilant and identify any incompatible and non-conforming wastes including any hot loads.
- 4.14.2 However, in the rare and exceptional circumstance that any waste vehicles found to be carrying hot loads are identified, the waste vehicle will be rejected and sent away. If upon unloading, wastes are identified as a hot load, it will be segregated by forklift and taken to the quarantine area as defined in the attached Site Layout Plan drawing ref. 5195-CAU-XX-XX-DR-V-1800.
- 4.14.3 The site has use of foam fire extinguishers around site which can be utilised should a hot load of non-hazardous waste is found. Site staff are trained to watch for and identify and potential fires e.g. smoke/steam coming from wastes and daily visual checks will be regularly carried out on waste loads.
- 4.14.4 Should any hot loads be unloaded within the site and stored in the quarantine area, this waste will be inspected as part of the Site Inspection Form' checklist (Appendix 1) to ensure that the waste is cool and not smoking/smouldering.

**4.15 Hot and dry weather**

- 4.15.1 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. Combustible non-hazardous wastes will be stored in a roll-on-off container that will be covered when not being filled that will provide shading. All wastes will be stored for the minimum storage time, waste operations will be performed so that all incoming waste brought to site is processed, separated and loaded off-site in the shortest time possible.
- 4.15.2 It is considered that scrap metals will not be affected by hot weather.
- 4.15.3 If absolutely required, the use of onsite hoses can be used to cool down any materials showing any indicating signs of smoke, fire or smouldering.

**4.16 Fire Watch**

- 4.16.1 The Fire Watch will be visual checks and observations on wastes, equipment and storage areas and will be carried out regularly and especially at the end of the working day to identify any potential for fire risk or any signs of smoking/ smouldering.
- 4.16.2 Hot exhausts/vents/surfaces or engines can ignite wastes/dusts/accumulation trapped near them or settling onto them. Operators of site equipment and mobile plant will be instructed to ensure that wastes and other debris are cleared from around surfaces at the end of each shift. It is not anticipated that any dust or debris will be generated by the proposed site activities.
- 4.16.3 Good housekeeping measures are to be employed on site include short waste storage durations, regular inspection of wastes and regular site clean-ups. Tidying and litter picking at the end of every working day will also be undertaken where necessary to ensure no on-site litter and minimise the accumulation of combustible materials.

## 5.0 PREVENTING SELF-COMBUSTION

### 5.1 Overview

5.1.1 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, the site will carry out a daily fire watch as part of the 'Site Inspection Form' checklist (Appendix 1).

### 5.2 Fire Prevention Procedures

- 5.2.1 Following strict waste acceptance procedures at the weighbridge, non-hazardous wastes and WEEE will be unloaded in the reception bays under the canopy roof, before being visually inspected and sampled by trained site staff. Any hot loads or non-conforming waste types received will be rejected from site.
- 5.2.2 Potentially combustible wastes such as packaging in the general waste skip (i.e. plastics, paper, cardboard etc.) will be stored in a separate metal, container/skip with a cover or a bin for cardboard. Wastes kept in skips and containers will be emptied regularly when full.
- 5.2.3 Non-hazardous wastes such as pallets and cardboard may be incidental waste from incoming palletised hazardous waste loads, which once unloaded into their designated bays, leave an empty pallet or box(es). Other waste loads accepted at the site may be entirely whole pallets. Empty pallets will be stored in loose stockpiles awaiting collection off-site, at least 6m apart from other waste piles or buildings. Any broken bits of damaged pallets may be stored in the general waste skip.
- 5.2.4 Other non-hazardous combustible materials stored at the site, such as scrap metal, are unlikely to self-combust, and will be stored in a covered skip/RORO container at a suitable stand-off from other waste storage and emptied regularly when full.
- 5.2.5 Waste Electrical and Electronic Equipment (WEEE) will be stored separately in a designated concrete storage bay under the canopy roof. The storage bays will have 3 concrete walls and a sleeping policeman along the front of the bay. The concrete walls provide fire resistant protection to waste piles either side and WEEE will be containerised to protect from the wet. Large bulky items of WEEE such as fridges and lamps will be stored in a separate bay from the smaller WEEE items.
- 5.2.6 All stockpiles and containerised wastes will be inspected as part of daily site inspections for signs of smoking, self-heating or arson.
- 5.2.7 Any skips or RORO containers containing combustible wastes that are found to be showing signs of self-combustion/fire will be doused with water to cool and wet the waste and if

necessary, the skip or RORO moved into the quarantine area in the event of a fire inside the container away from other wastes and buildings.

5.2.8 Daily site inspections will be undertaken by trained site staff, using the 'Site Inspection Form' checklist in Appendix 1, which is to include for checking stockpiles and containers of waste stored on site for signs of self-combustion, heating, steam or smoke. If signs of self-heating stockpiles of waste are detected, the emergency measures outlined below will be employed to prevent further heating or developing into a fire.

5.2.9 No combustible non-hazardous wastes on site will be stored for longer than 3 months, with most wastes processed and removed from site within a week. However, if a stockpile of waste is stored for longer than 3 months, the operator will ensure extra fire prevention measures are implemented to prevent self-combustion, which will include additional monitoring and controlling temperatures within the waste stockpile by:

- Monitoring the temperature of the pile using a probe or other device as appropriate.
- Staff will be trained to detect and manage hotspots.

### **5.3 Action Plan**

5.3.1 In the rare circumstance should there be any indication of self-heating of stockpiles, the following actions will be undertaken to cool the materials:

- Wastes will be rotated as necessary to allow cooling;
- Wastes can be transferred and spread out within the quarantine area; and
- Cooled and any fire/heating doused utilising an appropriate source of water.

### **5.4 Managing Storage times**

5.4.1 To prevent self-combustion, maximum storage time of all waste materials on site will be minimised. As per the site's Environmental Management system (EMS) and waste acceptance procedures, all loads deposited at the site shall have the following information recorded at the weighbridge:

- Date and time of receipt of waste
- Vehicle size/type and registration number
- Name and address of customer/haulier
- Waste type and quantity
- Waste carrier registration number

5.4.2 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. 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 (containerised wastes will not require this).

## **5.5 Monitoring and Control temperature**

- 5.5.1 Hazardous wastes that are WEEE will be containerised and kept dry under the canopy roof, stored externally in concrete storage bays. Bulky WEEE such as fridges will be stored loose in concrete bays.
- 5.5.2 General waste containing waste packaging, broken pallets, cardboard, plastics etc. will be contained in a metal covered skip or bins. Loose pallets awaiting removal from site for reuse or recycling will be stored in stockpiles at least 6m separation distance from the next waste pile or building.
- 5.5.3 As part of daily inspections, stored wastes should be checked at regular intervals by trained site staff/management to ensure that there are no signs or smoking, smouldering or indications of fire or hotspots. Water from on-site hose reels or water sprayers can be used to cool or dampen the waste and mobile plant used to turn piles or spread out to allow cooling.

## **5.6 Waste Bale Storage**

- 5.6.1 There is potential for cardboard to be accepted at the site in bales, which will be stored for no longer than 3 months on site, at least 6m apart from other waste piles or buildings. There is no other waste bale storage proposed for the site.

## **5.7 Waste ELV bales**

- 5.7.1 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 There will be a 'Skip Area' (see areas numbered 19-22 on Site Layout Plan ref. 5195-CAU-XX-XX-DR-V-1800) in the northern portion of site housing the general waste skip (Roll-on bin) for mixed non-hazardous plastics, broken pallets etc, and the scrap metal skip (Roll on bin). These together with the area 27 'Consumable storage' are where the majority of non-hazardous combustible wastes will be stored on site. The largest skip/RORO container will be 35m<sup>3</sup> in size and can be moved, if necessary, around site by mobile plant/forklift to achieve the required separation distance, or to the quarantine area.
- 6.1.2 Loose whole pallets brought to site will be stored in stockpiles, or if broken/fragmented in the general waste skip. It is likely a skip or small waste bin (wheelie bin) will be used to store waste cardboard packaging for removal off-site for recycling.
- 6.1.3 WEEE will be stored in sealed containers within a concrete storage bay, typically measuring 6m wide by 12m long with a maximum capacity estimated at 72m<sup>3</sup>.
- 6.1.4 Operations will be carried out so that there is a rapid turnover of stock which will drastically reduce the risk of 'older' material from self-heating and practically eliminating the potential for thermal build up and self-combustion. Skips will be covered to protect from excessive heating from the sun or build-up of rainwater encouraging biodegradation of materials such as cardboard.

## 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, only parts stored in containers of ELVs such as brake parts, plastics or wheels.

### 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 Combustible wastes to be stored in containers such as skips/bin and RORO containers will be:

- General waste (which may include broken pallets, plastics, empty non-hazardous packaging, cardboard etc.) – in a skip/RORO container or wheelie bin
- Scrap metal – in RORO container
- WEEE wastes – will be bulked and stored in containers within a concrete storage bay

7.3.3 Each container of combustible waste at the site will be stored separately and will be made accessible from at least one side at all times so that a fire can be extinguished.

7.3.4 The skip/bin or RORO container can be moved by mobile plant (forklift) on site as soon as reasonably practicable to prevent a fire spreading. If a fire occurs in a waste container, it will be moved to the quarantine area or an area which is 6m away from any other item, building or stockpile. If safe to do so, a fire hose reel or extinguisher can be used to douse the fire.

7.3.5 The EA's Fire Prevention does not apply to hazardous wastes, however for information all hazardous wastes will be stored in individual containers such as plastic containers, 1000 litre IBCs, drums and kegs within the concrete storage bays on site. Bagged asbestos waste will be stored in a metal lockable covered RORO container (see Site Layout Plan ref. 5195-CAU-XX-XX-DR-V-1800).

## 8.0 PREVENTION FIRE SPREADING

### 8.1 Separation distances

8.1.1 The separation distance between containers storing combustible waste on site will be in accordance with those recommended in the EA's Fire Prevention Plan (FPP) guidance and containers can be further moved around site or to the quarantine area in the event of a fire occurring in a container.

8.1.2 Combustible wastes stored inside a container may include:

- Scrap metals (ferrous and non-ferrous) – RORO container in northern area
- General wastes – RORO container
- Cardboard – skip or wheelie bin

8.1.3 If required, a separation distance of at least 6 metres will be maintained between loose waste stockpiles of waste and any buildings or other combustible or flammable materials.

8.1.4 Combustible wastes stored in stockpiles may include:

- Tyres
- Wooden pallets

8.1.5 Concrete storage bay walls between stored wastes negate the need to have a 6m separation distance due to their fire-resistant properties.

8.1.6 Combustible wastes stored in concrete bays may include:

- WEEE – concrete storage bays in southern area

8.1.7 The locations of waste storage areas are shown in the attached Site Layout Plan drawing ref. 51985-CAU-XX-XX-DR-V-1800.

8.1.8 The 'Site Inspection Form' checklist (Appendix 1) will be filled out daily to ensure that all stockpiles and containers are being inspected and managed correctly in line with the Fire Prevention Plan.

## 9.0 QUARANTINE AREA

### 9.1 Overview

- 9.1.1 The site will have a quarantine area in the event of a fire for temporarily storing wastes or waste containers in the northern portion of the site, labelled as '32' on the attached Site Layout Plan ref. 5195-CAU-XX-XX-DR-V-1800, provided with an impermeable surface.
- 9.1.2 When a quarantine area is required to be used, the part of the designated quarantine area that is closest to the waste to be quarantined and that is free of objects, mobile plant and other wastes, will be used, providing a 6m separation distance. This will depend on operational requirements that day and will be decided on by the Site Manager or deputy manager at the time.
- 9.1.3 In the worst-case scenario, the quarantine area is capable of holding at least 50% of the volume of the largest waste pile stockpiled at 2m height, or an entire skip/RORO container of waste, and is designated with a 6m separation distance.
- 9.1.4 The quarantine area provides a space where the site mobile plant can safely place burning wastes onto to extinguish them, and unburnt wastes can also be placed here to isolate them and prevent them catching fire.

## 10.0 DETECTING FIRE

### 10.1 Fire Alarm System

- 10.1.1 Site staff will be trained in the potential signs of containers 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 site inspections, all containers storing waste materials will be checked daily for signs of smoking, smouldering, steam, heat or flames and the alarm raised if detected. Any heat build-up or hot spots that are identified early will be cooled using water sources or waste piles rotated and spread out.
- 10.1.3 The site will have an air horn fire alarm for raising the alarm located in the site office that can be sounded in the event of a fire to make site staff aware of a fire emergency and to muster at a designated fire assembly point. Where possible, firefighting will be undertaken using fire extinguishers and water supplies (hose, sprayers) on site.
- 10.1.4 The fire alarm air horn will be regularly checked by site management and the checks recorded in the 'Site Inspection Form' checklist (Appendix 1). Any fault will be reported immediately for repairs or replacement.
- 10.1.5 The fire alarm air horn will be tested weekly, and this will be recorded in the 'Site Inspection Form' checklist (Appendix 1) (however not conducted daily).
- 10.1.6 Fire assembly points will be kept clear, visible and correctly labelled at all times.

#### ***Out of hours***

- 10.1.7 The site will operate a CCTV system across the facility, 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.
- 10.1.8 The Site Management will notify the Fire and Rescue Service (FRS) of the Fire Information box which holds a copy of the Fire Prevention Plan. On arrival, the Site Manager/Deputy will engage with the FRS in any way and provide instructions to assist with the fire.

## 11.0 FIRE SUPPRESSION & FIRE-FIGHTING

### 11.1 Inside Buildings

- 11.1.1 There will be no combustible non-hazardous wastes stored inside the enclosed building overnight or when the site is closed, therefore an automatic suppression system has not been specified.
- 11.1.2 The site office is within 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 inspection to ensure that the site is being managed correctly and that all fire detection and suppression equipment is working.
- 11.1.3 The enclosed building used for repackaging of wastes will not be used for storage of wastes at any time. Wastes will be repackaged and bulked only in this building, before being returned to the designated storage bays.
- 11.1.4 The shed used as a fuel store, overnight forklift parking and on-site laboratory will not be used to store wastes, however fire extinguishers and spill kits will be present due to the flammable nature of the fuels/oils/lubricants stored.

### 11.2 Fire-Fighting

- 11.2.1 It is considered that most incidents of fire on waste sites are small and containable, thereby the use of mobile extinguishers and hoses is considered to be a more fit for purpose option over an automatic/fixed suppression system due to the following:
- The waste stockpiles are limited in size to manageable sizes, within fire-proof concrete bays, or within containers (i.e. skips or RORO containers).
  - Hoses and extinguishers can be applied instantly and proactively by trained site staff. This will help allow a fire to be extinguished within 3 hours.
  - Site staff will be trained in raising the alarm of a fire and in fire suppression duties of small manageable fires. For larger fires, the local Fire & Rescue Service will be called, and all site staff and visitors evacuated to the fire assembly point.
  - Hoses and extinguishers are mobile allowing flexibility to tackle different waste areas, wastes can be dowsed should a portion alight or smouldering wastes need to be pulled out of a large stockpile by mobile plant, if safe to do so.

### 11.3 Fire Extinguishers

- 11.3.1 Site staff will be trained in fire safety awareness and in the use of site fire-fighting equipment. Fire extinguishers will be placed at strategic locations around the site, particularly in the site office and fuel store. A check (discharged/full, service date etc) of fire extinguishers will be undertaken weekly and logged in the daily 'Site Inspection Form' checklist. All fire

extinguishers are subject to annual testing by an approved accredited supplier. All fire extinguishers conform to British Standards EN 3. Mobile plant on site (two forklifts) will be provided with fire extinguishers to be kept in the vehicle cab at all times in case of a fire emergency.

## 12.0 WATER SUPPLIES

### 12.1 Overview

- 12.1.1 In accordance with the Environment Agency's 'Fire prevention plans: environmental permits' guidance (updated 11<sup>th</sup> 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 Water supplies and firefighting equipment will be provided on site and will consist of a hose supplying mains water and on-site fire extinguishers. Off-site there is a fire hydrant located approximately 80m to the north of the site entrance (as shown on Figure 4).
- 12.1.3 It is also anticipated that the local Fire and Rescue Service (FRS) upon attendance at site will provide fire engines containing 1,800 litres each, and they will utilise the fire hydrant(s) located on Watson Close.

### 12.2 Water Supply Requirements for Worst-Case Scenario

- 12.2.1 The EA guidance on 'Fire prevention plans' states, '*a 300m<sup>3</sup> pile of waste will require at least 2,000 litres per minute of water for 3 hours*', (calculated to be a total of 360,000 litres or 360m<sup>3</sup>).
- 12.2.2 Based on this, the largest proposed stockpile of combustible wastes at the site will be in an RORO/skip container, measured at 35m<sup>3</sup>. Therefore, a 35m<sup>3</sup> waste pile would require at least 233.10 litres per minute of water for 3 hours, which equates to 41,958 litres, or 42m<sup>3</sup>.
- 12.2.3 As the waste on site is stored in containers rather than in large piles, it is considered that most container fires would normally be extinguished using onsite equipment (fire extinguishers/hoses) or at worst, well within 1 hour by the fire brigade using water from the fire tenders/engines. Additional water would be drawn from the fire hydrant located approximately 80m north outside the site entrance, although it not anticipated water would be required at the rate stated for a 300m<sup>3</sup> stockpile (as per EA guidance).
- 12.2.4 It is estimated that the worst-case scenario would be a fire of non-hazardous waste in a 35m<sup>3</sup> container/skip in the 'Skip Area' (e.g. the general waste skip) a worse case situation where the container was full. It is unlikely that in most operating conditions that the fire would spread beyond a single container and that the affected container or adjacent containers could not be isolated/sent to the quarantine area.
- 12.2.5 The Fire Hydrant on Watson Close, approximately 80m to the north, was independently tested by Essex & Suffolk Water and the pressure at the hydrant was recorded as 5.81 bar at the time of testing. The pipe diameter is approximately 150mm. The fire rescue service also has the ability to call up the water provider and increase pressure to the water main supplying the hydrant in the event of a fire if more water is required.



- 12.2.6 Water would be drawn direct from the fire tenders and backed up where necessary from the fire hydrant located outside the site. It is anticipated that between 1 to 3 tenders would attend the fire dependent upon the severity of the fire.
- 12.2.7 The most likely scenario is a single 35m<sup>3</sup> container fire requiring 233 litres per minute (assuming EA Guidance). It is considered that container fires can be extinguished within 1 hour therefore 233 litres x 60 minutes = 13,980 litres based on the Environment Agency example for a large stockpile.
- 12.2.8 It is estimated that the capacity of up to 3 tenders and back up from the fire hydrant is sufficient to cope with the likely scenarios detailed. From operator experience, a high capacity 50kg fire extinguisher can extinguish a typical container fire well within 1 hour.
- 12.2.9 The location of the fire hydrant is shown on drawing ref. 5195-CAU-XX-XX-DR-V-1800 and in Figure 4 below. A copy of the email correspondence from Essex & Suffolk Water company about the Hydrant testing is contained within Appendix 2.

### 12.3 Summary of Available Water Supplies

- 12.3.1 The summary of available water supplies at the site is provided below in Table 3:

**Table 3 - Fire water supplies available at the Site**

Description	Capacity & Flow	Location
On-site hoses	Mains water pressure.	On-site.
Fire Hydrant on Watson Close ref.'wexhs016628' (as provided by Essex & Suffolk Water)	<p>Reading of 5.81 bar from fire hydrant (on 07/12/22).</p> <p>Flow will be a minimum of 8 litres per second (480 litres per minute), as is required standard for fire hydrants.</p> <p>For comparison this would provide 14,400 litres in 30mins or 86,400 litres in 3 hours.</p> <p>Mains fed – unlimited supply.</p>	The nearest hydrant is approximately 80m to the north of the site entrance, located on Watson Close, as shown in Figure 4 below.
Fire and Rescue Fire Engines	Fire tenders containing 1,800 litres of water, flow rate of 18.9litres per second (1,134 litres per minute).	Fire & Rescue Service engines/vehicles situated on site and at the site perimeter/entrance to tackle fire.

	Will connect to Fire Hydrant for unlimited supply of water.	
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## 12.4 Fire & Rescue Service Response

- 12.4.1 It is anticipated that most small fires can be doused by use of fire extinguishers and the water from hoses on site, which can be used by trained staff, until further assistance is required and the arrival of the local Fire and Rescue Service.
- 12.4.2 Once fire tenders arrive on site, assuming 1 to 3 engines attend site, this would provide approximately 1,800 or up to 5,400 litres of water, before connecting to the fire hydrant nearby.
- 12.4.3 The fire water on site will be contained by the site drainage, concrete surfacing and perimeter bunding, with all stop valves closed to prevent uncontrolled release of fire waters to surface water receptors.
- 12.4.4 It is very unlikely more than one stockpile or more than one container would be on fire at once, and very unlikely fire would spread due to the separation distances between waste stockpiles/skips, the fireproof concrete storage bay walls and floors on site, limits of stockpile sizes and other fire prevention measures in place, such as the ability to move a container on fire into the quarantine area at the site.

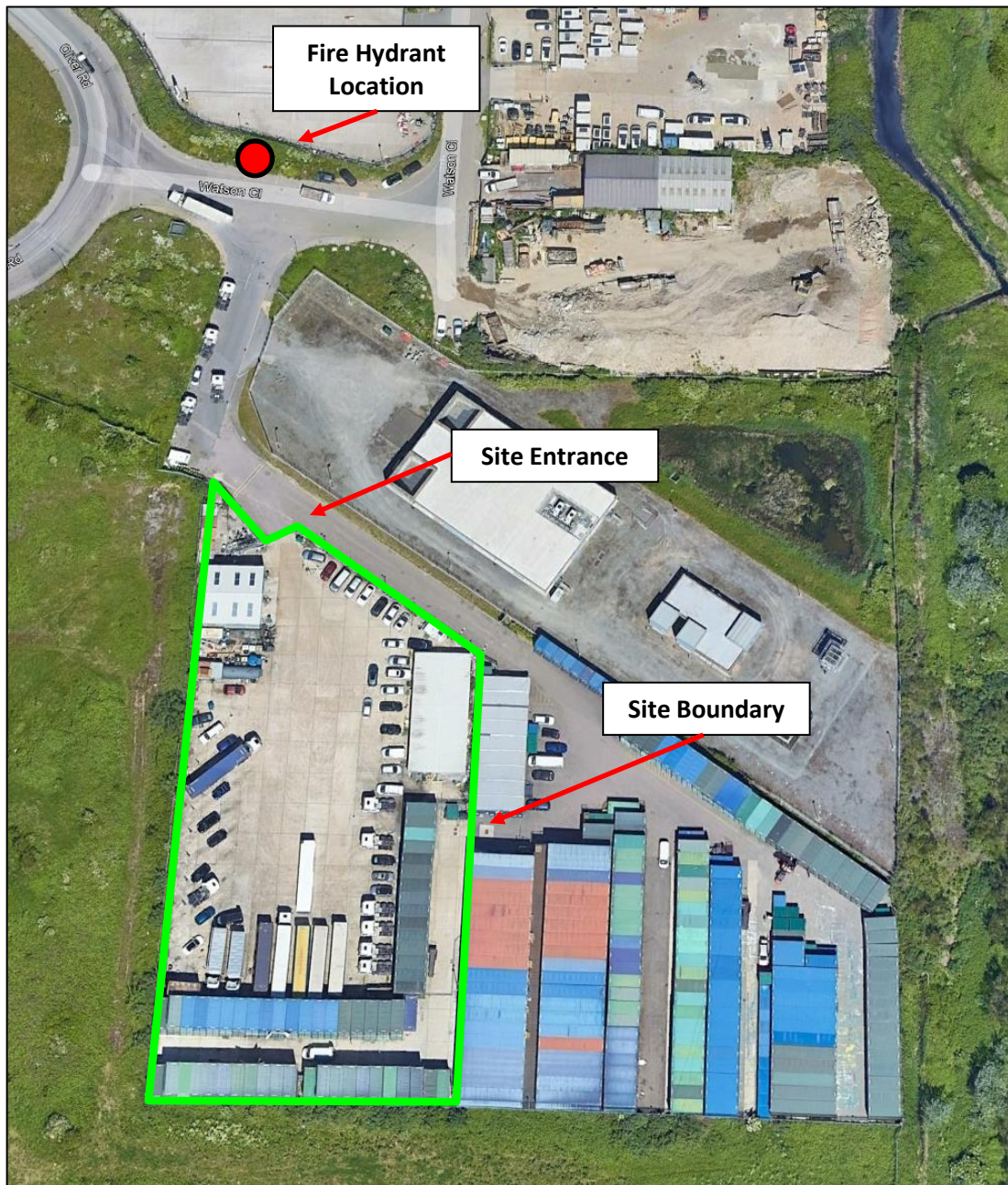
## 12.5 Fire Hydrants

- 12.5.1 The local water company, Essex & Suffolk Water, have confirmed there is a fire hydrant located on Watson Close, approximately 80m north of the site entrance, is available to use in the event of a fire, as shown in Figure 4 below.

## 12.6 Fire Response

- 12.6.1 It is considered that with the combined use of the fire extinguishers and the water from hoses on site, fire engines and the water hydrants, these will be able to provide a sufficient water supply to fully extinguish a worst-case scenario fire. As per the EA guidance, the rapid detection and immediate response (see Section 13 'Fire-fighting techniques') 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.
- 12.6.2 Due to the quick fire detection procedures on site, staff will be able to provide an immediate response to carry out manual fire suppression, therefore it is unlikely that large volumes of fire water will be required.
- 12.6.3 In the event of a fire breaking out, site staff will move any waste piles that are not fire impacted, away from the fire-impacted waste pile(s) so that the pile is not fully involved in a fire. Mobile plant can also be used to pull out any burning waste from stockpiles into quarantine area (only is safe to do so) so that it can be tackled and will prevent the whole

stockpile from being fully involved in a fire. Stop valves in the site drainage system will be closed to contain fire waters from leaving site.



**Figure 4 - Location of Nearest Fire Hydrant**

## 12.7 Out of hours

12.7.1 During out of hours, the Fire & Rescue Service (FRS) will be called out to site and have use of fire tenders and connection to the fire hydrant on Watson Close and in the wider industrial estate.

12.7.2 Out of hours operations and use of water supplies are referenced further in Sections 13 and 14 of this document.

## 13.0 MANAGING FIRE WATER

### 13.1 Containment

13.1.1 In the event of a fire, all spent fire waters will be contained on site to prevent run-off and pollution to the surrounding environment by the site's impermeable surfacing, perimeter kerbs/walls, and surface water drainage system, interceptor and stop valves.

#### Southern Area

13.1.2 The southern part of the site will be fully bunded and contained and used for storing and bulking hazardous waste. Hazardous waste is not covered by this Fire Prevention Plan (FPP) in accordance with Environment Agency FPP guidance, except for stockpiles of WEEE.

13.1.3 The southern area is entirely concrete surfacing with concrete storage bay walls, sleeping policeman across the entrance and overhead canopy. There is to be no surface water drainage system in this area. No liquids will be allowed to leave the area in the event of fire waters accumulating and will be pumped out and disposed of at an appropriate licenced facility.

#### Northern Area

13.1.4 The proposed site area of the northern portion of site is approximately 2,800 m<sup>2</sup> covered in impermeable concrete surfacing with a minimum of 0.1m high perimeter kerbing around the boundary. The natural fall of the site surfacing in the northern area is northwards towards the site entrance, which will be bunded with a sleeping policeman.

13.1.5 The northern part of site will also benefit from an impermeable surface (constructed of concrete) that will minimise infiltration of any spent fire water to escape down into the ground or over land beyond the site boundary into the surrounding environment/watercourses.

13.1.6 Perimeter kerbing will be present around the northern portion of the site, with a sleeping policemen across the site entrance, to contain fire waters in this area and in the event of a fire the stop valves will be closed in the surface water drainage system.

13.1.7 Fire waters will be contained by the sealed site drainage system during a fire on site and pumped out and disposed of appropriately to a suitable licenced facility afterwards. No fire waters will be discharged to surface water.

13.1.8 Based on the water supplies available at the site from the on-site hoses (small amounts), 3 fire engines (5,400 litres) and a nearby fire hydrant (28,800 litres in 1 hour) (see Table 3), it is proposed the northern portion of the site will need to be capable of holding approximately 34,200 litres after a 1-hour period of fire-fighting, which is the most likely duration when fires in containers will be fully doused.

13.1.9 It has been calculated that the site surface of the northern area is approximately 2,800m<sup>2</sup> capable of holding up to 280m<sup>3</sup> (280,000 litres) of water, based on a minimum 0.1m high perimeter kerbing around the boundary and a 0.1m high sleeping policeman across the site

entrance. These calculations are based on existing site topography and should be used as a guide only. This would be effective in containing over 3 hours of water supply (approx. 102,600 litres) which is considered more than sufficient to deal with a container-based fire.

### **13.2 Site Drainage System**

- 13.2.1 The site benefits from an existing surface water drainage system and naturally falls towards the north, as per the drainage survey undertaken during the recent Planning Application.
- 13.2.2 A water stop valve is present within the surface water drainage system, located in the north-western corner, as shown in the Site Layout Plan ref. 5195-CAU-XX-XX-DR-V-1800, which can be closed in an emergency.
- 13.2.3 The quick fire action responses of site staff will ensure that large volumes of water will not be required as fires will be detected before they become too large.
- 13.2.4 All areas of site surfacing, concrete storage bays and containers will be visually inspected at least weekly, if not daily as part of daily site inspections, to ensure continuing integrity and fitness for purpose. Staff are trained on site to make visual observations and reports 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 in the Site Diary, kept in the Site Office.

### **13.3 Assessing risks to groundwater from fire water**

- 13.3.1 The site will benefit from an impermeable site surface (concrete) that will prevent infiltration of any spent fire water to escape beyond the site boundary into the surrounding environment. Should a fire occur, the surface water drainage system will be isolated by stop valve to prevent the escape of potential contaminated fire waters to nearby surface and groundwater environments. Fire waters will then be contained on-site and later tankered off-site for treatment.
- 13.3.2 It is considered that containment measures in place are suitable for the nature of the site activities to ensure there will be negligible impact and potential of the escape of contaminated fire waters to the groundwater and surface water environments.

## 14.0 FIRE FIGHTING TECHNIQUES

### 14.1 Overview

14.1.1 The site has been designed in ordered to allow active firefighting.

### 14.2 Immediate response

14.2.1 Upon identifying or being made aware of a fire, the site deputy will raise the alarm and alert all present on site to the fire and its location and alert the emergency services.

14.2.2 The Site deputy will action trained staff to activate and discharge either the fire extinguishers or fire hose reels and water tank(s) supply onto the fire impacted waste. Mobile plant will segregate any waste stockpiles not impacted by the fire to reduce the likelihood of fire spread. In addition, mobile plant can minimise the volume of the fire impacted stockpile by clearing away any unaffected waste, thus reducing the likelihood of the stockpile being fully involved in a fire and reducing the water requirements to control the fire. This will only be actioned if safe to do so.

14.2.3 Burning wastes can be isolated for cooling/and or dousing using the Quarantine Area as required.

14.2.4 The site will be evacuated in accordance with the site evacuation plan with the exception of staff involved in active firefighting. The following procedures will be carried out:

- On discovery of a fire, the alarm will be raised immediately by sounding an air horn to alert site users and by shouting "FIRE, FIRE, FIRE".
- All personnel, staff and visitors must evacuate and assemble at the designated fire assembly point located outside the main gate.
- The area will be evacuated, and no member of public, visitors or customers will be allowed to enter the site.
- Site Manager/Personnel discovering the fire, without endangering themselves or others, will decide whether or not the fire can be controlled using the on-site fire-fighting equipment (fire extinguishers).
- Call the Emergency Services for significant fires, and those which may affect site safety.

14.2.5 It is the responsibility of the Site Deputy/Fire Marshal to ensure that all personnel, visitors, sub-contractors are all accounted for, and to give that information to the Emergency Services on their arrival.

14.2.6 Small fires can be extinguished by trained on site members of staff with the use of appropriate handheld fire extinguishers or hose reels. Fire extinguishers will be located as required around the site entrances and offices for easy access and usage.

14.2.7 Containers containing waste (i.e. skips) will already be separated at an appropriate distance so that the potential for spread from container to container is minimised. In the event of a fire in one of the containers, mobile plant will be deployed to isolate the affected materials and/or containers provided that it is safe to do so and isolate that container to the quarantine area. The container can be dosed with either a fire extinguisher or hose reel to extinguish the fire.

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

14.2.9 Site access for emergency services and vehicles will be via the main entrance/exit on the northern boundary and accessibility will be unobstructed at all times for emergency services. Access routes to waste storage and quarantine areas in the event of a fire are shown in drawing ref. Site Layout Plan 5195-CAU-XX-XX-DR-V-1800.

14.2.10 The Site Deputy/Fire Marshal will:

- Control vehicle movements and prevent further access to the site by directing waste vehicles to alternative local third-party facilities;
- Assist with the emergency services and to provide clear access routes to the fire, provide mobile plant if necessary; and,
- At no time, should personal safety be compromised.

14.2.11 Should the emergency services take control, water supplies are available as detailed in Section 11 'Water Supplies', including a fire hydrant on Watson Close to the north.

### **14.3 Out of hours response**

14.3.1 A fire pack will be located in a box at the entrance of the site cleared marked for the FRS to access in the event of attending site in the absence of personnel on site. The pack will contain:

- Site drawings showing the locations of hydrants and extinguishers;
- Information relating to the waste operations on site;
- Information relating to the mobile plant and vehicles on site;
- Contact details for key holders.

14.3.2 In the event of an out of hours fire when the operator are not present on site, the CCTV surveillance company will contact the FRS who will force entry to site. According to the Fire and Rescue Services response time map, the FRS can attend the site between 10-15 minutes following a call-out. Staff and key holders are able to attend the site within 30mins of a call out.

#### **14.4 Staff Training**

14.4.1 All personnel working on site will be provided training on the Fire Prevention Plan and all associated procedures and controls. FPP training will be provided to all new starters and temporary employees working at the site. FPP refresher training will be carried out at least annually.

14.4.2 Staff with the appropriate Fire Marshall training will be provided to the Site Deputy and regular site staff. Fire Marshall training will include safe use and deployment of fire extinguishers on small fires and procedures to call for assistance from the FRS.

14.4.3 As part of staff training, fire drills will be undertaken twice a year at the site, typically spaced around 6 months apart, which will include training on associated procedures and controls in the case of a fire. Records of fire drills and fire training will be made as per the site's Environmental Management System training schedules and records.

14.4.4 Staff training in fire prevention and procedures will be reviewed annually and further training undertaken if necessary. The skills and competencies necessary for key posts should be documented and records of training needs and training received for these posts maintained. The key posts will include contractors and those purchasing equipment and materials. Training is provided so that all workers have a satisfactory understanding of their duties in relation to fire prevention on site.

14.4.5 The documented management systems will include training requirements for all relevant staff which cover awareness of the FPP for the activity and their work activities. Training will also cover awareness of all potential effects from operation under normal and abnormal circumstances with respect to fire, the awareness of the need to report deviation from the FPP, and prevention of accidents and action to be taken when accidents occur. The potential risks posed by the work of contractors should 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.

14.4.6 The company's procedures on staff training for new and existing employees are included in the management system. As part of training staff will also be made aware of the procedures for dealing with a hazard (including fire) and reporting an event, and the company's fire prevention procedure.



## 15.0 DURING AND AFTER A FIRE

### 15.1 During a Fire

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

15.1.2 All nearby residents, businesses and the Environment Agency will be notified during any firefighting taking place on site. Available staff will visit nearby residents and advise of the fire and precautionary actions such as keeping windows closed.

#### ***Small Fire***

15.1.3 If a fire is deemed small, safe and controllable, the small fire of smouldering waste will be dealt by staff on site will be dealt with in-situ, mobile plant can be utilised to pull the burning waste/container of waste out into the open quarantine area and away from any other wastes or nearby materials that could potentially catch fire. The fire will then either:

- Be extinguished at source i.e. within its container or storage bay, or;
- Moved to the designated quarantine area and extinguished using the fire extinguishers on site.

15.1.4 Fires can be extinguished by use of fire extinguishers or the discharge of water from hoses.

15.1.5 Once the fire has satisfactorily been extinguished, the remaining area will be inspected by site staff to identify any signs of smouldering and decontamination procedures can then take place.

15.1.6 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.

#### ***Uncontainable Fires***

15.1.7 In the event of a major fire, whereby the fire is too large to control safely on site which cannot be dealt with by site staff, the following procedures will be carried out;

- a) Site Management/nominated duty will contact the Fire and Rescue Services, and any other emergency services required immediately. When practicably possible, the regulatory bodies (Environment Agency) will also be contacted.
- b) Following the arrival of the Fire and Rescue Services and emergency services, all site staff will take instructions to assist with any procedures required, including;
  - Moving unburnt/unaffected wastes away from the fire using mobile equipment;
  - Dampening down unburnt/unaffected waste;

- Isolating area around burning wastes;
- Evacuating people from site offices/other containerised welfare facilities;
- Halting any entrance of customers or site vehicles to site.

15.1.8 On the arrival of the Fire and Rescue Services (FRS), Site Management will ensure that there is clear and safe access to the site and will appraise the FRS with the details of the fire including the location and composition of the waste involved. Site Management will assist the FRS in any way safely and practicably to ensure that the fire is extinguished.

1.1 FRS access around the site and to waste stockpiles is as shown in the Site Layout Plan, drawing ref. 5195-CAU-XX-XX-DR-V-1800, however locations of stockpiles and containers may change due to operational requirements and site staff will make the FRS aware of any changes to stockpile/waste container locations prior to entering.

## 15.2 After a Fire

### Engagement with neighbours and receptors

15.2.1 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.

15.2.2 Contact with other properties located further afield will be undertaken under the direction of the Fire Rescue Services and/or emergency services attending site.

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

### Site Clean-Up

15.2.4 Any fire waters/contaminated waters will be tankered off-site to a suitable treatment facility for disposal.

15.2.5 After any fire or hot waste load event, the waste after extinguishing will be loaded onto an appropriate waste carrier and taken to landfill. Under no circumstances will this waste be mixed and/or placed within any of the waste streams on site. The quarantine area will undergo deep cleaning using the pressure washing facilities and brushes, where the surface water will be tankered off site to a suitable treatment site. Containers and any remaining waste affected by fire will be removed from site and taken to an appropriate disposal facility off site.

15.2.6 All site 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 site to ensure it is in a satisfactory condition before the site can reopen.

- 15.2.7 Following a fire which required the presence of the Fire and Rescue Service and emergency services, in addition to above, management will liaise with the regulatory authorities and Fire and Rescue Services to produce a plan to allow normal operations to the site.
- 15.2.8 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.

## 16.0 REFERENCES

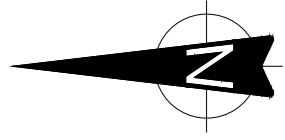
1. Environment Agency – ‘Fire Prevention Plans: Environmental Permits’, published July 2016, updated January 2021.

## **DRAWINGS**

**Site Layout Plan ref. 5195-CAU-XX-XX-DR-V-1800**

**Sensitive Receptor Plan ref. 5195-CAU-XX-XX-DR-V-1801**

**Fire Hydrant Location ref. 5195-CAU-XX-XX-DR-V-1803**



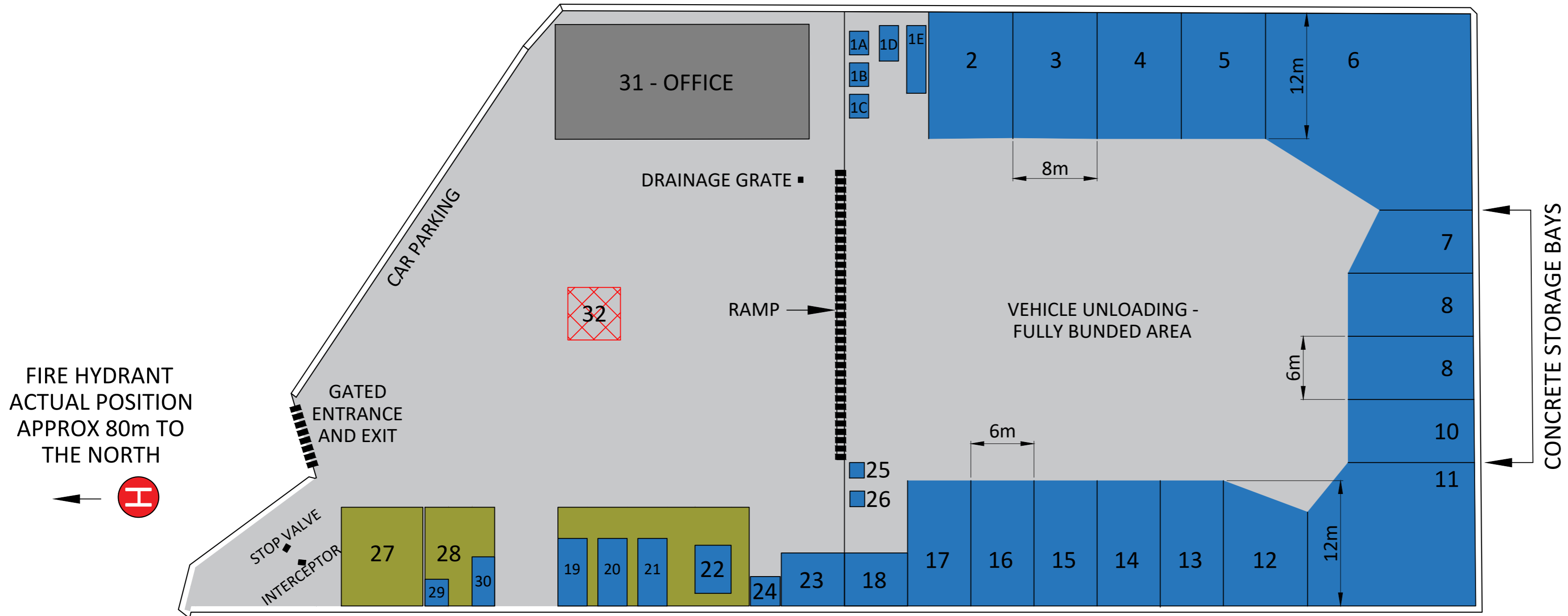
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**LEGEND**

- FIRE HYDRANT - APPROX 80m TO THE NORTH
- SLEEPING POLICEMAN

**PERIMETER KERBING & FENCING**



Bay	Waste Stream	Capacity pallets	Max Tonnage	Hazard codes	ADR Class
1A	Oxidising Agents containing Acids	1	1.5	HP2,HP4,HP5,HP8, HP14	5, 8
1B	Oxidising Agents	4	4	HP2,HP4,HP5,HP8, HP14	5
1C	Organic Peroxides	1	1	HP2,HP4,HP5,HP8, HP14	5.2
1D	Water Reactives	1	1	HP3,HP4,HP5,HP8	4.3
1E	Solvent Vials	6	3	HP3,HP6,HP10,HP11	3, 6.1
2	Waste Reception Area	60	60	All HP Codes	3,4.1,4.2,4.3,5.1, 5.2,6.1, 8, 9
3	Low Hazard Waste	60	60	HP4,HP5,HP6, HP14	9
4	Oily Rags	60	60	HP3, HP4,HP5,HP7,HP10,HP14	3, 9
5	Flammable Solids, Adhesives and Resins	60	60	HP3,HP4,HP5,HP6,HP8	3, 4, 8
6	Flammable Solvents, Paints and Resins	60	60	HP3,HP4,HP5,HP6,	3, 4, 6.1
7	Oil/Water	60	60	HP3,HP4,HP5,HP7,HP10,HP11,HP14	9
8	Toxic Solids/Liquids, Lab Wastes, Agrochemicals	40	40	HP4,HP5,HP6,HP7,HP8, HP10,HP11,HP14	6.1, 8, 9
9	IT Communication and Household WEEE	40	40	HP5,HP6,HP7,HP14	9
10	Waste Batteries	40	40	HP3,HP4, HP5,HP6,HP14	4.3, 6.1, 9
11	Fridges and Fluorescent tubes, and Lamps	60	30	HP14	9
12	Acids	40	40	HP2,HP4,HP5,HP6,HP8	3, 5.1, 8, 6.1, 8, 9
13	Empty Packaging and Environmental Hazards	40	20	HP3,HP6,HP8,HP14	9
14	Alkali Waste, Caustic, Ammonia and Cyanides	40	40	HP4,HP5,HP6,HP8,HP14	5.1, 6.1, 8, 9
15	Bleach and Oxidising Liquids	40	40	HP2,HP8,HP14	5.1, 8, 9
16	Reception, Inspection, and Sorting	40	40	All HP Codes	3, 4.1, 4.2, 5.1, 5.2, 6.1, 8, 9,
17	Quarantine Bay, Spare Reception	40	20	All HP Codes	3, 4.1, 4.2, 5.1, 5.2, 6.1, 8, 9,
18	Emissions filtered bulking area	8	4	HP2,HP3,HP6,HP7,HP10,HP8,HP11,HP9	3, 5.1, 6.1, 8, 9

Skip area						
19	General Waste - Roll on Bin	35	20	Non Haz	N/A	
20	Asbestos - enclosed Roll-on bin	35	20	HP7,HP14	9	
21	Scrap Metal - Roll on Bin	40	20	Non Haz	N/A	
22	Pigeon Guano - covered skip	20	10	Non Haz	N/A	

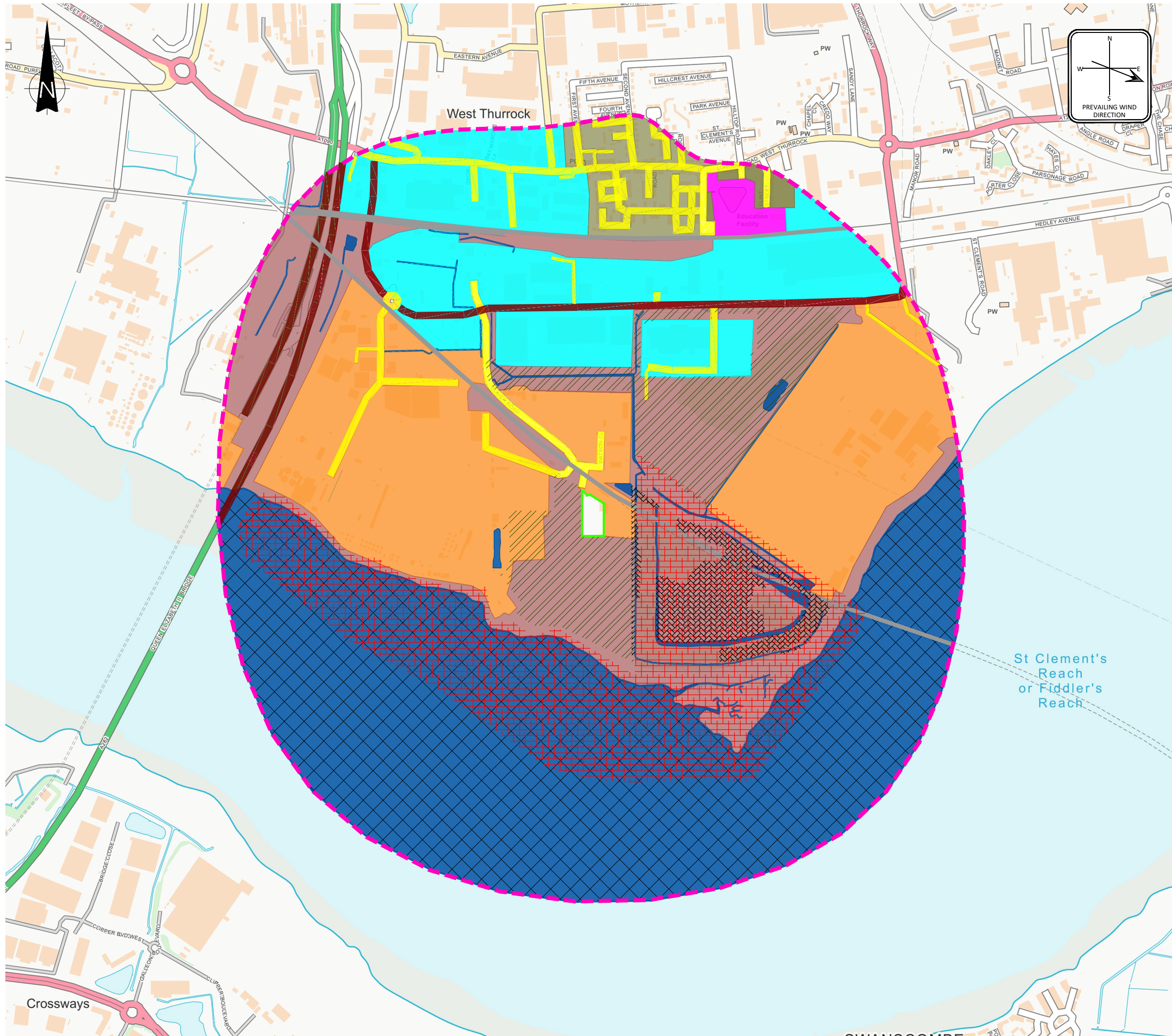
Gas Cylinders - Metal cages, Drums and Wastesafes						
23	Misc Gases including Aerosols, Butane, Propane and other Hazardous and Non Hazardous Gases	20	20	HP2,HP3,HP6,HP8,HP14	2.1, 2.2, 2.3, 3, 6.1, 9	
24	Acetylene Gas	4	2	HP3	2.3	

Inside Bay 18	
25	Emergency Shower
26	Drum Crusher

Non Waste Areas	
27	Consumable storage, empty drums and IBC's
28	Fork lift truck parking and charging/refuelling area
29	Fuel storage - on a bunded IBC
30	Laboratory
31	Office and toilet
32	Quarantine area in event of fire

P02	UPDATED DRAINAGE ELEMENTS	EJD	SH	AS	15.12.22
P01	ISSUED FOR INFORMATION	EJD	AS	AS	02.12.22
REV	MODIFICATIONS	BY	RE	AP	DATE
PURPOSE OF ISSUE					STATUS
FOR INFORMATION					S2
CLIENT:					
PROJECT:					
RIVERSIDE HAZARDOUS WASTE TRANSFER STATION					
TITLE:					
NEW SITE LAYOUT					
DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY		
OTHERS	EJD	AS	AS		
DATE	SCALE @ A2	JOB REF:	REVISION		
28-11-2022	NTS	5195	P02		
DRAWING NUMBER					
5195-CAU-XX-XX-DR-V-1800					

Registered Office: InTec, Parc Menair, Bangor, Gwynedd, LL57 4FG Company Registered No: 06716319



**LEGEND**

- PROPOSED PERMIT BOUNDARY
- - - 1000m OFFSET
- SURFACE WATER
- WOODLAND / SCRUBLAND
- COMMERCIAL
- EDUCATIONAL FACILITY
- INDUSTRIAL
- RESIDENTIAL
- MAJOR ROAD
- MINOR ROAD
- RAIL
- PROTECTED FISH MIGRATORY ROUTE
- PROTECTED HABITATS
- SSSI
- LOCAL WILDLIFE SITES

P02	LWS AREAS UPDATED	EJD	SH	SH	10.07.23
P01	ISSUED FOR INFORMATION	EJD	SH	SH	01.12.22
REV	MODIFICATIONS	BY	RE	AP	DATE
PURPOSE OF ISSUE					STATUS
FOR INFORMATION					S2

CLIENT:



**Williams Environmental**  
Waste Management that doesn't cost the Earth

PROJECT:

**RIVERSIDE WASTE TRANSFER STATION**

TITLE:

**SENSITIVE RECEPTORS PLAN**

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	AD	SH
DATE	SCALE @ A3	JOB REF:	REVISION
29-11-2022	1:10,000	5195	P02

DRAWING NUMBER

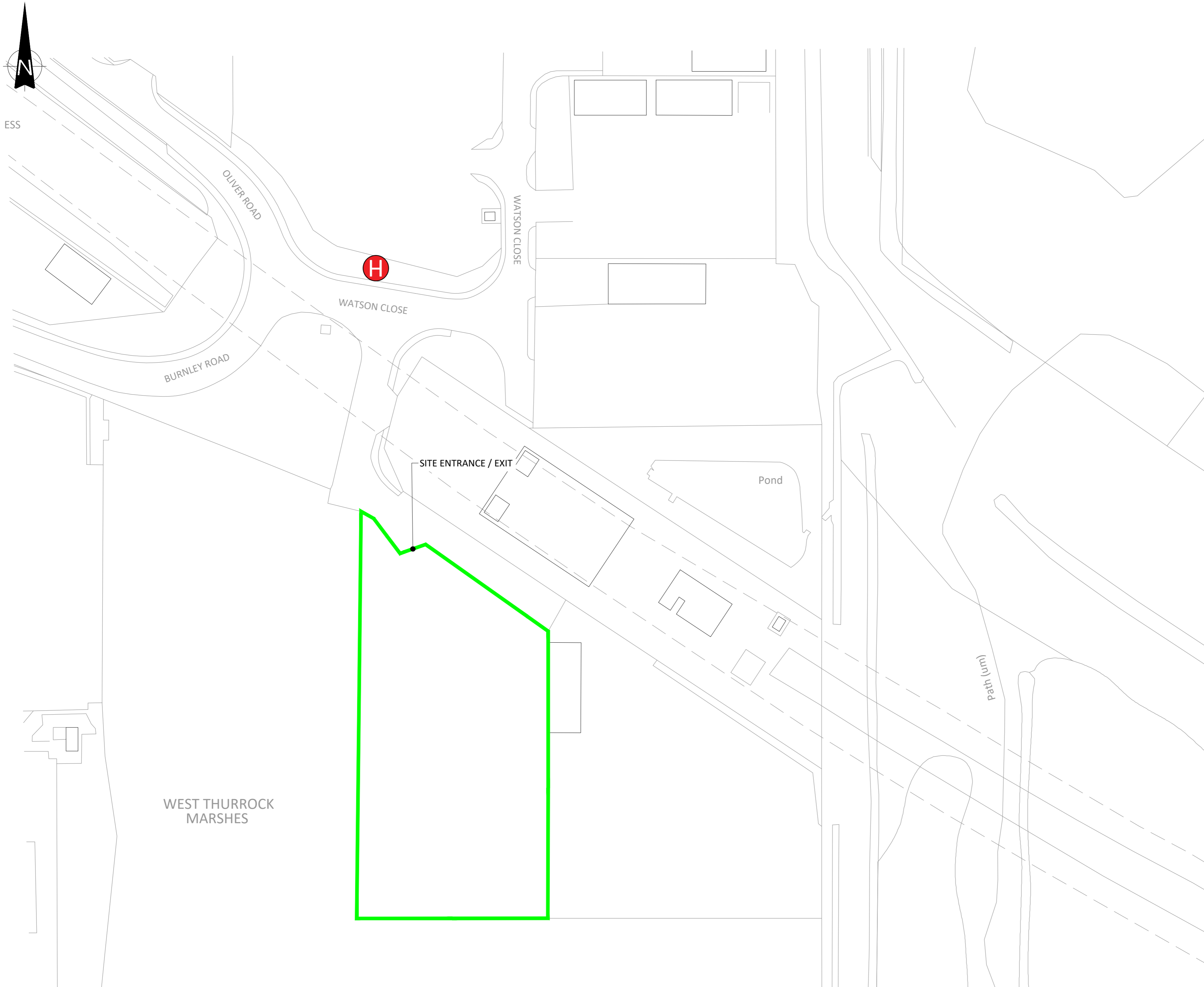
**5195-CAU-XX-XX-DR-V-1801**



**Caulmert**  
engineering environmental planning

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**LEGEND**

- █ SITE BOUNDARY
- H FIRE HYDRANT

P02	UPDATED TO CLIENT COMMENTS	EJD	SH	SH	16.12.22				
P01	ISSUED FOR INFORMATION	EJD	AS	AS	02.12.22				
REV	MODIFICATIONS	BY	RE	AP	DATE				
PURPOSE OF ISSUE						STATUS			
FOR INFORMATION						S2			
CLIENT:									
<b>Williams Environmental</b> <i>Waste Management that doesn't cost the Earth</i>									
PROJECT:									
RIVERSIDE HAZARDOUS WASTE TRANSFER STATION									
TITLE:									
FIRE HYDRANT LOCATION									
DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY						
OTHERS	EJD	AS	AS						
DATE	SCALE @ A2	JOB REF:	REVISION						
16-12-2022	1:750	5195	P02						
DRAWING NUMBER									
5195-CAU-XX-XX-DR-V-1803									
<b>Caulmert</b> <i>engineering environmental planning</i>									

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## APPENDIX 1

### Site Inspection Form

## SITE INSPECTION FORM (DAILY INSPECTIONS)

WEEK STARTING:							
DAILY SITE INSPECTION	DAY						
	M	T	W	T	F	S	S
SITE ENTRANCE / NOTICE BOARD							
SECURITY - GATES							
SECURITY - FENCING							
SECURITY – PORTACABINS / DOORS / LOCKS							
SITE ROADS / SURFACES							
PORTACABIN WALLS / ROOF / EXTERIOR							
PORTACABIN INTERIOR							
WASTE CONTAINERS, BAYS, BUNDS, WALLS, SUMPS							
WASTE TYPES							
WASTE / SKIP STORAGE							
PLANT / EQUIPMENT							
WEIGHBRIDGE / SITE OFFICE							
FUEL TANK / BUND (if any)							
FLOORING & HARDSTANDING							
DRAINAGE CHANNELS / GULLIES							
WASTE TYPES / QUANTITIES							
REJECTED WASTE TYPES / STORAGE							
NOISE LEVELS							
FIRES							
LITTER							
DUST							
ODOUR / VOCs							
VERMIN / PESTS							
RECORDS							
OTHER -							
INSPECTION CARRIED OUT BY:							

NOTES / ACTIONS (CONTINUE ON A SEPARATE SHEET IF NECESSARY):

CHECKED BY:		SIGNATURE:	
POSITION:		DATE:	
<i>Sheet</i>		<i>of</i>	



## APPENDIX 2

### Essex & Suffolk Water – Hydrant Testing Correspondence

**From:** Kerry Stratford <[Kerry.Stratford@nwl.co.uk](mailto:Kerry.Stratford@nwl.co.uk)>  
**Sent:** 12 December 2022 09:01  
**To:** Mike Price <[mike@williamsenvironmental.co.uk](mailto:mike@williamsenvironmental.co.uk)>  
**Subject:** RE: EXTERNAL :RE: Fire hydrant on Watson Close RM20 3EF

Good Morning

I have spoken to the technician who has informed me that the pressure read was taken in Bar pressure as that's what we use, as for a flow read from a fire hydrant we don't have the equipment to do that, that would be for the fire brigade to do.

Many Thanks

Kerry

**From:** Mike Price <[mike@williamsenvironmental.co.uk](mailto:mike@williamsenvironmental.co.uk)>  
**Sent:** 12 December 2022 08:17  
**To:** Kerry Stratford <[Kerry.Stratford@nwl.co.uk](mailto:Kerry.Stratford@nwl.co.uk)>  
**Subject:** RE: EXTERNAL :RE: Fire hydrant on Watson Close RM20 3EF

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Hi Kerry,

Thank you very much for your message. I may not have had a good signal the time when the engineer called.

I assume the reading of 5.81 is measured in PSI.

Can a flow rate of litres per minute be calculated from this reading please or can you give me the engineers mobile number please so I can ask?

Best regards  
Mike

Mike Price BSc MCIWM  
Technical Manager



**Williams Environmental**

*Waste Management that doesn't cost the Earth*

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**From:** Kerry Stratford <[Kerry.Stratford@nwl.co.uk](mailto:Kerry.Stratford@nwl.co.uk)>  
**Sent:** 10 December 2022 12:10  
**To:** Mike Price <[mike@williamsenvironmental.co.uk](mailto:mike@williamsenvironmental.co.uk)>  
**Subject:** EXTERNAL :RE: Fire hydrant on Watson Close RM20 3EF

Hi Mike

Sorry I haven't been in work since Wednesday. I did receive your email and we attended 7.12.22. The technician called you but there was no reply. His notes are 'Pressure read taken from wexhs016628 and pressure read was 5.81.'

Kind Regards

Kerry

**From:** Mike Price <[mike@williamsenvironmental.co.uk](mailto:mike@williamsenvironmental.co.uk)>  
**Sent:** 08 December 2022 10:48  
**To:** Kerry Stratford <[Kerry.Stratford@nwl.co.uk](mailto:Kerry.Stratford@nwl.co.uk)>  
**Subject:** FW: Fire hydrant on Watson Close RM20 3EF

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Hi Kerry,

Please can you confirm that you received my email?

And can you give a likely timescale for the reading please?

Many thanks  
Mike

Mike Price BSc MCIWM  
Technical Manager



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Waste Management that doesn't cost the Earth



[mike@williamsenvironmental.co.uk](mailto:mike@williamsenvironmental.co.uk)



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**From:** Mike Price

**Sent:** 06 December 2022 11:41

**To:** [kerry.stratford@nwl.co.uk](mailto:kerry.stratford@nwl.co.uk)

**Subject:** Fire hydrant on Watson Close RM20 3EF

Hi Kerry,

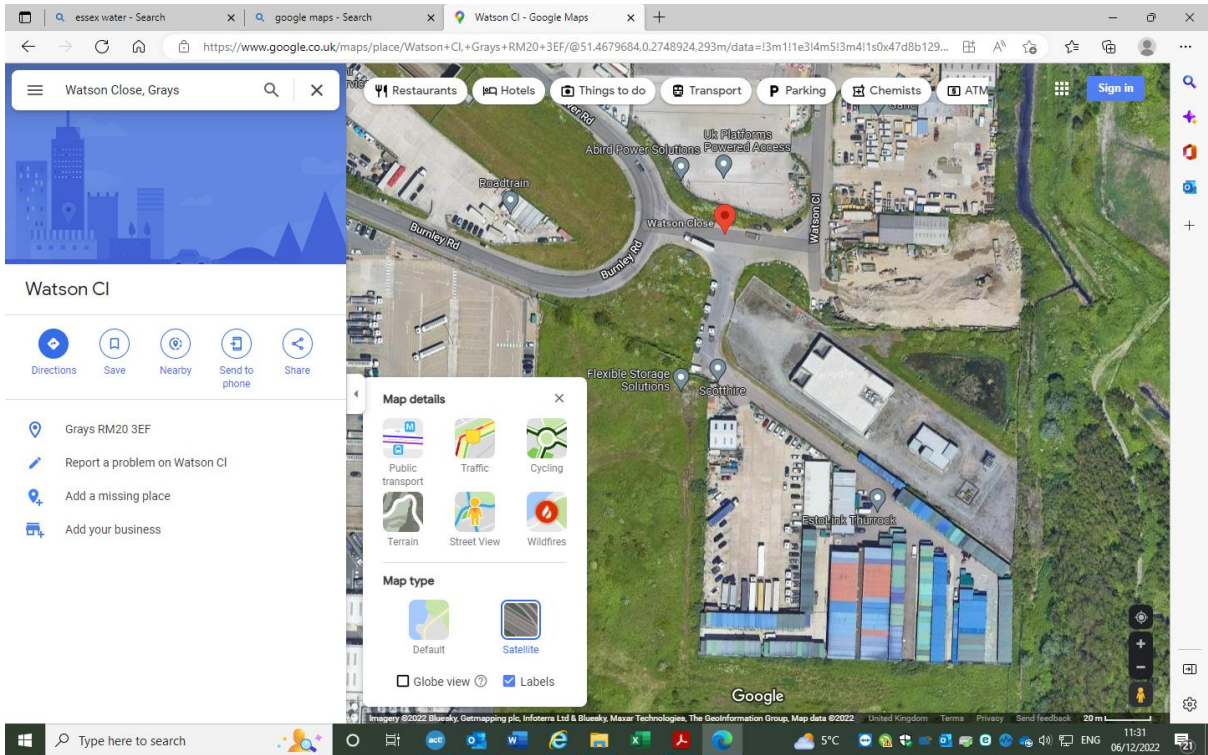
Thank you for your time today. As discussed we have planning permission from Thurrock Council for a transfer station at Watson Close and are in the process of completing a permit application with the Environment Agency. They are requesting we have adequate flow rate at the nearest hydrant which is in Watson Close and so we are requesting the flow rate at the hydrant. If you cannot measure the flow rate then I believe this can be found from the water pressure?

On the map below we will be moving to the premises occupied by Scott Hire, and I believe the closest hydrant is by the red pin.

I look forward to hearing back from you,

Mike


07780 303119




Mike Price BSc MCIWM  
Technical Manager



 [mike@williamsenvironmental.co.uk](mailto:mike@williamsenvironmental.co.uk)

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