Thorverton Road Distribution Hub

Fire Prevention Plan

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Document Details

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Document Review History

Date	Version	Description
April 2024	Version 8.0	Updated to account for operational changes since acquisition of DCW by SUEZ R&R Ltd
July 2024	Version 9.0	Original Document produced to meet the new SUEZ template. This document supersedes all previous versions of the Fire Prevention Plan.
March 2025	Version 10.0	Updated appendices.

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Appendices

Appendix A	Waste Storage Details

Figures

No.	Drawing	Reference
1	Site Location Plan	Tho-LOC-0724-01-A3
2	Permit Boundary Plan	Tho-PER-0724-01-A3
3	Indicative Site Layout	Tho-LAY-0325-01-A3
4	Site Drainage Plan	Tho-DRN-1024-01-A3
5	Receptor Plan	Tho-REC-0924-01-A3
6	Emergency Access Route	Tho-EAR-0325-01-A3

1 INTRODUCTION

1.1 This document details the Fire Prevention Plan (FPP) for Thorverton Road Distribution Hub (the site) located at Thorverton Road, Matford Business Park, Exeter, EX2 8FS at National Grid Reference (NGR) SX 93076 89848. The site location and permit boundary are shown in Figure 1 and 2 respectively.

1.2 This document is written to support an application to vary the environmental permit to operate a Transfer Station (TS) which accepts non-hazardous and hazardous wastes from household, industrial and commercial sources, with the site accepting a maximum of 75,000 tonnes per annum, with a maximum of 10 tonnes of hazardous waste per day.

1.3 Material is delivered to the site predominantly in skip / hook loader type vehicles, refuse collection vehicles (RCVs) and vans. Material will either be tipped directly in the transfer station building or unloaded externally and stored in skips or in the WEEE shelter.

1.4 The majority of waste, including Cardboard, hard plastics and shredded paper, is stored in stockpiles inside the transfer station building prior to baling. Soft plastics are delivered to site pre-baled. Bales are either stored inside the transfer station building or the external storage covered bay. The location of the recyclables within the site may alter to provide operational flexibility however they will always be stored within the pre constructed bays.

1.5 An existing Fire Risk Assessment covering the site operation is already in place. It is reviewed at regular intervals not exceeding 12 months. The Fire Risk Assessment will be included within the SUEZ electronic Risk assessment database.

1.6 An appropriate person will review this Fire Prevention Plan at regular intervals and on at least an annual basis, or following any of the events below:

- testing of the plan to ensure the plan works and staff understand the procedures to be undertaken to prevent a fire occurring and the procedure to be undertaken in the event of a fire
- an incident
- change in legislation or formal guidance
- prior to a change in activity on site

1.7 In addition, the requirements of the Fire Prevention Plan will be communicated to site operational staff on at least an annual basis via toolbox talks. Yearly refresher toolbox talks will ensure that the requirements of the Fire Prevention Plan are reinforced.

2 RISK OF FIRE

2.1 Assessing the Risk of Fire

2.1.1 The risk assessment to identify potential events or failures that may lead to an environmental impact as a result of a waste related fire at site is included in the Environmental Risk Assessment (document reference 1.3). The risk assessment provides details of the following: the hazard, the pathways and receptors, the probability of occurrence, the consequences or impacts and the measures that will be taken to manage the risk, and an evaluation of the mitigated risk.

2.1.2 Further detail on the hazard, in terms of the materials received stored and/or treated on the site, the volumes of materials received, and the potential causes of fires are discussed further in this section of the Fire Prevention Plan. The sensitive receptors and the consequence of a fire on those receptors are also discussed below.

2.2 Combustible Materials on Site

2.2.1 The combustible materials which may be received and stored at the site include:

- Shredded Paper
- Cardboard
- Metals
- Plastics
- Waste Electrical and Electronic Equipment (WEEE)
- Wire
- Circuit boards
- Batteries

2.3 Waste Storage and Hazardous Materials Storage

2.3.1 Managing waste storage is a key factor, not only in preventing fires, but in mitigating the impact, should a fire break out.

2.3.2 Appendix A details the volume, storage time and storage method for each waste type at site. All maximum storage volumes of loose materials have been calculated using 75% of the maximum storage volume of the bay (using maximum depth, height and width dimensions) to account for the nature of the material stored, pile properties and freeboard space.

Waste storage

2.3.3 Dedicated bays, areas and containers are provided for separate acceptance of various waste.

2.3.4 As detailed in Figure 3, the majority of combustible wastes received at the site will be stored inside the existing transfer building located to the south of the site prior to baling. The baling activity will be undertaken inside the main transfer station building and adjacent baler shed. Bales will be stored inside the transfer station building and in the external storage covered bay opposite the building.

2.3.5 In addition, WEEE waste will be stored and processed in the covered WEEE storage area and adjacent storage skips.

2.3.6 An indicative site layout plan showing the proposed location of the waste storage bays, areas and containers are shown in Figure 3.

Hazardous materials storage

2.3.7 Non-waste fuel storage is located on site as indicated in Figure 3 in a fully bunded tank. The fuel tank is located on an impermeable surface and sheltered from the main flow of site traffic.

2.3.8 Orphaned gas cylinders extracted from incoming waste streams are quarantined and stored upright within a well-ventilated, lockable, roofed, storage area. The storage area is clearly marked with a “flammable gas” warning sign and will be kept locked when cylinders are not being inserted or removed.

2.3.9 Batteries will be stored in drums that will contain any spillage of acid batteries.

2.3.10 Any hazardous waste delivered to the site that is not permitted by the permit will be segregated and consigned appropriately for disposal at a suitably permitted facility.

2.3.11 Gas cylinders, combustible liquids, chemicals kept on site are stored in accordance with Environment Agency best practice.

2.4 Cause of Fire

2.4.1 The potential causes of fire on the site have been considered and include the following:

- arson or vandalism
- cooking appliance in welfare facilities
- plant or equipment failure
- electrical faults
- naked lights
- discarded smoking materials
- hot works, e.g. welding, cutting (will be included within contractor’s risk assessments as this type of work is not undertaken by site staff)
- hot exhausts
- fuel deliveries and refuelling plant
- build-up of dusts

- damaged/exposed electrical cables
- Mechanical heat from sparks and friction
- incompatible wastes
- ignited materials received at the site
- neighbouring site activity

2.4.2 Any of the causes detailed above has the potential to ignite waste materials upon the site. The consequences of a fire are discussed below with mitigation measures detailed in a further section.

2.5 Impacts of a Fire

2.5.1 The effects of a fire may be both immediate and long term. The potential impacts of a fire have been considered and are summarized below:

- thermal radiation harming nearby properties and residents leading to fire spread
- creation of hazardous waste by the fire and impacts of firefighting
- explosions and projectiles harming sensitive receptors and spreading the fire to unaffected areas
- fire water run-off transporting pollutants to surface water and groundwater
- transport disruption resulting from road and rail closures
- nuisance from smoke, odour and particulates
- threat to life and property
- detriment of local amenity

2.5.2 The general management actions to mitigate the impact of a fire on sensitive receptors are detailed in Sections 3 and 4 of this Fire Prevention Plan.

2.6 Sensitive Receptors

2.6.1 Sensitive receptors within 1km of the site that may potentially be at risk from a fire have been identified within Table 1 and are shown in drawing in Figure 5.

Table 1 – Sensitive receptors

No.	Receptor	Category	Distance (m)	Direction from site
0	Groundwater	Water Body	<50	-
1	Alphin Brook	Water Body (LWS)	200	E-NE
2	Exeter Ship Canal	Water Body (LWS)	275	E
3	River Exe (SPA, SSSI, Ramsar)	Water Body (SPA, SSSI, Ramsar)	430	E-NE
4	Matford Brook	Water Body	640	S

5	Matford Business Park	Industrial and Commercial	<50	W-NW
6	Exeter Eagles BMX Club	Recreational	100	N
7	Exeter Aces Cycle Speedway	Recreational	150	N
8	Double Locks Pub	Commercial	250	E-NE
9	Kiddi Caru Nursery	Amenity	300	S
10	Riverside Valley Park	Recreational	400	NE
11	Matford Centre	Amenity	500	W-SW
12	Matford Park and Ride	Industrial and Transport	540	SW
13	University of Exeter Dukes Meadow	Recreational	600	NE
14	Ancient and Semi-natural Woodland	Woodland	600	SW
15	River Exe Country Park	Recreational	700	E
16	The Devon Hotel	Residential and Commercial	700	S
17	Urban and Rural Plants Garden Centre	Commercial	750	S
18	RSPB Matford Marshes	Nature Reserve	800	SE
19	Marsh Barton Trading Estate	Industrial and Commercial	800	NW
20	Marsh Barton Train Station	Industrial and Transport	800	NW
21	Residential Properties	Residential	850	W-SW
22	Residential Properties	Residential	850	S
23	Matford Barton Farm	Residential and Agricultural	900	SW
24	Residential Properties	Residential	910	E-NE
25	ISCA Academy	Educational	1000	N
26	Exeter and Devon Crematorium	Amenity	1000	N
27	Residential Properties	Residential	1000	N

2.7 Wind Direction

2.7.1 The data obtained for Thorverton Road indicates that the prevailing wind direction is from the west. A compass rose from meteoblue.com with the prevailing wind direction is included in Figure 5.

3 PREVENTATIVE MEASURES

3.1 SUEZ Policies and Procedures

3.1.1 Section 3.8 of SUEZ Integrated Management System (IMS) relates to Emergency Preparedness and Response and will be followed in the event of a fire or explosion.

3.1.2 In addition to Section 3.8, the following policies and procedures, as detailed in the IMS, are also relevant:

- Accident Investigation and Reporting
- Site Inspection, Audit and Reporting
- Managing Non-Conformance, Corrective & Preventive Action
- Control of Records
- Audits
- Waste Acceptance
- Rejection of Waste
- Disposal of Site Waste
- Surface Water Management
- Oil and Fuel Storage

3.1.3 One of the principle objectives of the IMS is to ensure the efficient and safe operation of the site through the implementation of procedures that ensure defined staff roles and responsibilities supported by provision of appropriate training.

3.1.4 Key procedures that apply to all SUEZ sites include training all staff, contractors and visitors in correct health and safety and fire prevention procedures. The implementation of a regular maintenance and inspection programme for all areas of site and equipment to ensure good housekeeping and effective operation of machinery.

3.1.5 All site staff along with site contractors are required to wear appropriate Personal Protective Equipment.

3.2 Controls to Manage Common Causes of Fire

Arson

3.2.1 Site security to prevent arson includes security fencing and locked gate (out of hours). Out of hours Security checks by Marsh Barton Site Security. CCTV camera system, backed up to an internal hard drive.

Plant and equipment

3.2.2 Faults within a vehicle or item of plant have potential to cause fire so a regular plant and machinery preventative maintenance programme is in place to identify and remedy potential issues at an early stage.

3.2.3 All machinery/equipment is subject to routine cleaning, servicing in line with manufacturer's guidance and daily checks/defect reporting. The daily check includes identification of leaks.

3.2.4 All site vehicles are fitted with fire extinguishers and dust filters. Vehicles will have high level exhausts fitted.

3.2.5 All vehicles and items of plant are stored at a safe distance (6m) from waste stockpiles when not in use as indicated on Figure 3.

3.2.6 Mobile plant will be maintained in accordance with the Mobile Plant procedures as outlined in SUEZ Policies and Procedures This includes daily vehicle pre-use inspection checks, reporting of all defects to site management and regular clearing of detritus from around the machine. The machine will be subject to regular service inspections in accordance with manufacturer's recommendations which will include maintenance of the exhaust and cleaning if required. Daily inspections of the exhaust will check for blockages or excess build-up of material.

3.2.7 Mobile plant will be maintained in accordance with manufacturer's guidance and weekly cleaning will be undertaken by the operator. In addition, daily vehicle inspections will be carried out prior to using the equipment.

Electrical Equipment

3.2.8 All portable items of electrical equipment are listed in a register and tested by a competent person at least annually. Items must not be connected to the electrical supply that cannot be shown to have been tested within the previous 12 months.

3.2.9 Fixed electrical installations are installed, inspected, tested, and maintained by suitably trained and qualified persons. Contractors undertaking the work must be enrolled on the National Inspection Council for Electrical Installation Contacting (NICEIC) register of Approved Contractors or similar contractor from SUEZ Approved supplier list. Inspection and testing shall be carried out at minimum periods of three years, or following:

- any substantial alteration to the electrical installation,
- any incident that might have cause damage to the electrical installation
- At periods stipulated by an approved contactor issuing a test report

3.2.10 Following every inspection and testing, defects should be rectified as soon as reasonably practicable.

3.2.11 In addition, fixed electrical equipment will only be installed if it is fit for purpose and compatible with the electrical installation and its capacity. All fixed electrical equipment will be used, inspected, tested and serviced in line with manufacturers' recommendations.

3.2.12 Electrical sockets must not be overloaded.

Discarded smoking materials

3.2.13 No wastes will be burned within the boundaries of the site.

3.2.14 Smoking is not permitted within the site boundary.

Hot works

3.2.15 Contractors required to undertake hot works will be required to provide risk assessments and follow approved safe working procedures. Any hot works will be subject to the Permit to Work procedure and will be adequately supervised. In the event of hot works on site the initial fire watch will be undertaken two hours after hot works have been completed. Following the completion of hot works, the end of the day fire watch will pay particular attention to the area where hot works were undertaken.

Industrial heaters

3.2.16 No industrial heaters will be used on site.

Hot exhausts

3.2.17 A fire watch will be implemented at the end of the working day to reduce the risk of combustion as dust can settle onto hot exhaust and engine parts.

Ignition sources

3.2.18 Any sources of ignition including for example heating pipes, naked flames, light bulbs, spaces heaters etc. will be kept 6 metres away or will be separated by a fire wall from any combustible and flammable waste on site.

Leaks and spillages of oils and fuels

3.2.19 Faults within a vehicle or item of plant have potential to cause fire so a regular plant and machinery maintenance program is in place to identify and remedy potential issues at an early stage.

3.2.20 All machinery/equipment is subject to routine cleaning, servicing in line with manufacturers guidance and daily checks/defect reporting. The daily check includes identification of leaks, and where identified, is cleaned up according to spillage procedure as detailed in Section 3.8 of the SUEZ IMS.

Build-up of loose combustible waste, dust and fluff

3.2.21 Regular cleaning will be undertaken by site staff to minimise the generation of dust and litter on site.

3.2.22 Daily check sheets include a requirement for site staff to undertake visual dust qualitative monitoring; if perceived to be excessive the action causing the emission will be halted and remedial measures implemented.

3.2.23 Site cleaning regimes in place to reduce dust and litter will be directed through Standard Operating Procedures detailing the duration and frequency of cleaning activities, the equipment required to clean

and visual aids depicting how areas should look following cleaning activity. In general, ongoing inspection and cleaning is undertaken on site. The waste storage area is cleaned regularly.

Waste acceptance/reactions between wastes

3.2.24 Waste acceptance procedures will comply with the site permit and associated environmental legislation. Only waste types detailed in the permit will be accepted at the site.

3.2.25 The documentation accompanying the load shall be checked at the weighbridge, and shall include, but not be limited to the Carriers Certificate of Registration and Duty of Care Waste Transfer Note.

3.2.26 The information recorded in respect of each load as provided by the Waste Transfer Note will be:

- Ticket Number
- Vehicle Registration Number and Type
- Time and date (or date range) of transfer
- Waste description and quantities including all EWC codes
- Container type
- Where the transfer(s) took place
- Category of Transferor and Transferee (i.e. producer, WDA, registered carrier, permit holder, EPR etc.)
- Names and addresses of all parties involved in the transfer and their roles (i.e. producer, carrier, disposer)
- Details of relevant permit/exemptions
- Signatures of all parties involved

3.2.27 Staff will carry out ongoing visual inspections of the wastes at the weighbridge where possible. All loads will be visually inspected on site as the waste is discharged or unloaded from the delivering vehicle.

3.2.28 Waste deposition will generally be undertaken by those delivering the waste or for the vehicles carrying bales, by site staff using the sites mobile plant. Site staff will direct and assist drivers as necessary.

3.2.29 Should any load, either upon entry to the site, or upon tipping, be discovered to contain waste types not permitted at the site or contain incompatible wastes the load will be rejected and removed from site by the delivering vehicle. A load rejection form will be completed in all cases and a record kept in the site diary and the customer informed.

3.2.30 If wastes not permitted by the site permit are discovered amongst a load after deposit, the waste will be isolated to prevent the processing of this waste.

Deposited hot loads

3.2.31 A quarantine area is available in the event that a hot or burning load is received on site. This area may also be used in the event of a fire on site.

3.2.32 If a hot load is discovered during delivery or deposit of the load, the waste will be isolated and placed in the quarantine area. The waste will be dealt with accordingly (i.e. dampened etc.). The incident and time of discovery will be recorded in the site diary. The waste will be placed in a quarantine area until the fire is extinguished and then loaded into a suitable container. Arrangements will be made for the disposal of such wastes at a suitably permitted disposal facility as soon as practicably possible.

3.3 Controls to Prevent Self-Combustion of Waste

Waste storage procedures and waste piles sizes

3.3.1 Managing storage at the site is a key consideration in reducing the risk of fire. The waste types, storage detail, maximum volumes/stockpile size, storage duration and location on site are detailed in Appendix A.

3.3.2 All waste entering the site is logged in at the weighbridge, with weight, EWC codes, date and time recorded. The records enable the Site Manager to review the weighbridge reports to understand the materials that have been imported and exported from site.

3.3.3 Twice-daily checks are made of waste in storage to identify any issues that have potential to cause a fire.

3.3.4 Clear signage reinforces the safe storage of materials and use of ignition sources.

3.3.5 Storage of waste is managed to minimise the volume of waste stored, ensuring that it does not exceed maximum pile sizes, and limit the storage time as far as practicably possible.

3.3.6 Materials are removed from site in order of receipt to reduce the risk of self-combustion. This is implemented by the frequent turnover of material and the bays/ waste stockpiles being emptied regularly.

3.3.7 Regular working practice includes the emptying of a bay or removal of a stockpile when the product pile reaches the size of a full vehicle load. As the outputs of the process are a valued commodity, SUEZ seek to remove the material off site as soon as possible in order to release its commercial value. A 0.5m freeboard will be implemented at the top of each bay wall to prevent fire spreading over the bays. Waste will not be stored above the maximum height ensuring that the maximum stockpile sizes are not exceeded.

3.3.8 Stock rotation can be demonstrated via continuous operation and the implementation of the “5S” system with operations fully recorded via the use of weighbridge tickets.

3.3.9 Materials are normally stored for a maximum of 72 hours. Unless stated otherwise in the waste storage plan (Appendix A). This will reduce the potential risk associated with self-heating due to processes within the waste.

3.3.10 Combustible materials stored within containers are fully accessible to allow any fire inside the containers to be extinguished. Containers are accessible to enable rapid segregation if necessary, of

burning materials from non-burning materials and vice versa. Containers will be moved using the existing mobile plant at the site.

3.3.11 The majority of the waste storage is undertaken within the building. Other than wastes stored in containers/ skips, the remainder of the materials are stored outside within the external covered bays. Therefore all materials on site are either contained or stored under covered area shaded from any direct sunlight reducing the risk of self-heating.

Monitoring and controlling of temperature

3.3.12 Waste temperature monitoring at site is not proposed due to the short maximum residence time of the majority of waste type at the site of around 2 weeks. A few waste types are stored on site between a month and 3 months due to the low volume received at any one time. Environment Agency guidance requires temperature monitoring to be in place if combustible waste is stored on site for longer than 3 months, which is not the case at this site.

Waste bale storage

3.3.13 The baled processed materials (as identified above and within Appendix A) are stored within bays within the covered storage area. Bays will be separated by concrete A-Frames (Alphabloc). The A-frames are rated to NFPA221 standards where the thinnest individual layer thickness has a fire resistance of 3.75 hours.

Measures to prevent fire spread

3.3.14 All waste will be stored on an impermeable surface. The non-flammable nature of the impermeable surface will act as a firebreak, which should significantly reduce the risk of a fire spreading.

3.3.15 Bales of flammable materials are stored within the Transfer Station Building or the external covered bay and are separated away from fixed plant by a minimum of 6m or by fire resistant A-Frame walls.

3.3.16 Unprocessed material is separated from the finished goods bales by either 6m separation or by concrete A-frame Walls which act as a suitable fire wall.

3.3.17 The wastes stored in containers can be easily moved using the existing mobile plant at the site following instruction by site manager. Combustible materials stored within the containers are fully accessible to allow any fire inside to be extinguished. Containers are accessible to enable rapid segregation, if necessary, of burning materials from non-burning materials and vice versa.

3.3.18 A-Frames are used in the following areas: Inside the building between waste piles and the walls of the building, the external storage bay and the 2 quarantine areas indicated on figure 3.

3.3.19 The closest neighbouring building to the site is located to the west of the site, 2m away from the site fence. Due to the layout of the site, the closest waste pile to this building is approximately 25m away so risk of fire spreading to buildings externally from site is negligible.

Quarantine area

3.3.20 A quarantine area is retained at all times to allow burning material to be moved into this area (provided it is safe to do so) to extinguish and control fire spread. It is also used to move piles of non-burning material (adjacent to a fire) to prevent spread.

3.3.21 The indicative location and size of the quarantine areas are shown in Figure 3. These areas are subject to change due to the nature of the process and the nature of the materials needing to be quarantined. Therefore, the exact quarantine area need to remain flexible. Any of the quarantine areas detailed below will be available and utilised as required.

3.3.22 As set out in EA guidance, the size of the quarantine area should be sufficient to accommodate 50% of the volume of the largest waste pile and provide a minimum separation distance of 6m on all sides to the nearest pile, building or site boundary.

3.3.23 With reference to the pile size dimensions in Appendix A, it is considered that 288m^3 will comprise the largest potentially flammable stockpile and therefore the quarantine area size (10m x 5m x 3m) is deemed suitable to accommodate 50% of this.

3.3.24 The quarantine area is located inside the site permit boundary with either at least a 6 metre distance or a fire wall separation with the site office, the site perimeter, and any combustible waste piles.

3.3.25 Additional quarantine area is located in the middle of the yard area shown on figure 3 as Loading/Unloading area and as such will be clear of other material. However, to avoid confusion it will not be marked upon the ground but will be identified to site operatives at the beginning of each shift and emphasis will be made to the need of a 6m fire break from the nearest combustible waste.

3.3.26 In the event of a fire being detected on site, the material would be dealt with in the most appropriate manner, including either segregation of burning material into the quarantine area or the remaining non burning waste will be segregated to ensure the separation distance from the burning waste. The site has capability to move loose materials and containers quickly, with a loading shovel, 360 excavator and a telehandler operational at the facility.

3.3.27 Should any waste in one of the waste storage areas contain burning waste material, then either that stockpile itself or the designated quarantine area, would form the quarantine area. Non-burning waste would also be removed from any burning waste storage area (and from adjacent stockpiles) where possible and moved to the designated quarantine area or any clear area on site.

4 DETECTION AND SUPPRESSION MEASURES

4.1 Fire Detection

Fire Alarm System

4.1.1 The site is equipped with a fire detection and alarm control panel system that has been designed in general accordance with BS 5839-1: 2013.

4.1.2 The fire alarm system will be regularly checked by the Technically Competent Manager (or other designated person) via a visual inspection of the control panel. Visual checks will be recorded on the site Daily Checklist. Any fault must be reported immediately.

4.1.3 The fire alarm system will be tested weekly from a different alarm point – on the same day and time – or at a frequency in line with the manufacturer's recommendations, by a designated person. This will be recorded in the Fire Logbook.

4.1.4 The fire alarm system will be inspected and maintained by a competent person every year in line with the service contract. Inspection and maintenance records will be kept in the Fire Logbook.

4.1.5 Fire alarm points must be kept clear, visible and correctly labelled at all times.

4.1.6 The results of the alarm testing and servicing will be held in the Fire Logbook.

Flame detection and thermal imaging

4.1.7 There are two IR3 flame detection points located in the Transfer Station building. These are visually checked daily as a part of the pre-start check procedure to ensure they are free from any debris that may affect their effectiveness.

4.1.8 The flame detection system is linked to the fire alarm panel system which will automatically give an audible warning if a fire is detected over the conveyor, within the baler in feed and also if fire is detected in the waste tipping area of the building.

4.2 Fire Suppression

Extinguishers/ firefighting equipment

4.1.9 Firefighting equipment will be provided on site and will consist of fire extinguishers, a water cannon, sprinklers, standard hose reels and fixed plant suppression systems. Three fire hydrants are present in close proximity shown in Figure 6. Along with the presence of a fire hydrant. The site has its own water supply and pumping.

4.1.10 Site staff will be trained in fire safety awareness and in the use of site firefighting equipment.

Manual Suppression Systems

4.1.11 There are a number of portable extinguishers placed at key strategic locations around the site as shown in Figure 4. A check of the fire extinguishers (discharged/full, service in date etc) is undertaken as part of the site weekly checks. All fire extinguishers are subject to annual testing by an approved accredited supplier.

4.1.12 All fire extinguishers conform to British Standard EN 3 and are located on wall brackets with the base of the extinguisher at a suitable height, or they are sited in permanent fire points. The extinguishers are of a suitable size and weight for use by site staff.

4.1.13 A water cannon is fitted inside the Transfer station Building, designed to protect the area around the conveyor and to provide targeted suppression in the building.

Automatic Suppression Systems

4.2.1 The main transfer station building is equipped with a deluge suppression system which is fed via a pump room. The suppression system covers the waste storage area in the building. The suppression system is automatically activated by the PIR flame detectors. The principal system is at roof level and once activated all sprinkler heads will be set off to release approximately 2000L of water per minute for a 3-hour duration.

4.2.2 Automatic suppression systems are also fitted to the baler and conveyor which uses a water tank to spray on the conveyor, within the baler, the baler motor compartment and the baler control unit cabin.

4.2.3 Pumps will be tested and maintained as per manufacturer guidance and any test and maintenance will be recorded.

4.3 Fire Fighting Techniques

4.3.1 Managing waste storage is a key factor, not only in preventing fires, but in mitigating the impact, should a fire break out.

4.3.2 Providing access to the site in the event of a fire is a key consideration in containing a fire. Contact details in the event of an emergency are clearly displayed on site.

4.3.3 The emergency access routes to waste storage and quarantine area in the event of a fire are shown in Figure 6.

4.3.4 The firefighting procedure detailed in Section 5 must be adhered to if a fire should break out on site.

4.4 Water Supply

4.4.1 The Environment Agency Fire Prevention Plan guidance indicates that a 300m^3 of combustible material will require a water supply of at least 2000 litres a minute for a minimum of 3 hours. As the maximum total volume of combustible wastes stored within the largest bays at the site will be 288m^3 it is calculated that we will need a water supply capable of providing 1920L/min.

4.4.2 The primary water supply on site is from a 400,000L galvanised tank. This feeds the deluge suppression system in the transfer station building at a rate of 2000L per minute for 3 hours and 20 minutes which is greater than the minimum required for a 288m^3 waste pile.

4.4.3 In Addition, three water hydrants, maintained by South West Water, are located 30m, 60m and 85m from the site entrance. Devon and Somerset Fire Service estimate that each of the 150mm hydrants will supply between 1200L and 2100L per minute. The location of the Water and Fire hydrants located near site can be seen in Figure 6.

4.5 Fire Water Management

Fire water volume

4.5.1 The Environment Agency Fire Prevention Plan guidance indicates that a 300m^3 of combustible material will require a water supply of at least 2000 litres a minute for a minimum of 3 hours. As the maximum total volume of combustible wastes stored within the largest bays at the site will be 288m^3.

4.5.2 Based on the estimation above, the volume of water that would be required to manage the maximum total volume of materials contained within the largest bay would be 345,600L. with a flow rate of 1920L/min.

4.5.3 In the event of a fire, in order to reduce the requirement for the calculated large volumes of both water supply and the resultant management of fire water, alternative measures are proposed. These measures include a priority action (where safe to do so) of the removal of a non-burning waste within any stockpile in order to provide a suitable firebreak to prevent fire spread via use of the quarantine area.

Fire water management

4.5.4 The site will benefit from an impermeable surface that will prevent the uncontrolled release of any spent fire water.

4.5.5 All areas of hardstanding, impermeable pavement, bays and containers are visually inspected at least monthly to ensure continuing integrity and fitness for purpose. The inspection and any necessary maintenance subsequently required will be recorded.

4.5.6 The sloped design of the concrete floor helps direct fire water runoff into a gulley, channelling it towards the foul water drains through 225mm and 300mm pipes with an interceptor or silt trap. Permission to discharge firewater to the foul drainage system was given by South West Water in September 2017.

This primary method for removing fire water is more than sufficient to handle the 2,000L per minute generated by the suppression system.

4.5.7 In addition 164,590L of fire water can be held on site to aid in any delayed discharge speed. Secondary containment includes 6,590L within drain pipework and Interceptors, 75,000L within the yard gully, 57,000L within the weighbridge pit and 26,000L in the baler conveyor pit.

4.6 Contingency Plan in the Event of a Fire

4.6.1 In the event of a major fire, the emergency procedures will be followed which includes notifying the Fire Rescue Service (FRS) and Environment Agency. A business continuity plan is in place which includes contingency planning in the event of a fire, the business continuity plan is included in Document 1.5. In the event of a fire, the following contingency action plan will be implemented:

- Remove all staff off site to a safe place.
- Depending upon the scale of the fire, operations on site will be suspended whilst the fire is extinguished.
- Close site and await further instruction from the authorities.
- During this period, SUEZ haulage team will be notified.
- Inform nearby residents and businesses. This will be done via SUEZ's communications team and in consultation with the local authority.
- Direct waste deliveries/commercial customer to alternative facilities.
- Any burnt waste or material will be segregated and contained on site, either directly on site or within containers. This will then be assessed and disposed of at a suitably permitted facility.
- Any fire water contained on site, in secondary containment detailed above would then be removed from site via tanker for subsequent processing at a suitably permitted facility.
- The site will be cleaned, or areas cordoned off prior to operations recommencing.
- Internal plant checks may also be required prior to recommencement of operations.

4.6.2 Fire damaged wastes will be disposed of at a suitable permitted disposal facility as soon as practicably possible.

4.6.2 Operations will only recommence once the Fire Service have advised that it is safe to do so and the Environment Agency will be notified of the restart of operation.

4.7 Out of hours Response

4.7.1 A fire pack will be located in a box at the entrance of the site clearly 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 location of hydrants
- Information relating to hazardous materials and their location
- Drainage plans.
- Contact details for key holders

4.7.2 In the event of an out of hours fire when there was no SUEZ presence at site, the FRS would force their entry into the site and will gain access to the site via the normal site access. The FRS can attend site in less than 10 min, and following a callout, site personnel would attend site as early as possible but within 30 min of receipt and acknowledgment of notification.

5 FIRE FIGHTING PROCEDURE

The following procedure must be adhered to if a fire should break out on the site.

ALL FIRES ON SITE MUST BE TREATED AS SERIOUS AND MUST BE REPORTED TO THE SITE SUPERVISOR AND/OR MANAGER AS SOON AS POSSIBLE.

5.1 It is considered very unlikely that a fire will occur but if this should happen then any outbreak of fire will be regarded as an emergency and immediate action will be taken to extinguish the fire. No one should attempt to fight a fire unless they have received training in the use of fire extinguishers and then only if this can be done without risk.

5.2 If it is safe to do so, attempts should be made to extinguish a fire. This can be done by using site machinery to move any non-burnt material away from the smoulder or source of fire or using water, working from the edge of the fire inwards. Plant and machinery must never be driven into the centre of any fire; this will place both the driver and the machine in danger. If possible, extinguish the fire with a portable extinguisher or water.

5.3 Should the fire be successfully extinguished by this action, a check should be kept of the area to ensure that the fire does not re-ignite. The area should be vacated until it is obvious that there is no further danger of the fire restarting.

5.4 If the above action FAILS to extinguish the fire, prohibit all entry to the area, then summon emergency services immediately. Close the site to all members of the public. Any persons already on the site should leave. The Fire Service will be contacted to deal with major fire incidents. Site staff will not be deployed to deal with major fires.

5.5 Telephone the Fire and Rescue Service – Dial **999.** Give the exact details including the site address and telephone number.

5.6 Before the Fire and Rescue Service arrives staff will:

- ensure operators of appropriate machinery are standing by in a safe location to help create fire breaks, under the direction of the FRS when they arrive
- Appoint a clearly identified person to liaise with the emergency services on site. They should identify themselves to the FRS as soon as they arrive
- ensure access routes are clear
- use pollution control equipment to block drains and/or divert fire water to a containment area and/or operate any pollution control facilities, such as drain closure valves/or penstocks where safe to do so

5.7 On arrival the FRS should be met by the identified responsible person who must provide them with a copy of your accident plan and update them with relevant information that will assist them in dealing with a fire more effectively.

5.8 The designated assembly point is located at the entrance gate of the transfer station. All persons must wait at the assembly point for further instructions. A Fire Warden will ensure that unauthorised persons do not enter the premises and that no one re-enters the site until given permission by a Fire Warden.

5.9 Upon the outbreak of fire, the receipt of waste at the site is to be suspended and not resumed until authorised by the Site Manager.

5.10 The Site Manager should notify the Environment Agency of a major fire immediately by telephone on the incident hotline, telephone number: 0800 807060 (unless the EIR Manger has confirmed that they will carry out the notification). The Agency must also be informed in writing as soon as is practicable.

5.11 Communication with local businesses and residents identified in the sensitive receptor table above will be undertaken in the event of a fire to reduce any environmental damage and risks to human health associated with smoke and dust.

5.12 All incidents must be reported in the daybook and on the SUEZ Incident Reporting and Investigation System (IRIS). The EIR Manager should be informed so that in turn, full details of the event can be reported to the Environment Agency in writing.

5.13 Site operations will not be recommenced until deemed safe to do so by the Local Fire Authority.

Appendices

Appendix A – Waste Storage Details

Thorverton Road Distribution Hub – Waste Storage Plan

APPENDIX A – WASTE STORAGE DETAILS

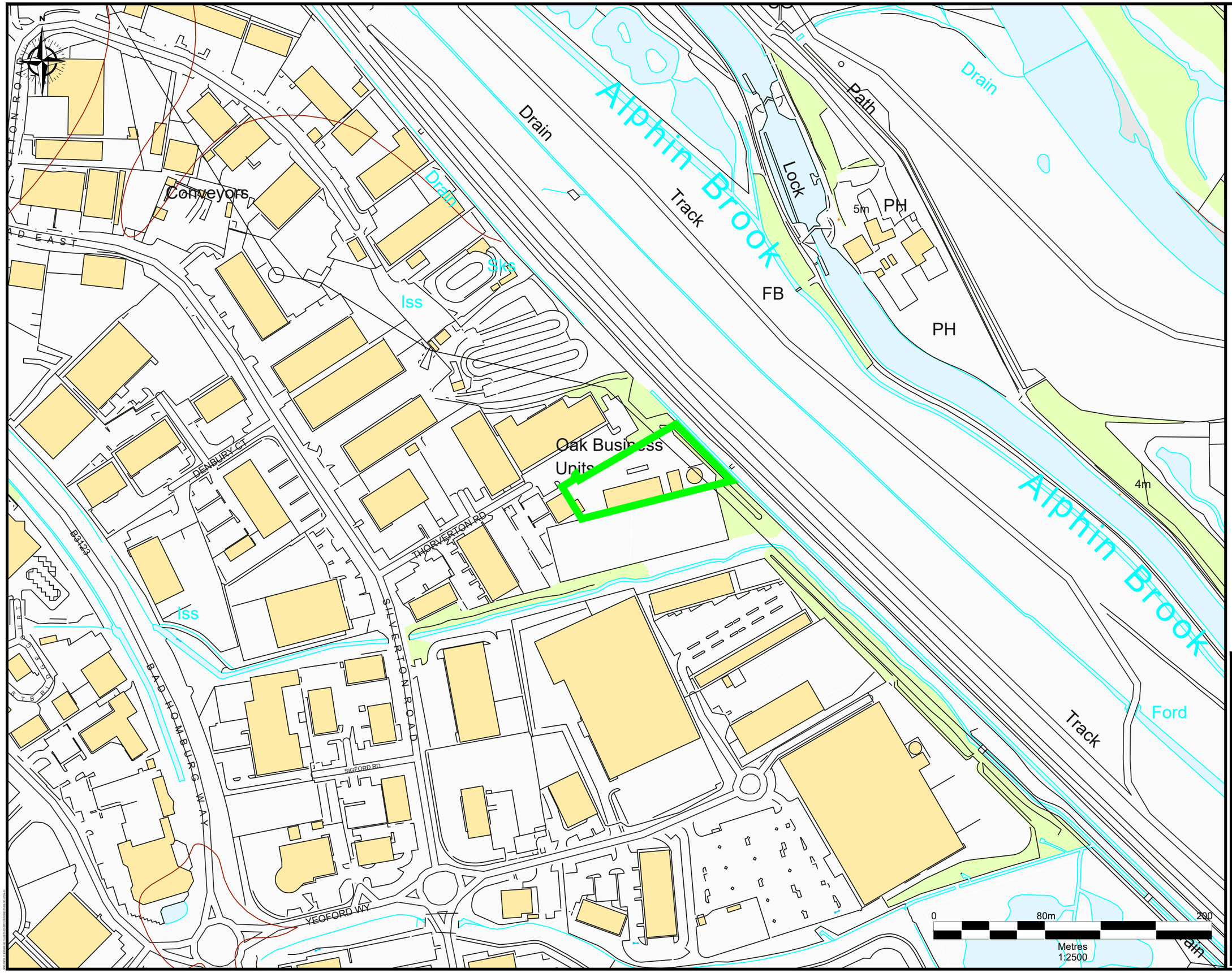
Waste type	Form	Location within site (See site layout plan)	Storage detail	Bay or Container Dimensions	Volume of waste (m^3)	Maximum storage time on site
Hard Plastics	Loose	Transfer Station Building	Internal A-Frame Bay	6 m (W) x 6 m (L) x 3 m (H)	144 m^3 *	72 Hours
Cardboard	Loose	Transfer Station Building	Internal A-Frame Bay	4 m (W) x 6 m (L) x 3 m (H)	54 m^3 *	72 Hours
Shredded Paper	Loose	Transfer Station Building				72 Hours
Hard Plastics	Baled	Transfer Station Building	Internal A-Frame Bay	16 m (W) x 6 m (L) x 3 m (H)	288 m^3	2 Weeks
DMR	Baled	Transfer Station Building				2 Weeks
Shredded Paper	Baled	Transfer Station Building				2 Weeks
Cardboard	Baled	Card/Poly Bay	External A-Frame Bay with Canopy	10 m (W) x 6 m (L) x 4 m (H)	240 m^3	2 Weeks
Soft Plastics	Baled	Card/Poly Bay				2 Weeks
Wire for disposal	Loose	WEEE Storage Area (11)	8yd Skip	1.83 m (W) x 3.66 m (L) x 1.37 m (H)	6.86 m^3	1 Month
Wire to be processed	Loose	WEEE Storage Area (10)	8yd Skip	1.83 m (W) x 3.66 m (L) x 1.37 m (H)	6.86 m^3	1 Month
Small WEEE to be sorted	Loose	WEEE Storage Area (12)	8yd Skip	1.83 m (W) x 3.66 m (L) x 1.37 m (H)	6.86 m^3	1 Month
Small WEEE for Disposal	Loose	WEEE Storage Area (13)	8yd Skip	1.83 m (W) x 3.66 m (L) x 1.37 m (H)	6.86 m^3	1 Month

Waste type	Form	Location within site (See site layout plan)	Storage detail	Bay or Container Dimensions	Volume of waste (m^3)	Maximum storage time on site
POPs	Loose	WEEE Storage Area (9)	8yd Skip	1.83 m (W) x 3.66 m (L) x 1.37 m (H)	6.86 m^3	1 Month
Fridges	Loose	WEEE Storage area (7)	ISO Container	2.5 m (W) x 6m (L) x 2.6m (H)	39 m^3	1 Month
Fluorescent Tubes	Loose	WEEE Storage area (8)	Specialised Container	1.2m (W) x 2.5m (L) x 1.2m (H)	3.6 m^3	3 Months
Small WEEE sorted	Loose	WEEE Storage area (5)	1100L Wheelie Bin	1.26 m (W) x 1 m (L) x 1.4 m (H)	1.76 m^3	1 Month
Large WEEE	Loose	WEEE Storage area (6)	Designated area	3 m (W) x 10 m (L) x 2 m (H)	60 m^3	1 Month
Batteries	Loose	WEEE Storage area (2)	220L Drums	0.59 m (D) x 0.96 m (H)	0.22 m^3	1 Month
Toners	Loose	WEEE Storage area (5)	Tonne Bags	0.9 m (W) x 0.9 m (L) x 1 m (H)	0.81 m^3	1 Month
PCB (Printed Circuit Boards)	Loose	WEEE Storage area (5)	Tonne Bags	0.9 m (W) x 0.9 m (L) x 1 m (H)	0.81 m^3	1 Month
Hard Drives	Loose	WEEE Storage area (5)	Tonne Bags	0.9 m (W) x 0.9 m (L) x 1 m (H)	0.81 m^3	1 Month
Processed Copper wire	Loose	WEEE Storage area (3)	Tonne Bags	0.9 m (W) x 0.9 m (L) x 1 m (H)	0.81 m^3	1 Month
Tv's/ Monitors	Loose	WEEE Storage area (4)	IBC containers	1.2 m (W) x 1 m (L) x 1.15 m (H)	1.38 m^3	1 Month

**Note: Volume calculations allow for material slump at the front of the storage area and so equate to 75% of the total cubic volume.*

Figures

Figure 1 – Site Location Plan



Notes

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Site Location

Rev	subject	date

suez

Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@suez.com

Site	Thoverton Road
Title	Site Location Plan
Scale	1:2500@A3
Date	July 2024
Drawing Ref	Tho-LOC-0724-01
Drawn by	JA
Checked by	LB

Figure 2 – Permit Boundary Plan

N

Motorcycle Training Centre

Sinks

Issues

Cycle Speedway

Cycle Racing Facility

El Ps

El Ps

Oak Business Units

MP 1965

WB

Recycling Business

Tank

FB

Double Locks (PH)

El P

Drain

ESS

THURVERTON ROAD

VERTON ROAD

1a

1b

2

3

Northleigh House

Newton Centre

4

3

2

1

El Sub Sta

1

Exeter Trade Centre

1 to 51
68

Basepoint Business Centres

67

61

59

52

SP

ESS

0 10 20 30 40m 60 80 100

Metres
1:1250

Notes

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Permit Boundary

Rev	subject	date

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Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@suez.com

Site: Thoverton Road

Title: Permit Boundary Plan

Scale: 1:1250@A3

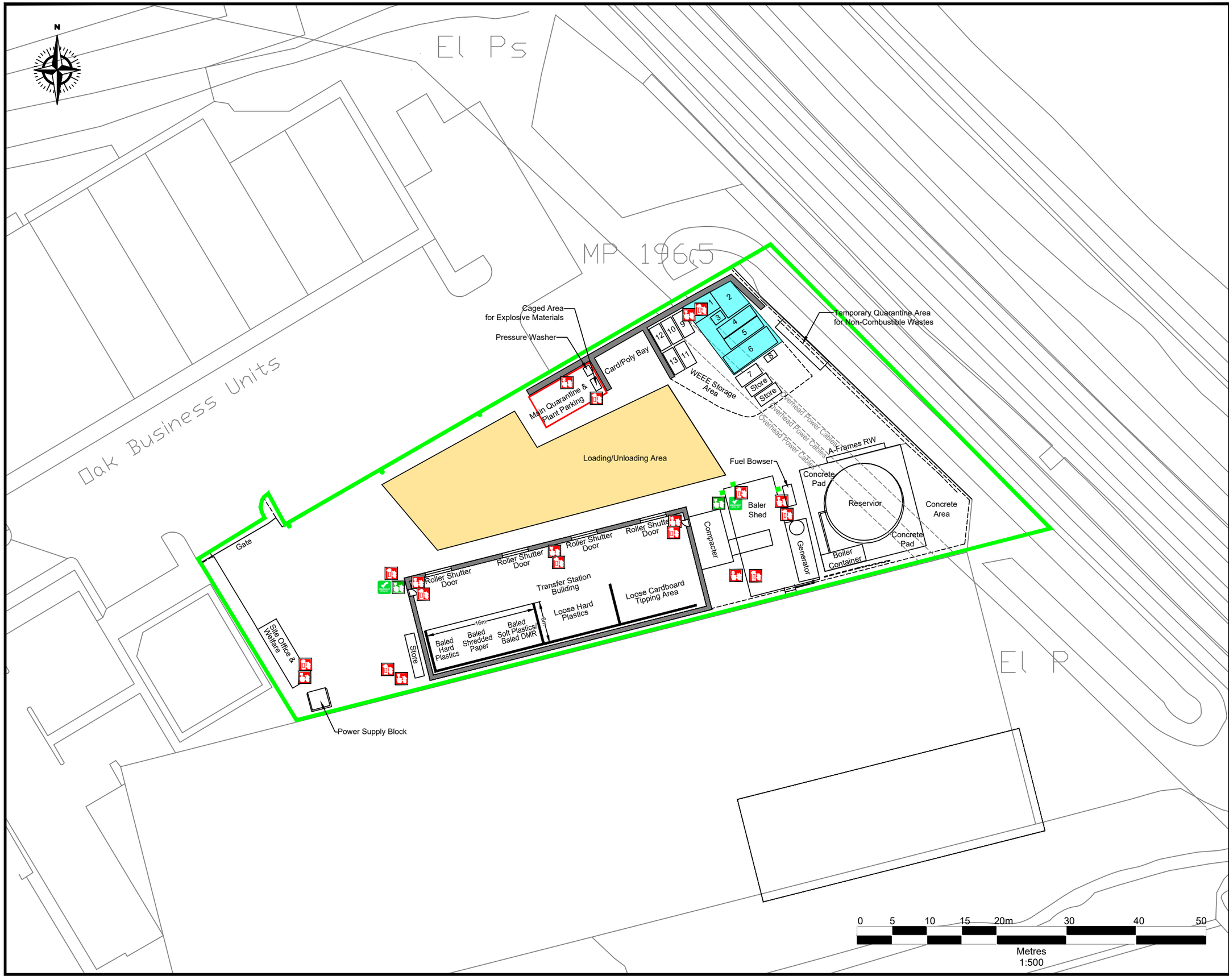
Date: July 2024

Drawing Ref: Tho-PER-0724-01

Drawn by: JA

Checked by: LB

Figure 3 – Indicative Site Layout



Notes

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- Permit Boundary
- Lamp Post
- Wall Lamp
- Emergency Spill Kit
- Fire Point
- Mobile Fire Point
- Fire Extinguisher
- Canopy

WEEE Storage Area Number

1. Wire Stripping and Cable Granulation Treatment Area
2. Batteries
3. Copper Wire
4. TVs
5. a) PCBs
   b) Toners,
   c) Hard drives
   d) Sorted Small WEEE
6. Large WEEE
7. Fridges
8. Fluorescent Tubes
9. POPs
10. Wire (to be sorted)
11. Wire (for disposal)
12. Small WEEE (to be sorted)
13. Small WEEE (for disposal)

Rev	subject	date

suez

Darwen Resource Recovery Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@silta.co.uk

Site: Thoverton Road

Title: Indicative Site Layout

Scale: 1:500@A3

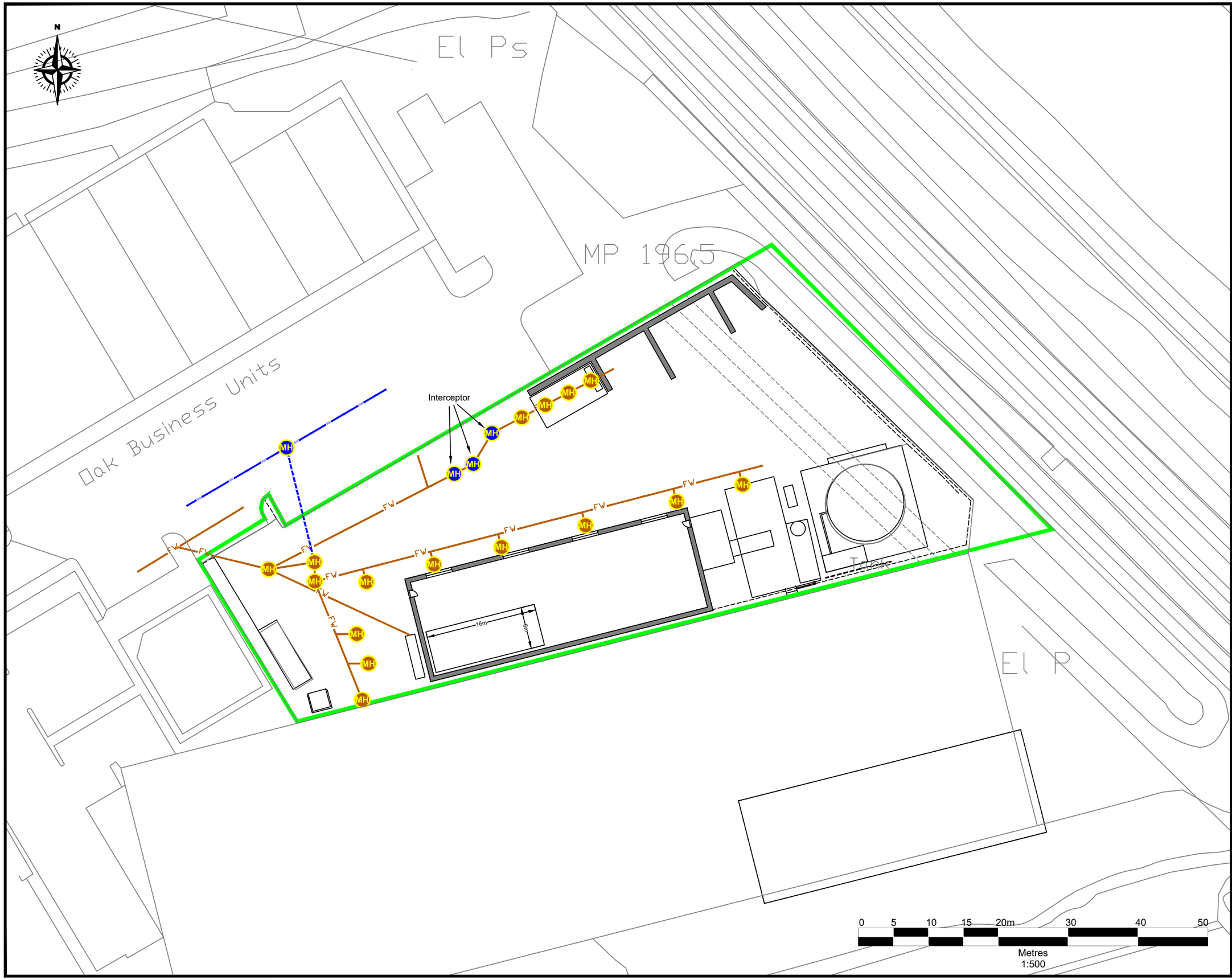
Date: March 2025

Drawing Ref: Tho-LAY-0325-01

Drawn by: JA

Checked by: LB

Figure 4 – Site Drainage Plan



Notes

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- Permit Boundary
- Interceptor Access Covers
- Foul Water Manhole
- Foul Drain
- Surface Water Drain
- Bypassed Surface Water Drain

Rev	subject	date

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Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@sita.co.uk

Site: Thoverton Road

Title: Site Drainage Plan

Scale: 1:500@A3

Date: October 2024

Drawing Ref: Tho-DRN-1024-01

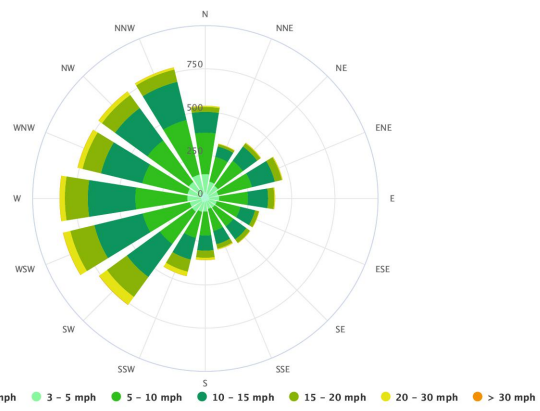
Drawn by: JA

Checked by: LB

Figure 5 – Receptor Plan

Exeter
50.72°N, 3.53°W (46 m asl).
Model: ERA5T.

Thoverton Road Wind Rose Data
Graph showing Wind Speed by Direction



Notes

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Permit Boundary
1km Offset
① Receptors

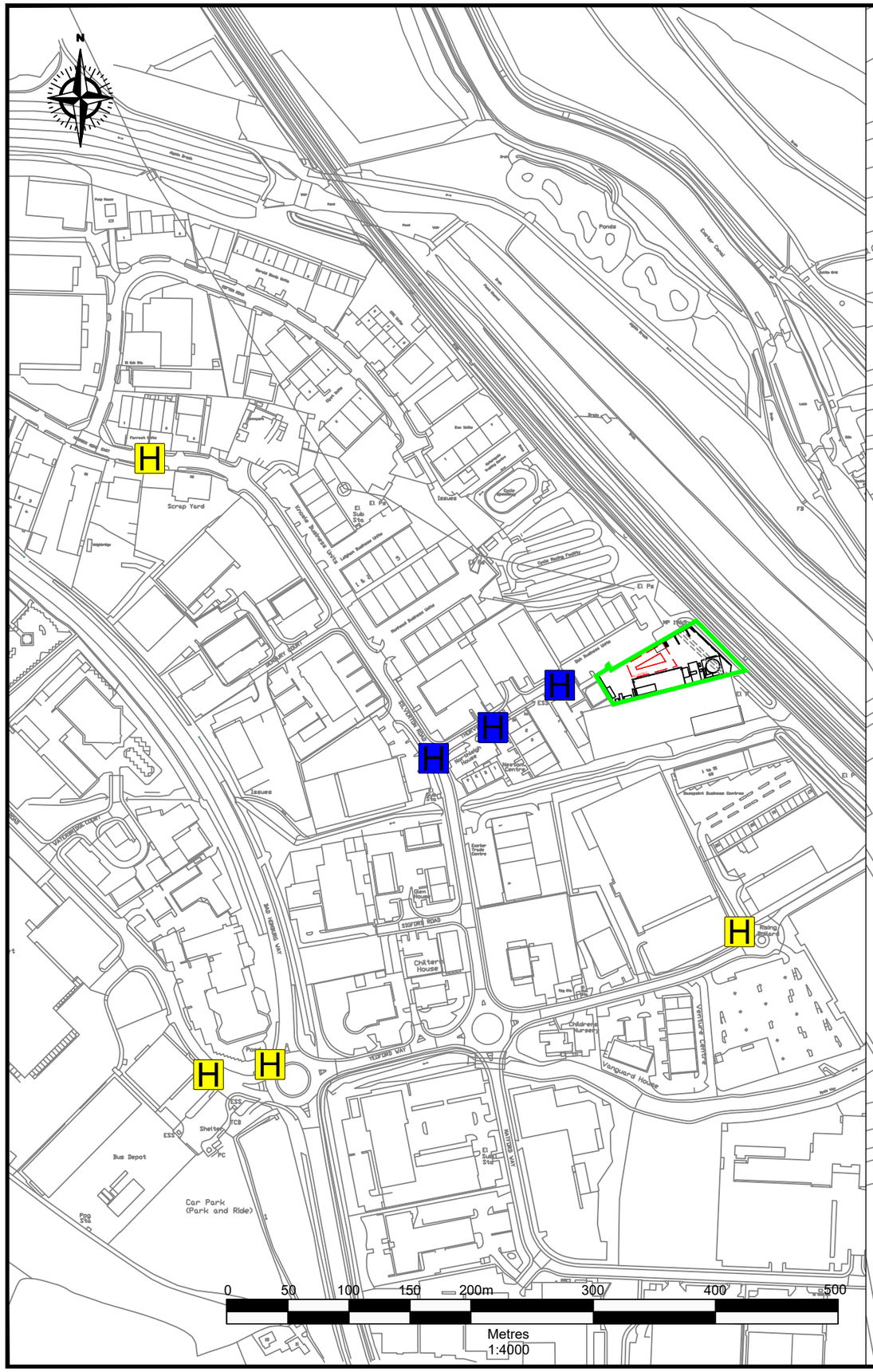
suez
Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@sita.co.uk

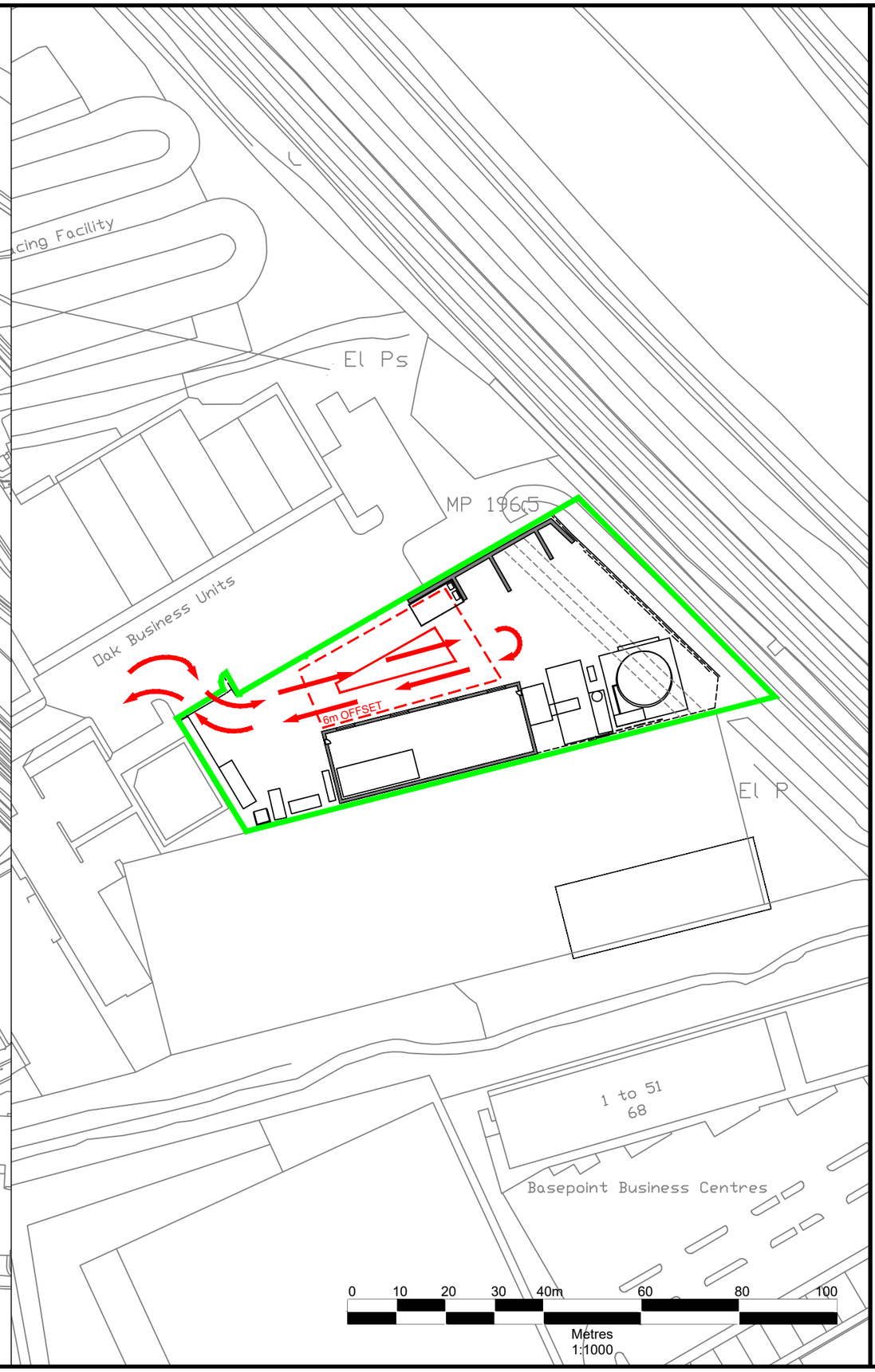
Site	Thoverton Road
Title	Receptor Plan
Scale	1:7,500 @ A3
Date	September 2024
Drawing Ref	Tho-REC-0924-01
Drawn by	JA
Checked by	LB

Rev	subject	date

0 100 200m 300 400 500
Metres
1:7500

Figure 6 – Emergency Access Route





Notes

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- Permit Boundary
- Emergency Access Route
- Water Hydrant
- Fire Hydrant
- Temporary Fire Quarantine Area

Rev	subject	date

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Darwen Resource Recovery Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@sita.co.uk

Site: Thoverton Road

Title: Emergency Access Route

Scale: 1:1000 & 1:4000 @A3

Date: March 2025

Drawing Ref: Tho-EAR-0325-01

Drawn by: JA

Checked by: LB